

Is TechnoCraft a New Cornerstone for Luxury Fashion?

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Abstract

This paper considers how technology and craft have come together to form TechnoCraft and questions whether this is simply a fashion trend, or has the potential to become a cornerstone in the evolution of luxury fashion.

The author defines TechnoCraft as the bringing together of technology and craft in terms of production and/or aesthetic, and uses historical contextualisation to explore how the shift from craft to technology has denoted fashion luxury (Thomas, 2007). Influencing drivers of TechnoCraft include the impact of globalisation, mass production, emerging economies, sustainability and ethical issues (Klein, 2000). These factors contribute to challenging the conventionally distinct aspects of craft and technology.

The paper appraises the emergence of TechnoCraft through four case studies, each focusing on a specific designer's work: Martin Leuthold of Jacob Schlaepfer, Manish Arora, Hussein Chalayan and Hardy Blechman of Maharishi.

Schlaepfer provides fabrics to many of the leading Haute Couture collections, with industrial processes that are refined with the handmade and specially crafted tooling (Leuthold, 2008). This appraisal includes the author's interview with Leuthold, looking at how TechnoCraft in Haute Couture can mitigate the threat posed by derivative low cost technology and craft products that pervade the high streets.

The work of Indian fashion designer Arora combines craft with the aesthetics of technology. Spacecraft imagery fuses with Mumbai street scenes and delicate embroidery with futuristic tailoring. Arora describes his work in the context of a "global Indian designer brand" (Arora, 2009). The author considers the role of TechnoCraft in the establishment of Arora's luxury fashion brand that carries global appeal while retaining a strong cultural identity.

Technology and innovation is strongly associated with the designer Chalayan. Starting with a core concept, Chalayan gathers technologists around him to help realise his ideas. The relationship is that of visionary artisan working with facilitators. The case study discussed centers on the development of the Ballerina Dress (Spring/Summer 2000) that the author worked on as technologist. The subject is the 'technology craftsperson'.

Maharishi is both streetstyle and luxury with a blend of technically innovative fabrics and hand crafted techniques. The greater the handmade element the more expensive and luxurious the finished garment. Best known for 'camouflage' fabrics, Maharishi's luxury here can alternate between bling and the understated (Blechman, 2004). The focus of this discussion is the role of TechnoCraft in establishing a luxury streetstyle.

The paper concludes that there is sufficient evidence from the case studies to indicate that TechnoCraft is now an established and growing direction for luxury fashion –from haute couture, branding and creative process to streetstyle.

Introduction

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Keywords

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Photo
1 Manish Arora exhibited at the TechnoTextile Exhibition, The Science Gallery, Trinity College Dublin.

technology has denoted fashion luxury (ibid). Prior to the Industrial Revolution the provenance of goods could be traced back to the individual craftsman often through the use of their individual maker's mark. When production moved from the cottage and atelier to the factory these marks became brands and logos served as a guarantee of consistent quality and traceability. At the high end of the market "...luxury companies made their brands, rather than the actual products, the objects of desire" (ibid). Although a sound business strategy, branding has also led to the proliferation of fake goods so that brands and logos alone as signifiers of luxury have been rendered obsolete. In this context, some luxury brands are increasingly looking at a combination of technology and craft –TechnoCraft– to formulate their aesthetic and brand of authenticity.

To help set the context of TechnoCraft it is worth noting in more detail the influencers of globalisation, mass production, emerging economies, and sustainability.

Globalisation is the result of integration of economies and societies around the world. It has opened new markets as well as close existing ones. An illustration of how this has the ability to take place simultaneously can be seen in the cotton industry. A cotton farmer in West Africa can expect to sell one kilo of cotton for 185 Central African francs (CFA) which is around about £0.24 sterling (Day, 2010). On the global market he is competing against American cotton farmers who in 2008/2009 were awarded \$3.1bn (£1.9bn) in subsidies, an amount that exceeded the market price by approximately 30%. For the luxury fashion industry globalisation offers the potential of access to all with increased volume of sales, but also the proliferation of fake goods. It also brings with it a danger of oversaturation of the market and the dilution of cultural identity that would normally accompany an association of place with the product, a feature absent from the globalised product. In combining technologically advanced materials and processes with bespoke and hand crafted finishes, designers are creating a new luxury. An example of this can be seen in the work of designers such as Jean-Charles de Castelbajac (Fr) whose *Le Manteau Cocon* (1999) combines quilting techniques with the highly technical lightweight and rich aesthetic of gold Mylar from the space industry.

Mass production is where standardised goods are produced using an assembly line system. One of the pioneers of mass production was Henry Ford at the beginning of the twentieth century. In 1909 Ford announced that he was only going to produce one make of car, the Model T, and that the chassis would be the same for all cars. With respect to choice, or customisation, he said that "Any customer can have a car painted any colour that he wants so long as it is black" (Ford, H., Crowther, S, 1922). Offering an advance on Ford's notion, fashion's little black dress is redesigned each season but customers at the luxury end of the market want something more personalised, so that we are seeing the emergence of mass customisation. The utilisation of Computer Aided Design (CAD) and Computer Aided Manufacturing (CAM) in this process has delivered the benefit where "The "individual" pattern or small series need not be hand-made any longer" (Stattmann, 2005). The process is used to great effect by shoe designer Marloes ten Bhomer. Ten Bhomer creates small numbers of highly sculpted shoes that combine traditional leather with advanced textiles such as carbon fiber. These involve the hand made as well as industrial production techniques such as laminated and CNC-milled leather, rotational moulding and laser sintered rubber (ten Bhomer, 2010).

Emerging economies are countries that are undergoing a rapid rate of growth and industrialisation from a position some way behind the developed nations. In 2010 there were around thirty of these markets, with China and India the largest. Many of these countries have played an important role as a source of low cost labour for the luxury fashion industry. However, this relationship is now changing: "The strikes, stoppages and suicides that have afflicted foreign factories on China's coast in recent months have shaken the popular image of the country's workers as docile, diligent and dirt cheap" (*The Economist*, 2010). Better paid workers means greater consumption for all markets. For example, in 2006, China officially had three hundred thousand millionaires (ibid). These are new markets and they cannot be expected predictably to follow more established luxury shoppers' buying patterns. Signs are already showing that these new shoppers in Shanghai and Beijing are looking for a different experience where a "blend of localization with international appeal is a key formula to attract this new luxury consumer" (red-luxury.com, 2010).

Sustainability refers to the capacity of our world to remain productive and diverse over time. Products, from their design and production to use, reuse and end of life has an impact on our environment, and sustainable products are those that have a low impact on natural resources. There is a shift in thinking about sustainability coming from environmentalists, designers and increasingly economists: "Today we are in a world where economics really only recognises manmade capital. But the reality is that there is also human capital and there is also natural capital" (Sukhdev, 2010). The luxury fashion industry is

recognising its value in events such as the International Herald Tribune's annual Luxury Fashion Conference. The 2009 conference saw Christian Blanckaert, Executive Vice-President of Hermès International declare the end of "pop luxury" while Dries Van Noten's discussion of his twenty year relationship with a Kolkata embroidery atelier further signalled a move towards a more sustainable form of luxury (Roy, 2009), one that combines old and new, tradition and technology.

Research Approach

The research method for this paper is that of case studies in analysis. The author uses four examples that each offers a different approach to the subject both conceptually and in practice. This allows for a comparison between studios as similarities and differences are noted and discussed. The approach sees specific issues highlighted in individual practice that allows a discussion.

The research is qualitative, drawing first on primary sources of literature, then personal interviews and examples through the case studies themselves. These form the basis for the concluding section that sets out by these examples how TechnoCraft is the new cornerstone of luxury.

Case studies

The paper appraises the emergence of TechnoCraft through four case studies, each focusing on a specific designer's work: Martin Leuthold of Jacob Schlaepfer, Manish Arora, Hussein Chalayan and Hardy Blechman of Maharishi. These are deliberately drawn from different cultural backgrounds that have strongly influenced their work, and each maintains a strong global position that is linked to their sense of local identity. An important aspect of this success is the way in which they bring together craft (associated with local) and technology (linked to global). These case studies explore this dynamic and the way that it informs the practice of TechnoCraft within luxury fashion.

Case study 1: Martin Leuthold of Jacob Schlaepfer

The origin of the St Gallen based company Jacob Schlaepfer can be traced back to 1904 with the establishment of an embroidery business by Rudolf Vogel. This was later bought by minority shareholder Jakob Schlaepfer in 1934, renaming it Jakob Schlaepfer. Today it is run under the creative direction of Martin Leuthold. Schlaepfer provides fabrics to many of the leading Haute Couture collections including Yves Saint Laurent and Christian Lacroix. The company signature is its use of industrial processes that have been refined with the handmade and specially crafted tooling.

Christian Dior has described the importance of highly skilled workmanship to his luxury couture house as the craftspeople, tailors and seamstresses, working in his atelier who "...constantly strive for perfection" (ibid). The esteem of the studio can be seen in some of the quotations that appear on their web site – "The fabric is half the fashion" Yves Saint Laurent, and "Jacob Schlaepfer is the best European embroidery" Yushuiko Horita (www.jakob-schlaepfer.ch, 2010). In the author's interview with Martin Leuthold he was asked how the recognition of quality and luxury can be maintained as the market is increasingly being flooded with low cost heavily embroidered and detailed lasercut clothes found in high street chainstores such as H&M and Zara or on the internet where a full length embroidered and bead embellished wedding dress can cost as little as US\$37.00 (www.wholesale-dress.net, 2010). Leuthold's response is philosophical as he stresses the difference between what they are doing and the work that is produced in the Swiss atelier. The low cost garments are either low-skill or entirely machine based on inexpensive fabrics. The Schlaepfer fabrics combine refined technological advances with highly skilled craftsmanship using materials that are themselves of luxury quality. The company web site reinforces this mark of difference with Romeo Gigli's quote typical as he describes "Schlaepfer's creative designers succeed in combining everything that implies handcraft with everything that technology can produce".

It is the detail of the Schlaepfer approach that allows them to maintain an aesthetic that is firmly based in the luxury market. Fabrics are not simply lasercut or embroidered, the technologies are greatly refined specially for their use and often with patent protection or hand skills included in the process. They have collaborated with Swarovski to develop thermo-fixable paste gems while their Emboscan technology combines lasercutting with embroidery for delicately layered textiles with a structured lace-like quality. It is not possible to reproduce the quality or aesthetics achieved by this approach using either technology or hand crafted processes on their own. The bringing together of the two allows the couture atelier to successfully mitigate the threat posed by derivative low cost technology and low skilled craft production.

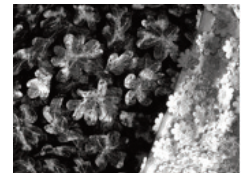


Photo
1 Jacob Schlaepfer, lasercut and embossed fabric.

Case study 2: Manish Arora

The work of Indian fashion designer Arora combines craft with the aesthetics of technology. The Indian designer launched his label in 1997, followed by his diffusion label Fish Fry in 2001 and making his debut at London Fashion Week in 2005. His work brings together futuristic imagery with meticulously hand-crafted embroidery, appliqué, quilting and beading. Spacecraft imagery fuses with Mumbai street scenes and delicate embroidery with futuristic tailoring. In the TechnoThreads exhibition at The Science Gallery, Dublin (2008), Arora's work was positioned in the section titled Aesthetics of Science. The exhibition catalogue emphasises the contrast here between the hand-made and technological, noting that "It seems ironic that today it is the mix of craft and machine that has come to denote luxury" (ibid).

Lisa Armstrong has lamented "It is an absolute truism that today's fashion is global" going on to describe it as "bland" and "depressing" before noting with reference to Arora, "how reassuring that some designers still think local while acting global" (Armstrong, 2006). TechnoCraft as it is employed by Manish Arora is used to establish his brand globally by maintaining a strong local cultural identity. India has long been recognised for its fine hand craft techniques and these are used to good effect in luxury clothing for the growing India luxury market. Applying these skills to an aesthetic that is both local and international is one that alludes many Indian designers that are successful on the home market. Arora combines craft techniques with technology aesthetics to develop a brand that is appreciated nationally and internationally. He introduces the futuristic look both in the tailoring and decorative surface of his clothing. For the luxury customer the appeal is this craft and technology, East meets West and the sense of the exotic that accompanies this unique creative vision.

Arora aligns his work to art in his conceptual use of TechnoCraft. In his 2010 Wonder Wall Collection at London's Conran shop, framed samplers are shown from a number of the designer's collections. The work is elevated by this process of framing and hanging as "wall art" to the status of artwork. Textiles that began as samplers displayed on the designer's wall as inspiration have been taken and produced in limited editions so that the customer is invited to buy the framed work as "investment pieces". Placing the work in this context the designer is reinforcing the conceptual influence of the British Pop artist Eduardo Paolozzi. Both share an exuberant sense of colour, love of kitsch, robots, space and mechanical toys that are then reinterpreted with a hand made aesthetic in their work. The art critic Clement Greenberg equates kitsch with "folk or rudimentary culture" (Greenberg, 1939), while Edward Allington celebrates its unique position in art: "Kitsch is usually seen as art's antithesis –that which is worse than ugly" (Allington, 2003). In both Paolozzi and Arora's work it is the bringing together of craft and technology that allows them to interpret kitsch as art.

Case study 3: Hussein Chalayan

Hussein Chalayan graduated from Central St Martins in 1993 with a collection that included silk dresses that had been buried in the ground for months to give them an aged appearance (O'Mahony, 2001). His career has since been notable for his ability to bring together technology and innovation. Much of this involves a collaborative process with craftspeople and technologists, often blurring the line between the two so that the technologist is in effect the craftsman (Sennett, 2008). Starting with a core concept, Chalayan gathers technology craftspeople around him to help realise his ideas.

In the early part of his career, Chalayan's collaborations focused on craft that was given a technological aesthetic. This included his 1996 Nothing, Interscope (Spring/Summer) Pixelated dress with husband and wife duo Eley Kishimoto. The design appears pixelated and digitally designed, but it is derived from hand painted watercolours of flowers that have been repeatedly put through a colour photocopier to achieve the effect (Chalayan, 1996). Hand crafted techniques are here used to convey technological aesthetics. In before Minus Now, Spring/Summer 2000, his Ballerina dress is outwardly made of silk but beneath lies cutting edge technology to enable the dress to expand and change shape¹. The development process involved a consistent dialogue between craft and technology in order to achieve control over the Shape Memory Alloy (SMA) used to change the shape of the dress. The technology had first to be mastered by the technocraftsman before going on to push the limits of its capability in the volume and weight of fabric that could be moved in a predictable as opposed to random manner. The solution combined the technical SMA with the ancient art of Japanese origami with forty-five meters of wire carefully folded before expanding when subjected to electricity (heat). The designer has inverted the craft technology process, affording the garment the ability to appear as non-technological couture before revealing its true dual nature.



Photo
1 Hussein Chalayan, Ballerina Dress

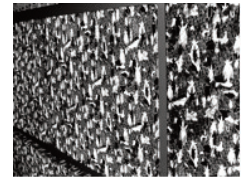
Chalayan uses photography and film to explore further realms of his work in a way that would not be possible using conventional concept to sketch methods. A parallel can be seen in the way that the artist David Hockney works with his iPhone sketches where he draws the Yorkshire sunrise able to see the light based colours that he is using as opposed to paint pigment that appears dark in the low light (Weschler, 2009). In a collaboration with British photographer Nick Knight, Chalayan's robot controlled airplane dress is reworked as a series of stills and 3D animation for SHOWstudio 01 Limited Edition Box Set (2001). The sequence of images is based on corrupted and distorted 3D scans of the original dress. While Hockney chooses to send his iPhone images free of charge and in a way that they can be distributed without limitation, Chalayan and Knight use the conventional art form of a limited edition box set to denote art, exclusivity and by extension luxury. The images reproduced in British *Vogue* are available to all, but only a select few can afford the luxury of owning the box set.

Case study 4: Hardy Blechman of Maharishi

The streetstyle menswear label Maharishi was set up in 1994 by Hardy Blechman who remains its creative director. He started as an importer of military surplus clothing, gradually altering and reworking the garments before embarking on the development of their own camouflage designs. The label is translated from Sanskrit for 'great vision'. The philosophy behind the label is the reappropriation of camouflage so that it becomes recognised as a symbol of peace rather than conflict (ibid). Maharishi is both street-style and luxury with a blend of technically innovative fabrics and hand crafted techniques of appliqué, embroidery, beading and hand finishes. The greater the handmade element the more expensive and ultimately luxurious the finished garment.

The environmental benefit of recycling has been with the label since its launch working with the ethos of 'respect nature: utilise technology' (Blechman, 2004). These garments have by their nature been mass-customised in that no two are exactly the same. Rare surplus garments are utilised and reworking intensive with hand stitching and appliqué undertaken by artisans in India so that the end result is far removed from military clothing that might otherwise become landfill. The embroidery motifs frequently use symbols based on peace and good luck while the clothing is made "smudged with herbal incense, blessed, and washed in saffron water to symbolically cleanse it of its military associations" (Maharishi 2010).

Maharishi print details about the garment on the inside of their clothes. This includes conventional wash and care details alongside information about the origin of the materials and the meaning behind the pattern used. This is for the wearer only and not visible from the exterior becoming an unexpected secret in a luxury streetstyle garment.



Discussion

TechnoCraft in luxury fashion takes many forms and allows the balance between technology and craft to constantly shift with each collection. In doing so it retains a dynamism with the possibility for continuing reinvention in the hands of the designer. The case studies discussed in this paper illustrate just four approaches being taken yet even within these examples it is evident that the designers themselves are constantly reassessing and refining their own methodology.

External trends that are not exclusive to the luxury industry play an important role in TechnoCraft. To remove sustainability, mass-customisation or other factors discussed from the equation and much of the philosophy behind the work would be weakened. The partnership is needed to afford the conceptual depth and layering of meaning that the luxury customer demands. The end product is not enough, the whole process, service and inclusion of the customer is vital.

The fashion designer Marc Jacobs has expressed the view that "When you look at [Louis Vuitton], you see it as a mass-produced luxury.", or as Thomas puts it more bluntly, "Vuitton is the McDonald's of the luxury industry". As designers constantly strive to find ways of offering their customers more they are increasingly looking at ways of personalising their products in what is effectively mass customisation. An example of this is Scabal who produce the ultimate luxury suiting fabric that incorporates lapis lazuli, diamond chips and gold (Scabal, 2010). Their Private Line collection allows customers to have their own unique pin stripe that uses their own text or name printed 'ticker tape' style to form the pinstripe. From a distance it looks like a normal stripe, it is only on closer inspection that the text is revealed. The luxury jeweller John Hardy, based in Bali, inscribes each piece of jewellery with a short message on the reverse that can be seen and read by the wearer alone. Creative director Guy Bedarida describes it as "like a little secret for the wearer alone... that's our trademark" (Bendell, 2007).

The greatest threat to the system of luxury comes from mass market that uses a combination of technology and craft but in a very different way, one that is invisible to the consumer and not a reason for their

Photo
1 Maharishi, Gorskuba reflective print wall display in London studio

buying the product. The sports trainer is an example of this, where as many as forty different high technology materials can be used to create a shoe that is then made by hand. The skill of the maker is likely to remain an important point of difference between the trainer that costs \$100 and the hand-made shoe from Bontoni that starts at \$4,000. The former taking less than an hour to assemble and the latter thirteen weeks (Bailey, 2010). While the skill level in much of mass produced clothing and footwear is currently low, this is likely to change as the demand for higher wages increases and the availability of low cost labour decreases.

Conclusion

The demand for new luxury is expanding geographically, demographically and culturally. The luxury market relies on product differentiation, and this is offered by TechnoCraft. The flexibility offered in this bringing together of technology and craft means that TechnoCraft can be applied to a range of conceptual and applied fashion practices. In this paper the case study examples show how TechnoCraft can be used as a point of difference to mark luxury apart from low cost products appearing on the mass market which tends to use either technology or craft but rarely both together in a meaningful way. In emerging economies looking to establish their own cultural identities in the world, TechnoCraft is used to meet the global-local trend showcased through designers such as Manish Arora.

Where roles and definitions are reassessed we are starting to see an increasing number of what Sennett refers to as 'the technologist as craftsman'. TechnoCraft allows designers at the cutting edge to push boundaries beyond fashion and into fine art. This can be seen in the example of the luxury streetstyle consumer who wants to convey their style, status and knowledge in layers so that like-minded contemporaries will know that there is a printed text inside their clothes but others will not necessarily be aware of it.

There is evidence within the case studies that TechnoCraft has become an established direction for luxury fashion. On the basis of these studies, TechnoCraft may be well positioned to continue to evolve and develop to become further refined and meet future needs of this industry.

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Note

1. Author worked on this project as technology craftsperson.