

POLIMODA
Polimoda Research Hub

MOMENTING THE MEMENTO

CONFERENCE PROCEEDINGS

Edited by Polimoda
Introduction by Danilo Venturi

IFFTI CONFERENCE
14-15 May 2015

Edited by:
Polimoda
via Curtatone 1
50123, Firenze
Italy
Conference Proceedings 2015 Momenting The Memento, Biblioteca Nazionale Centrale di Firenze, 14-15 Maggio 2015

© International Foundation of Fashion Technology Institutes 2015

Individual contributors will also retain ownership of separate copyrights in their own contributions.

All rights reserved. Except for the quotation of short passages for the purposes of criticism and review, no part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise without prior permission of the publisher.

Momenting The Memento
ISBN: 978-88-596-1774-7
Graphic Design by The Creatures Factory
Printed by: Polistampa (Italy)

MOMENTING THE MEMENTO INTRODUCTION BY DANILO VENTURI

The Moment is a space-time fragment that lies between the arcadia (a perfect past that never existed) and the utopia (a perfect future that will never exist), where creativity and the highest existential expression spreads in all its emotional load.

As asserted in the book 'Momenting the Memento' that provided the theme for the IFFTI Conference 2015, the Moment is the result of epochal changes that we are still largely living through. Globalisation and maximum territorial expansion on earth create standardisation but also the emergence of extreme localisms. In the impossibility of a further outward expansion, human beings tend to draw into themselves, accumulating positive and negative energies, producing a high level of emotionality as well as a new sense of spirituality. Globalisation leads to a greater exchange of ideas (that result in copying, on the negative side, and the technique of appropriation, on the positive) and a greater exchange of goods and people. They are travelling and mixing more and more, up to the point that the IDentity of a person is no longer defined by one's DNA, language or ethnicity but rather by the place one decides to stop and live in a certain moment. So, DNA becomes DNi and ethnicity, ethni[city]. As a consequence, now the sense of exotic doesn't come from what is far, but from our neighbour. We are all foreigners and we need to recognise ourselves as part of the same tribe in a creative act, which we share as an emotion in a given space-time, precisely, in the Moment.

The internet cancels geography and since geography is made by history, it cancels history too. In fact, when surfing the internet, time passes without a progressive sense of time, rather as an infinite and intense oblivion. Now, new generations don't use the internet, they live in it. They are technologically native and electronic devices are an extension of their bodies as well as of their minds. Everything on the internet becomes instantaneous and absolute, the choice of a picture or a statement that is manifested by clicking "I like" is at the same time instinctive, primitive, almost brutal, but also evolved for the medium it uses. Everything seems

to be a matter of style, everyone builds a persona with a profile on social networks, meanings travel in three dimensions through the hyperlinks, but the medium is not the substance. Once boys were serenading girls under their windows and now they send them songs on Facebook. Technology changes but love always triggers the same instincts. Therefore, the internet does not change the nature of the human being, rather it brings it to the extreme in making him [be] come what he really is, a mix of spirit and technique, an animal that needs to build an artificial identity other than that of the animal: idENTITY. In the end, the life we live on the internet is once again nothing else but a Moment.

1989, downfall of ideologies: as people stopped to believe in clear, strong and opposed tales, there was no longer distinction between mainstream and alternative, in music, in art or in fashion. The quest for sustainability is on everybody's lips as well as a good dose of hypocritical green washing, great politicians disappear but politics is everywhere, wars are fought in uniform but costumes can cause wars, romantic designers are endangered but every product and even a business plan must be imbued with aesthetic. Classic is the new avant-garde, documentary and news are forms of expression used now by the Society of the Spectacle but the prose loses value in favour of poetry or essay, scoring a point in favour of the concentration of meaning, be it emotional or technical. Propaganda, advertising and shows are all noise because it's in the Moment that a pulsation goes through a nerve, a click switches from a wi-fi and a word is whispered in a message that can entice. The word, like the image, is now symbolic, iconoclastic and icono[clash] at the same time, paradoxical like the installations of Momenting the Memento, a way for the future to help the past, beyond space, time and defined categories like love after death. Once mythical action was told by a story, today the word generates the action: a pre-Raphaelite post-Soviet style is not possible in history, it is in the Moment.

Polimoda's Director

THE 17TH ANNUAL IFFTI CONFERENCE 2015

MOMENTING THE MEMENTO

- 11 **Susan Barnwell**
Spectres and Ethereal Space – The New Dimension
- 19 **Armando Chant**
De-Stabilizing the Frame: the Transitional and Transformative Nature of the Image within Fashion Practice
- 25 **Maarit Aakko**
Crafting Aesthetics: the Meaning of Materiality and Process in Artisanal Fashion
- 31 **Anupam Rana, Hemali Mehta**
Wellness of Women Artisans Working in Hand Embroidery Sector, Gujarat through Ergonomics
- 37 **Rakhi Wahee Pratasp**
Metamorphosis of Ritual and Spiritual Textiles of India into New Fashion
- 45 **Ben Barry, Daniel Drak**
The Monster in My Closet: Men, Fashion and Embodiment
- 51 **Daphne Mohajer Va Pesaran**
From Wajiro Kon to Fruits Magazine: Tokyo Street Fashion Culture's Imprint on Collective Memory
- 57 **Group Trendtank** (Bernina Chan, Kasia Luczak, Abigail Rands, Mylène Lemercier)
The Science of Fashion. Looping the Memento
- 65 **Alyssa Choat**
Fetishisation of the Image: the Ugly/Beautiful Paradigm
- 71 **Binwant Kaur**
3DPrinting on Fashion: from Futuristic Conceit to Pragmatic Realization
- 79 **Tony Kent, Claire Phipps, Eva Schwarz, Marta Blasquez Cano**
Fashion Space and Place: Convergence of Consumer Experience
- 85 **Sanjeev Kumar Jharkede, Anshoo Rajvanshi**
Craft Redefined: an Expression
- 91 **Kavita Saluja**
'Absent' is the New Present
- 97 **Rhian Solomon, Katherine Townsend, Amanda Briggs-Goode**
Crafting Anatomies: Material, Performance, Identity
- 103 **Maja Gunn, Annika Enqvist in collaboration with the group MYCKET**
Exclude me in – Redressing Space through a Carnavalesque Act
- 111 **Maja Gunn**
On & Off – The Designer as a Writer
- 117 **Shweta Joshi**
The Drapes Unsung, the Ornaments Uncherished
- 123 **Goutam Saha, Satya Shankar Banerjee, Darniya Roy**
Design of Future: an Invitation to Creative and Argumentative Designers to Debate on Designing Future Society
- 131 **Alice Payne**
Writing Fashion's Future: the Gods and Monsters of the Anthropocene

Susan Barnwell

Spectres and Ethereal Space – The New Dimension

Canada

Ryerson University

ABSTRACT

Living in an invisible world is not new. In June 1692 Bridget Bishop, a washerwomen, was hanged as a witch - the first of many censured individuals executed during the Salem trials. Several reports on the events of the period refer to 'the wonders of the invisible world.' Recently some inspired creative research by students at Newcastle University gave invisible life to wireless networks - referenced as 'spectres.'

This paper will explore contemporary connections between spectres and ethereal space in the form of a discourse connecting fashion innovators of the twentieth century - such as the Italian Futurist Giacomo Balla and his revolutionary manifesto of men's clothing from 1913; the inspired forms of Rei Kawakubo, Yohji Yamamoto and Issey Miyake who collectively transformed the Japanese sensibility challenged long held attitudes towards clothing and the body and the thought-provoking creations of Vivienne Westwood that blurred genders and created confusion - to established concepts of fashion.

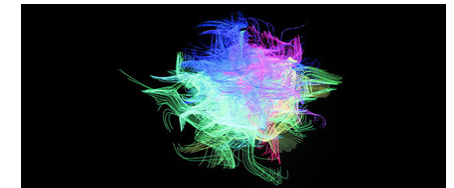
For millennia many established cultural controls endorsed the separation between the man made world and nature - the animate and inanimate. Within the last decade these distinctions have been shown to be false. According to most astrophysicists all the matter found in the universe today was created at the very first moment of time thought to be about 15 billion years ago. Everything that we can see and experience, from the furthest nova to nanotransistors - everything is composed of stardust.

We are on the cusp of phenomenal change. We need individuals capable of unifying the technical

advances in the world we experience with those digital technologies with their invisible underpinnings that are creating the secrets of future generations. We need fearless individuals capable of creating "errors without a past" while gravitating towards some other space beyond utopia.

SPECTRES AND ETHEREAL SPACE

Living in an invisible world is not new. In June 1692 Bridget Bishop, a washerwomen, was hanged as a witch - the first of many censured individuals executed during the Salem trials. Several reports on the events of the period refer to 'the wonders of the invisible world'¹, providing the spectres of an ethereal world. A similar phraseology is common among various social commentators including Jacques Derrida and Jean Baudrillard. Derrida, in *Specters of Marx: The State of the Debt, the Work of Mourning & the New International* (1993) explores the conception of the spectre, "the paradoxical state of the spectre, which is neither being nor non-being".² Ross Abbinnett in his assessment of Baudrillard adds that "that the most political way of approaching Baudrillard is to read him as a kind of 'evil genius' of simulation; as a provocation to acknowledge the spectral bodies who hover between life and death within the system of the hyperreal."³



Ryuichi Sakamoto and Daito Manabe's Visual Representation of Electromagnetic Waves for Japan Media Arts Festival Exhibit.

Recently some inspired creative research by students at Newcastle University, using the Kirlian Device⁴, gave invisible life to wireless networks - referenced as 'spectres'.⁵ In February 2015 an award of excellence was given to Ryuichi Sakamoto and Daito Manabe for their media installation 'Sensing streams - invisible, inaudible' at the 18th Japan Media Arts Festival in Tokyo. 'An installation work in which, through detection (or sensing), electromagnetic waves imperceptible to humans are made visible and audible'⁶ providing visual insight into digitalized society and the role of smart devices. An article in a recent issue of MIT Technology Review provided details of the development of a technology that will allow mobile devices the power to display full-colour holographic images and video - spectres in the palm of your hand?⁷

Invisible forces influence our day-to-day world. Algorithms are complex, often controversial, and ill understood - yet they touch every aspect of our lives. Every response to a Google search responds to an algorithm that includes hundreds of ranking signals to determine the order of results. As we have a tendency to give more 'weight' to the higher rankings then it is possible to suggest that our current beliefs and values are influenced by the algorithm spectre.⁸ We must recognise that the new frontier is ethereal and digital, providing a new dimension to fashion.

Alice laughed. "There's no use trying," she said: "one can't believe impossible things."... "I daresay you haven't had much practice," said the Queen. "When I was your age, I always did it for half-an-hour a day. Why, sometimes I've believed as many as six impossible things before breakfast." Lewis Carroll (Charles Lutwidge Dodgson), *Through the Looking-Glass, and What Alice Found There*, 1871.

BELIEVE IMPOSSIBLE THINGS

For millennia many established cultural controls endorsed the separation between the animate and inanimate. Within the last decade these distinctions have been shown to be false. According to most astrophysicists, all the matter found in the universe

today - including the matter in people, plants, animals, the earth, stars, and galaxies - and even the clothes that you wear was created at the very first moment of time, thought to be about 15 billion years ago. Everything that we can see, everything that we can not see, everything that has ever lived, everything that will ever live, everything is composed of stardust.⁹ We need to believe impossible things.

Change and complexity are the defining characteristics of the age. An abundance of uncertainty and ambiguity demands "new knowledge, skills and a new mind-set".¹⁰ Success, personal and professional, will be dependent upon how well we deal with increasingly complex and dynamic situations. It is inconceivable to imagine working and living in a world without social networks or the accompanying technological elements that did not exist a decade or two ago. Advances in methods of production; enhanced environmental concerns; consciousness of social inequalities and an acute awareness of secular confrontations - all provide both challenges and, for the prepared mind, exciting and invigorating opportunities for design innovation. All demand the willingness to believe impossible things. It's all a matter of mind-set.

PAST, PRESENT, FUTURE

We do not need to build a bridge between the past and future - it's already here. Michele Besso was a life long friend of Albert Einstein. Besso died in 1955 and Einstein wrote a letter of condolence to Besso's family, saying; "He has departed from this strange world a little ahead of me. That means nothing. For us believing physicists, the distinction between past, present and future is only a stubborn illusion."¹¹



The Moscow based Yandex School of Data Analysis collaborates with CERN on one of the main experiments at the Large Hadron Collider.¹²

A MAGICAL SPACE

The Large Hadron Collider (LHC) at CERN gives a tantalising glimpse of the beginning of spacetime and future research may indicate what takes over where spacetime ends. LHC could discover the moment before the big bang, the moment before the moment,¹³ this may result in a radical and fundamental change in our perception of the world. We could jump from four to the ten dimensions posited by string theory theorists.¹⁴ That, briefly, is the general matrix against which the remainder of this paper is offered.

FOCUS

This paper will explore contemporary connections between bridges and monsters¹⁵ in the form of a discourse connecting fashion innovators of the twentieth century; the Italian Futurist Giacomo Balla and his revolutionary manifesto of men's clothing from 1913; the inspired ethereal forms of Rei Kawakubo, Yohji Yamamoto and Issey Miyake who collectively transformed the Japanese sensibility and challenged long held attitudes towards clothing and the body; consider the thought provoking creations of Vivienne Westwood who blurred gender distinctions and created confusion to established perceptions of fashion and end with some thoughts on contemporary interactive digital forms of expression.

FUTURISTS

The twentieth century dawned against a backdrop of industrial innovation that changed the daily patterns of life. Physically most evident was the transformation of systems of transportation. The speeding car and the rampaging train revealed previously hidden realities. The transitory nature of the blurred images as the material progressed through ethereal provided a new appreciation of technology together with a realisation that ethereal sensations were also subject to manipulation. The time-lapse photography of Étienne-Jules Marey and Eadweard Muybridge captured the moment.¹⁶ Aerial views added another dimension to vision. Futurism focused on the emotions associated with the "new face" of the world and on their artistic expression.¹⁷

Conceived by Filippo Tommaso Marinetti, Futurism entered into the cultural consciousness by way of the front page of *Le Figaro* on 20 February 1909.¹⁸ A devout nationalist Marinetti provided a scathing critique of all things classically Italian.¹⁹ A central objective presented in the manifesto was a redefinition of Italian culture by the progressive, mechanical aesthetics of dynamism and speed, and the creation of an *ex nihilo* culture that stands detached from any other tradition.²⁰ Quite literally, something out of nothing.

The participating artists were Italian but the operational centre was Paris. Luigi Russolo was intrigued by sound - he struggled with attempting two-dimensional revelations but was far more successful with his four dimensional noise intoners (*intonarumori*). Lucciano Chessa argues that these machines were scientific experiments in the mystical ethereal effects of sound. Russolo believed that his machines could spur listeners and practitioners into an enhanced state of consciousness.²¹

Giacomo Balla²² conducted early experiments into wearable technology. "He was one of a group of influential techno-sartorial transformers that included fellow Futurist F. T. Marinetti, Russian Constructivists Varvara Stepanova and Liubov Popova, and Paris based Cubist, Sonia Delaunay."²³ Balla saw clothing, quite literally, as a physical manifestation of Futurism. He produced the "Antineutral Suit (for men): Fashion Manifesto" in 1914.²⁴ The manifesto called for the abolition of neutral colours; boring shapes; morning suits; the mediocrity of moderation and the symmetrical cut. Balla stated that the Futurist suit will be; aggressive; agile; dynamic; simple and comfortable; hygienic; joyful; illuminating; strong willed; asymmetrical; short lived and changeable.²⁵ Design components that would have little meaning to the tailors of Savile Row.

Balla and his twenty-three year old colleague, Fortunato Depero issued a manifesto in March of 1915 titled 'La Ricostruzione Futurista dell'Universo' ('The Futurist Reconstruction of the Universe').²⁶ This

was by far the most radical and prophetic work of the period, emphasising movement and fragmentation of forms and a break from contemporary concepts of spacetime.²⁷

CULTURAL IDEOLOGY OF DESIGN

Concepts of the unexpected; the coolness of subversion and commodification;²⁸ plus situations, fragmentation of forms, ex nihilo culture - all come together in Japanese fashion design as embodied in the design philosophies of Rei Kawakubo and Yohji Yamamoto. A small hand made bowl becomes so much more when it is perceived as 'Racku'. A traditional kimono clothes its wearer in a mantle of meaning far more intense to that provided by a couture creation. Our understanding of who we are is shaped by our perception of the external world. We are, what we believe ourselves to be.²⁹

By the early 1980's many people associated with fashion were questioning the traditional belief that clothing should express wealth and status. The trend began in Japan with the unsettling clothes of Yohji Yamamoto and Rei Kawakubo. These clothes were usually black and often intensely torn or ragged. The trend gathered momentum and was reflected in the Paris showings of the Winter 1983/84 collections when a contingent of Japanese designers emerged and presented a totally new concept in dressing, their overriding message being that clothes should interact with the persona.

Rei Kawakubo produced clothing in bold new shapes that paid little attention to the natural shape of the body. More important her bump dress of 1997 shifted the natural curves of a woman's body and her dress became a metaphor for creating a revised awareness of the body. Rei Kawakubo operates less with eroticism and more with poetic forms bereft of pre-established semantic content. She questions accepted notions of fashion and rejects the traditional concept of beauty and perfect form - more reminiscent of the Zen concepts of wabi-sabi - All things are impermanent; All things are imperfect; All things are incomplete.³⁰

In the early 1990s Vivian Westwood continued her

deconstruction of fragmented images. She took sex out of the bedroom and explored clothing that was androgynous and blurred genders. This was not about cross dressing but deliberate gender confusion and the transportation of established order. She does not just challenge, she dismantles the very fibres of our traditional beliefs about fashion, hierarchy status and sex. There is a perversity in her uniqueness she delights in being different, she told the Times newspaper recently that: "The only possible effect one can have on the world is through unpopular ideas - they are the only subversion." Always self-confident of her own sexuality she is quoted as saying, "I've never thought it powerful to be like a second-rate man. Femininity is stronger, and I don't understand why people keep plugging this boring asexual body. Its just a question of adjusting the eyes. It is only perverse because it is unexpected."³¹

In tomorrow's world, genders are merging into the fourth dimension while time and space are merging into the fifth dimension. Issey Miyake's recent collections provide a real bridge to the future - a folded flat piece of recycled plastic magically transforms into an expression of the fifth dimension.

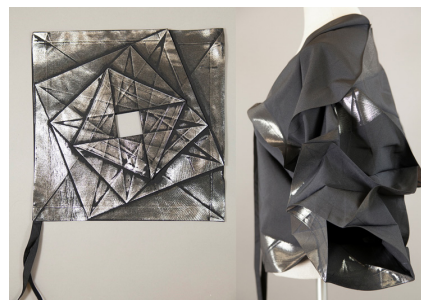
A FLASH OF MEMORY

For all the post Hiroshima national adjustments, the basic tenets of Japanese culture remain in place - loyalty, duty, honour, and respect - these remain paramount in any attempt to understand Japanese culture and the philosophy of Japanese design. The iconic Japanese designer Issey Miyake offers a personal assessment.

"On Aug. 6, 1945, the first atomic bomb was dropped on my hometown, Hiroshima. I was there, and only 7 years old... I have never chosen to share my memories or thoughts of that day. I have tried, albeit unsuccessfully, to put them behind me, preferring to think of things that can be created not destroyed, and that bring beauty and joy. I gravitated toward the field of clothing design, partly because it is a creative format that is modern and optimistic."³²

132 5

Throughout his career, Issey Miyake has pushed the edge of the envelope, always searching, always moving forward. In 1999 he appointed Dai Fujiwara as creative director so that he could focus on the Reality Lab, a research based team of designers, technologists, engineers that, as he explains, "challenges, explores and celebrates the infinite possibilities of creativity."³³



Issey Miyake, 132.5. Collection 2012.

In his 132.5. collection presented in 2012, instead of cutting and sewing, the fabric is folded with sharp, precise, permanent creases - like those of origami. When folded, the garments are pressed into flat round geometric shapes such as stars and swirls. When unfolded, they become multi-faceted angular tubes that can be worn as body coverings.

The title 132.5. explains the notion: one piece of fabric, a three-dimensional shape reduced to two, which morphs into a fifth dimension. In physics there are three dimensions; the fourth is time. Some astrophysicists reason that the fifth dimension may be the universe that we live in - according to Miyake it is when the garment is worn and comes to life "through the communication among people."³⁴

In today's world, the real power lies in the ability to transform one thing into another, to contain several realities rather than just reflecting one set of values, to embrace longevity and the traditions of the past with the technological promises of the future. The

new concerns will be about relevant creative self-expression. Our minds must be open to all possibilities. We must celebrate the abnormal or unacceptable as well as the acceptable in order to bring new visions to fashion to celebrate what we have been but also what we can be - we must believe that the acceptable and unacceptable exist in different parallel universes.



Dazed and Confused, September 1998. Model Aimee Mullins. Photographer Nick Knight.

As early as 1998 deliberations on what is acceptable (natural) and unacceptable and initially unnatural has been subject to on-going debate. For example Nick Knight's Dazed and Confused, Access-able photo shoot of Aimee Mullins (September 1998) brought the potential beauty of missing limbs to the forefront.³⁵ "Her athleticism led her to procure a pair of woven carbon-fibre prosthetic legs that were modelled after the hind legs of the cheetah... creative and interesting prosthetics that were empowering to herself, and which allowed for fashionable and artistic expression

through use (rather than simply acting as camouflage or a way to blend in)".³⁶ The fashion photographer Rick Guidotti founded Positive Exposure in 1997. He explored beauty in traditionally unacceptable images and extended the stereotypical view of beauty to embrace marginalized groups.³⁷

Maybe we can learn by observing the fringes elements that we have ignored in life, by asking these individuals how they adapted to the loss of an arm or leg - and in their answer lies the answer to environmental degeneration - "I had no option." We must adapt and develop. Fashion the most visual indicator of change will lead the way. We must be open to the endless possibilities of fashion.

We are on the cusp of prenominal change. No longer separated by the physicality of land, water or air, we are connected by the ethereal internet, with all the dilemmas, frustrations, excitement and endless possibilities that it provides. Ideas and information no longer rely on physical forms of transport; we are longer restricted to face to face encounter - holographic spectres await.

SPECTRES AND ETHEREAL SPACE IN MOTION

One final thought; with the irrelevance of old boundaries the way is open for unhindered exploration. Forget catwalks and couture; embrace holography, accept the new social hyperreality³⁸ and incorporate digital interaction in the design process. Referencing Baudrillard, Andrew Robinson comments: "The free play of fashion renders all signs relative, rendering power arbitrary". Take heart. Be powerful. Believe impossible things. Watch this three-minute clip of a mesmerizing seventy-one minute dance performance incorporating interactive digital projection³⁹ and let your mind explore the spectres and ethereal space beyond utopia.⁴⁰

References

¹ Mather, Cotton, (1693) (1862) *The Wonders of the Invisible World. Being an Account of the Trials of Several Witches Lately Executed in New-England*, London: John Russell Smith.

<http://www.gutenberg.org/files/28513/28513-h/28513-h.htm>

² Khatib, Sam, (2013) 'Derrida & Sons: Marx, Benjamin, and the Specter of the Messianic,' *Anthropological Materialism*, 2 January 2013. Available at: <http://anthropologicalmaterialism.hypotheses.org/1810>

³ Abbinnett, Ross, (2008) 'The Spectre and the Simulacrum. History after Baudrillard', *Theory Culture & Society*, Vol 25, No 6, (November 2008) pp. 69-87.

⁴ Hernan, Luis, (2015) 'Kirlian Device. An Instrument to Reveal the Ethereal,' *DigitalEthereal* (n.d.) Available at: <http://www.digitalethereal.com/kirliandevic.html>

⁵ Hernan, Luis, (2015) *Digital Ethereal. A Creative Exploration of Wireless Spectres* (n.d.). Available at: <http://www.digitalethereal.com/>

⁶ Sakamoto Ryuichi /Manabe Daito, (2015) 'Sensing streams - invisible, inaudible'. *Japan Media Arts Festival*. Available at: http://jmediaarts.jp/awards/excellence_award?section_id=1&locale=en#item2

⁷ Orcutt, Mike (2015) 'New Display Technology Lets LCDs Produce Princess Leia-Style Holograms', *MIT Technology Review*, 25 February 2015. Available at: <http://www.technologyreview.com/> See also: *Leia. Mobile Holography*, <https://www.leiainc.com/>

⁸ Spring, Tom, (2011) "Algorithms That Rule the Web." *PCWorld*, 24 January 2011.

⁹ 'How Much of the Human Body is made up of Stardust?' (n.d.) *Physics Central, The American Physical Society*. Available at <http://www.physicscentral.com/explore/poster-stardust.cfm>

¹⁰ Lee, Edmund, (2015) 'Igniting Innovation in Hong Kong,' *Hong Kong Design Centre*, February 2015. Available at: http://www.hkdesigncentre.org/download/dnews/201502_N2_eng.pdf

¹¹ Isaacson, Walter, (2007) *Einstein: His Life and Universe*. New York: Simon & Schuster, p. 540

¹² "Yandex School of Data Analysis teams up with CERN," (2015) *Rusbase*. Online guide to Russian tech market. Available at: <http://rusbase.com/news/author/robinmunby/yandex-school-cern/> For information on the free Masters level program in Computer Science and Data Analysis: <https://tech.yandex.com/education/shad/>

¹³ I refer to the conference theme; "Momenting the Memento" by Danilo Venturi, "The real moment is a nomad monad, a situation in which time and space ultimately overlap, in which the relative becomes absolute, and the transient event becomes an emotional memory." Available at: <http://www.iffit2015.polimodaconference.com/pane/the-conference/>

¹⁴ Halpern, Paul, (2014) 'How Many Dimensions Does the Universe Really Have?' *NOVA, The Nature of Reality*, 3 April 2014. Available at: <http://www.pbs.org/wgbh/nova/blogs/physics/2014/04/how-many-dimensions-does-the-universe-really-have/>

¹⁵ As indicated in the call for papers, I use the word 'monster' to indicate

something outside given borders, that may have invisible and/or ethereal form; with the ability to interpret and give meaning to impossible things.

¹⁶ Cranny-Francis, Anne, (2005) *MultiMedia: Texts and Contexts*, London: Sage, p. 89.

¹⁷ Futurism was defined by Filippo Tommaso Marinetti (1876-1944) in "The Futurist Manifesto," published in the Parisian paper *Le Figaro* on February 20, 1909.

See also: Gualdoni F, (2009) *Futurism*, Milan: Skira Editions. Bell J, (2007) *Mirror of the world. A new history of art*, London: Thames and Hudson; p 374-90

Bohn, Willard, (2004) *The Other Futurism: Futurist Activity in Venice, Padua, and Verona*, Toronto: Toronto University Press.

¹⁸ Marinetti, T. (1909) 'The Founding and Manifesto of Futurism', as translated in *Italian Futurism* (n.d.) Available at: <http://www.italianfuturism.org/manifestos/foundingmanifesto/>

¹⁹ Clough Rossa-Trillo, (1961) *Futurism: The Story of a Modern Art Movement*, New York, Wisdom Library, 1969, p. 1.

²⁰ Ohana, David (2010). 'Filippo Tommaso Marinetti, Futurism and Fascism', *The Futurist Syndrome*, Vol.3: *The Nihilist Order*, Eastbourne: Sussex Academic Press, pp. 11-87.

²¹ Chessa, Luciano, (2012) *Luigi Russolo, Futurist: Noise, Visual Arts and the Occult*, Berkeley: University of California Press.

Musica Futurista the Art of Noises, (2004) a collections twenty-three music and spoken word pieces from 1909 through 1935, Audio CD, 2004

²² Merjian, Ara H. (2012) "A Future by Design: Giacomo Balla and the Domestication of Transcendence," *Oxford Art Journal*, Vol. 35, Issue 2, pp. 121-146.

²³ King, Madeleine Frances (2011) *Fashion, the body and technology: tracing early 20th century techno-utopian ideas, aesthetics and impulses in 21st century wearable technology*. Masters by Research thesis, Queensland University of Technology. Available at: <http://eprints.queu.edu.au/50948/>

²⁴ It should be noted that Balla edited and re-released his 'Futurist Manifesto of Men'sClothing' just four months later, in September 1914, as 'The Antineutral Suit: FuturistManifesto', thereby transforming his sartorial imperative into a vehicle of explicitly interventionist, war-mongering activism. See: Giacomo Balla, 'Futurist Manifesto of Men's Clothing', translated and reprinted in Apollonio (ed.), *Futurist Manifestos*, pp. 132-4; and 'The Antineutral Suit: Futurist Manifesto', in Lawrence S. Rainey, Christine Poggi, Laura Wittman (eds), *Futurism: an anthology*, (2009) Yale University Press, pp. 202-4. de la Barra, Pablo Leon(2011) "Giacomo Balla, 'Il Giardino Futurista' And 'Futurist Suit', 1913-1930," *Centre for the Aesthetic Revolution*, 2 February 2011. Available at: <http://centrefortheaestheticrevolution.blogspot.ca/2011/02/giacomo-balla-il-giardino-futurista-and.html>

²⁵ On Balla's clothing design, see Emily Braun, (1995) 'Futurist Fashion: Three Manifestoes', *Art Journal*, vol. 54, no. 1, *Clothing as Subject*,

(Spring,1995), pp. 34-41.

²⁶ Giacomo Balla and Fortunato Depero, (2011) 'The Futurist Reconstruction of the Universe', originally published as a leaflet, *Direzione del Movimento Futurista*, March 11, 1915, Milan. Available at: <http://www.italianfuturism.org/manifestos/futurist-reconstruction-of-the-universe/> de la Barra, Pablo Leon, "Giacomo Balla, 'Il Giardino Futurista' And 'Futurist Suit', 1913-1930," *Centre for the Aesthetic Revolution*, 2 February 2011. Available at: <http://centrefortheaestheticrevolution.blogspot.ca/2011/02/giacomo-balla-il-giardino-futurista-and.html>

²⁷ "Italian Futurism. 1909-1944 Reconstructing the Universe," (2014) Solomon R. Guggenheim Museum, 2014. Available at: <http://centrefortheaestheticrevolution.blogspot.ca/2011/02/giacomo-balla-il-giardino-futurista-and.html>

²⁸ Yulianto, Wawan Eko, "Unflinchingly Cool: Commodification and Subversion in Pulp Fiction," Available at: http://www.academia.edu/1168374/Unflinchingly_Cool_Commodification_and_Subversion_in_Pulp_Fiction

²⁹ Parfit, Derek, (1986) "What We Believe Ourselves to Be", in *Reasons and Persons*, Oxford: Oxford University Press, p. 199. Available at: http://commonweb.unifh.ca/artsdean/pub/gestens/1/as/files/4610/17613_101712.pdf

³⁰ Koren, Leonard, (2008) *Wabi-Sabi for Artists, Designers, Poets & Philosophers*. Point Reyes CA: Imperfect Publishing, p. 49.

³¹ Wilcox, Claire, (2005) *Vivienne Westwood*, London: Victoria & Albert Museum, p. 4.

³² Miyake, Issey, (2009) "A Flash of Memory," *The New York Times*, 13 July 2009. Available at: <http://www.nytimes.com/2009/07/14/opinion/14miyake.html>

³³ As quoted by Dana Thomas (2010) "132.5 Issey Miyake" *The Design Observer Group*, 15 September 2010. Available at: <http://designobserver.com/feature/132-5-issey-miyake/15558/>

³⁴ Thomas, Dana, (2010) "132.5 Issey Miyake," *The Design Observer Group*, 15 September 2010. Available at: <http://designobserver.com/feature/132-5-issey-miyake/15558/>

³⁵ <http://www.aimeemullins.com/gallery/#>

³⁶ Mellissa, (2011) "Alexander McQueen: Art Beauty, and the Unique Body" *Worn Through*, June 30th, 2011. Available at: <http://www.wornthrough.com/2011/06/30/alexander-mcqueen-art-beauty-and-the-unique-body/>

³⁷ Guidotti, Rick, (2011) "From Stigma to Supermodel" TED, Phoenix: November 2011. Available at: http://www.ted.com/talks/rick_guidotti_from_stigma_to_supermodel?language=en

³⁸ Robinson, Andrew, "An A to Z of Theory I Jean Baudrillard: Hyperreality and Implosion", in *Theory, New in Ceasefire*, posted Friday, August 10, 2010. Available at: <https://ceasefiremagazine.co.uk/in-theory-baudrillard-9/>

³⁹ Pixel (2014) is a live show that combines dance choreography with interactive, 3-D projection mapping. The show features 11 dancers and debuted at Maison des Arts de Créteil in France. The 71-minute performance was directed and choreographed by Mourad Merzouki. Available at: <http://concert.arte.tv/fr/pixel-par-mourad-merzouki-au-festival-kalypso>

⁴⁰ "Beyond Utopia. New Politics, the Politics of Knowledge, and the Science Fictional Fireld in Japan," (2015) *Asiascape*. Leiden: Universiteit Leiden. Available at: <http://asiascape.org/beyondutopia.html>

Armando Chant

De-Stabilizing the Frame: the Transitional and Transformative Nature of the Image within Fashion Practice

Australia
University of Technology Sydney

ABSTRACT

The aim of this paper is to explore the nature and potential that the 'framing' of fashion can have in relation to the fashion image and to the fashion process itself. The 'frame' or approach to 'framing' that currently exists within a fashion context (in relation to large scale industry) can be understood within three main areas: industry, imagery and garment. Industry in terms of seasons, production and retail structures; 'imagery' in terms of editorial, campaign or presentation; and in terms of the 'framing' of the fashion garment itself, guided by gender, size and designated style.

However, this paper aims to understand and explore the 'frame', or process of 'framing', and its relationship to the fashion image away from the conventionalities and more linear framework of large-scale commerce, and within the fashion design 'process' of the small-scale designer/practitioner. In particular, it will focus on viewing the fashion 'image' through the lens of an evolving 'frame', so as to understand how the fashion image transitions and transforms through the fashion design process; engaging different forms of interpretation and its potential to inform experimental fashion practices.

The projects that have been created and undertaken so far, have been realised through a interdisciplinary, practice based PhD, enabling the 'practice' of fashion to be expansive in nature, and for outcomes produced as a part of, and through, 'process' to be interpreted as an engagement with the fashion image in its totality. The recognition of potential alternative sites for the fashion image to be sited within has also allowed for fashion design process be seen beyond its usual

confined and traditional frameworks. When thinking of the frame, and how it is being referenced within the practice, it is being thought of in three 'states': the framed, the de-framed and the un-framed.

The oscillating relationship between the 'framed' states, be it framed, de-framed or un-framed, is seen as a fluctuating and active dialogue between the fashion image and its subsequent experience. In many ways, the fashion image and its relationship to these 'states' demonstrates the potential for the image and its transitioning nature to be considered as a series of interconnected relationships between designer, image, medium and viewer; and in relationship to other creative practices such as art, photography, film and installation. As Zoe Ryan commenting on the inter-disciplinary practices of Bless, Boudicca, and Sandra Backlund states (Ryan, 2012, p.12).

"This more multi-faceted approach enables them to construct narratives or scenarios about their creations and the world of fashion design that help define their output and permit insights into their working process, emphasizing their ideas, showcasing their inventive spirit, and ultimately allowing more complex readings of their work that transcend any single garment or accessory"

This approach is building on the idea of fashion as a constantly changing process of image generation (through visual, medium and form) and how it can be perceived or re-configured in relationship to the evolving frame. As John Potvin states, "Fashion is a system of continuously changing images, and both fashion and space share in common the fact that they are modes and systems of representation." (2009, p. 9)

FASHION IN THE FRAME

Frame as window

This paper is proposing that at this point in the frame's cycle (in relationship to small scale fashion practice) that the frame should be thought of as a window into the process of image generation. If we consider the frame as window; a theoretical container and construct, then: Can it be seen as a method of looking and reading into the designers creative process? Viewing the frame or window in this manner calls into question the way in which the designer/practitioner engages with the act of image 'making' in fashion. At which point does the fashion image itself emerge or become realised? And how can it become a dualistic form of engagement of seeing/reading? For the designer, working within the 'frame' as a construct provides a fundamentally clear and precise way of seeing, reading and creating in which the space of experience and its mode of engagement are singular rather than multiple. It is an intimate relationship that is formed between the designer and the potential fashion image that is starting to unfold and traverse the path from the imaginary to the visual. The 'frame', when sited within research and process, is therefore facilitating the imaginative leap between the unreal and the real within a framed space of creative expression.

In this way, the frame as window into the design process can be seen as potentially performing two roles: that of site and that of lens. With regards to the site or siting, it is facilitating the fashion image to be 'placed' within the defined boundaries of the 'framed' paper, canvas or journal; the traditional site of the designer's 'visualisation'. However, the frame (from a conceptual and perceptual viewpoint) is also acting as a 'lens' for the fashion image to be seen 'through' and 'into'. The frame as lens is being interpreted as a device and method allowing the imaginary world of the designer to be made real. The site/lens dynamic that is occurring within the context of the 'framed' state is itself being considered as an intersected dualistic virtual space; a non defined entity, in which there is a push/pull action occurring between the

gestural action of the hand, the thought process, and the space of engagement. It is in this non-localised site that the imagination of the designer and the real world of the visualised fashion image meet and are brought together through an imaginary and intangible framework.

Framing the surface

The practice is considering the state of the frame, and when it comes to the emergence of the fashion image in visual form, the frame oscillates between being a contextual structure and a surface for gestural and active marks to be visualised. If we continue to consider the frame as a 'window' into the fashion process, at this stage the image is in a state of emergence and becoming; within the framed surface we see a constantly shifting and changing landscape of marks and lines in which layers of gestural intent and engagement are constructing the fashion image.

Every time a mark or gesture touches the surface, it has the potential to change what we see and engage with. It is re-defining the physicality of the active and 'framed' surface and the way we perceive it. The lines and marks are being thought of as tools by which the framed surface is being stained, dissected and re-shaped in relationship to the traces that are being left on it through gestural action. The framed surface is starting to change its form and shape through the imprints being left behind. Are these marks creating spaces or voids within the surface to be seen into, or are they a series of accumulated tactile textures that build onto it and change its perceived 'flat' dimensionality? The practice is seeing this part of the process and image generation as not about literal depiction, but about an abstracted indication of potential; an artistic rendering of conceptual thought that is framed visually and perceptually which is changing the state of the framed surface it exists upon.

The sketch, mark, or gesture is the first stroke in layering an image to be read or interpreted. It's a layering of surface actions, and is in constant flux. As Paul Carter, talking of the mark and image making

process, states (2004, p. 42), "Their combination and recombination enacts, rather than symbolises, process.

Their compounding traces evolutionary process." As can be seen, the image is embedded at this stage with a 'transitional' element; it is in progress, on the start of its journey through a process of transformation. The fashion image in transition is part action and part documentation of the moment of creation/creativity that occurs when the designer/maker's pen meets paper; the hard line of graphite making a definite statement of intent and an imaginative leap of faith. It is at this point that there is a direct relationship between the image being created and the action of the designer. A thought process is being visualised and there is a fundamental connection between body and mind that encourages a sense of questioning as to the perception of the frame, and to how it is changing in response to the hand. As Joan Truckabond (2012, p. 34) states, "It is through the hand, that the vision in the imagination, comes to fruition – either in a drawing or in material form. In sketching, the hand is prominent in probing a vision and materializing an idea."

DE-FRAMING THE FRAME

De-framing as an oscillating 'state'

In the 'framed' state, the active site for the fashion image lies both within and on the surface, with the feeling of change happening by the surface being visually and physically altered through gesture, mark and line. The practice is proposing that the 'frame' in its next stage of evolution be considered within a 'de-framed' context, one in which the fashion image is in a constant state of flux between being created, de-framed and re-made, and is transitioning from two-dimensional to three-dimensional form. The fashion image here is an unstable entity; an evolving form of interpretation and understanding in which there is a process of constant negotiation between image and form. This allows the traditional viewpoint of how the image/garment/artefact relationship is traditionally seen and experienced, to be re-assessed by the designer/practitioner. This de-framed state (in terms of process and outcome) potentially allows different perspectives on how the image /garment/artefact can

be interpreted, perceived and experienced.

Whereas within the framed state there was a singular relationship with the fashion image, here within the de-framed state of the frame, it becomes more fluid and porous; an inter-relationship is established between designer, image and form. The practice is proposing that the de-framed 'state' is that of oscillating in-between the states of site and form, and it can be seen as a site for experimental fashion outcomes to be revealed. What is seen to be created through this de-framed state of viewing and experience is a non-garment/artefact/image with no definite shape, form or localised place; an in-determinate and fluctuating site of creativity. The de-framed frame is offering us a method of looking at the fashion image (and its relationship to the garment) as a transition from pure surface to form in space. In this case, there is a perceptual oscillation between the garment as image and the image as garment. The de-framed state, and its relationship to fashion practice, is encouraging a fluid dialogue of creative expressions between image, garment and artefact in which new pairings, connections and possible resonances between mediums, techniques and forms can occur. As Kay Larson (Baas, J., Jacob, M., 2004, p. 71) states, "The frame takes on whatever shape is needed to meet the demands of the moment. When there is no inside or outside, boundaries, shift and flow, expand, contract, become perfectly fluid and adaptable."

Materiality and the frame

When considering the state of the frame within a de-framed context, the practice is proposing that the transitional fashion image can potentially be read and seen as a sequence of image, dimensional and material transformations. The gesture, line or mark initially created can therefore be seen as a constant presence, yet it is changed or transformed through its engagement with different materials, mediums or formats. This dimensional change signifies a visual, physical and temporal shift in the way that we engage and perceive the image, and potentially the method of working for the designer/practitioner. The practice is seeing the image within the textile surface as having a

sense of depth, materiality and tactility to it. The image is in process of becoming a three-dimensional entity; sited within the in-between gap of materialization, it is essentially caught in the evolutionary act of becoming manifest in three-dimensional form.

The garment as wearable form or non-garment (as it has no reference to the body at this stage) acts as facilitator for the image to be activated through bodily movement, and it come alive in three-dimensions when worn. The non-garment (when activated by the body) is offering the possibility for the image to change and transition in real time through the action of the wearer, now seen as a co-performer in the interplay between image, body and form. This sense of activation of the image and garment by the body is crucial to understanding the fashion image in transition as embodying a sequence of different bodily, positional and aesthetic viewpoints. By seeing the garment as a dynamic and transitioning entity, a direct aesthetic and conceptual relationship can be made between the photographic 'still' image and the kinetic 'moving image' and the siting of fashion within film. As Natalie Khan (2012, p. 238) states, "The shift from the still to the moving image is relevant when we consider fashion as an image or a visual phenomenon." In this sense, the de-framed image and the way it is visualised encourages a sense of formlessness through visual and temporal intervention in which the non-garment or form is being de-materialised. Transformed by the fashion image in flux, it becomes a hybrid entity existing between the physical/visual and real/virtual realms. If we perceive the transitioning image in this manner, through the de-framed frame, then the question can be asked, is the image being worn rather than the garment? And can the body now be considered surface?

THE FASHION IMAGE UN-FRAMED

The practice is understanding the 'frame' as perceptual viewpoint, and the creative outcomes produced as a sequence of evolving interpretations utilizing the image in a variety of mediums and dimensions, be it drawing, photography, garment, artefact or film. The image is engaging with framed states in

different ways, especially when the fashion image is not confined by a framework and is in a 'un-framed' state. By viewing the fashion image in an 'un-framed' manner we are opening up the possibility for fashion to exist within non-defined, ethereal and intangible space; extended into our spatial environment, its relationship to the illusionary or virtual in the context of fashion can be explored. Taking this approach into account, the practice is considering the 'unframed' fashion image as not being localised within a physical context. Instead it exists in a transitory and imaginary manner through an engagement with the spectator's memories, feelings and emotions. In this way, the spectator's role as co-performer/creator of the fashion image is enhanced.

With this in mind, the practice is considering the transitional fashion image as an interconnected series of images, activated through real and virtual time, in which we see one frame at a time, yet through an expanded viewpoint the 'total' experience is frameless, it is 'unframed'. We are seeing, as Bill Viola (1995, p. 89) states, "the narrow slit of the now." The transitional and filmic 'moving' fashion image oscillates between becoming and dematerializing; revealed through the ethereal medium of light. The practice, through its engagement with the medium of film and video, questions if the siting of the transitional fashion image can reside within the 'in-between' of film frames or stills; a marginal site where visual and material forms can be revealed and made more obvious through fashion process and production.

The filmic viewing experience here is not a passive one, but imaginatively 'active' as we have a memory bank of visual imagery and experiences from past events that informs what is happening in the here and now. We project onto and into an image, thus the transitional fashion image is a site for imaginative engagement in which there is a sensory and visual leap between what has been and what is next. This imaginative interaction with the fashion image is one whereby there are a number of connections being made beyond those implied, including visual, physical, imaginative, and those from our memory used to

create a new personalised narrative. Interpreting the fashion image through the lens of the 'un-framed' is a way of looking at ourselves, or placing ourselves in connection to the world around us; opening up multiple possibilities for imaginative engagement. This process of 'viewing', and 'imagining' is a crucial part of an alternative form of fashion production and consumption, steering us away from the reliance on the physical product to the experiential. The unframed fashion image in transition may be experienced singularly, but within fashion practice it is a multi-layered participatory experience shared through process, creation and the imagination. This imaginatively active engagement with the fashion image is one in which the designer/practitioner has relinquished control of their vision and handed it over to the viewer to engage with. As Bill Viola (1995, p. 120) states, "the real place the work exists is not on the screen or within the walls of the room, but in the mind and heart of the person who has seen it. This is where all images live."

CONCLUSION

As can be seen, the frame as a theoretical, perceptual and design construct is being considered as a continually oscillating 'state'; a non-defined entity, its physicality, presence and relevance defined by our relationship with it and the work being created and perceived. The fashion image, what it is and constitutes, can be sited within the entire design and image making process, and within a variety of different cultural and artistic mediums through this methodology. The process of framing, de-framing and un-framing that has been explored encourages a more fluid dialogue and relationship between image/garment/artefact and space whereby new pairings, connections and possible resonances between mediums and forms can occur. Rather than a fixed method of working or 'making', the logical design process is being disrupted to allow the viewer/perceiver/performer to create their own interpretations and personal narratives in response to the fluctuating manifestations of the transitional fashion image. The creative outcomes as part of process within small scale inter-disciplinary design practice, due to their

transformational and resonant nature, can be seen as a form of personal and cultural production, and they can be exponential in reach.

In this manner, both practitioner and perceiver are encouraged to engage in a form of questioning relating to how these images/forms came into being and their existence within the in-between, marginal transitional sites which oscillate between the real and the unreal (dependent on their mode of manufacture, presentation and reception), thereby exposing the interconnected nature of creative fashion practice and thought process. This approach reveals the connections between image, memory and imagination, and making the invisible visible by breaking down the boundaries or definitions of where the fashion image should exist. As Zoe Ryan states commenting on the nature of inter-disciplinary fashion practice (Ryan, 2012, p. 16) it is a process of "Breaking down traditional viewer/model relationships in an effort to stimulate fresh dialogue and exchange" This has led to the practice asking: Within the context of small scale experimental fashion practice is the potency and power of the fashion image sited within a physical context at all? Or is the transitory fashion image precisely that, one that oscillates between mediums, forms, and dimensions, between the real, the virtual and the imaginary; intrinsically linked to a mode of viewing or interpretation dependent on how it is 'framed'.

References

- Baas, J., Jacob, M. (2004). "Buddha Mind in Contemporary Art", University of California Press
- Carter, P. (2004). "Material Thinking: the theory and Practice of Creative Research", Melbourne University Publishing
- Khan, N. (2012). "Cutting the Fashion Body: why the Fashion Image is no longer still" *Fashion Theory* 16(2).
- Polvin, J. (2009) "The Places and Spaces of Fashion 1800 – 2007" London, Routledge.
- Ryan, Z., (2012) "Fashioning the Object", Art Institute of Chicago.
- Truckenbrod, J. (2012). "The Paradoxical Object: video film project", Black dog publishing.
- Viola, B., (1995) "Reasons for Knocking on an Empty House, writings 1973 – 1994", MIT Press.

Maarit Aakko

Crafting Aesthetics: the Meaning of Materiality and Process in Artisanal Fashion

Finland

Aalto University

ABSTRACT

Fashion, and particularly its physical embodiment, clothing, is a medium for a designer to render her emotions and visions into material form, and to further communicate them at an aesthetic level through cut, fabrics, construction and other details. This study aims to trace the process of crafting aesthetics in fashion design, with a focus on artisanal fashion. In particular, it explores the concept of artisanship as manifested in the design process and the creation of an aesthetic. Based on interviews with six fashion designers as well as on material and visual data from their collections, the study combines a qualitative analysis and a conversation about aesthetics in the artisanal approach to fashion design. The paper pays specific attention to the materiality of garments and to the creative process. The study is not concerned with establishing what artisanship could be in the aesthetic sense; rather, it offers the perspectives of different designers on the artisanal approach and its significance for the aesthetic of a garment. The study does not attempt to deconstruct that process in detail, but it provides examples and anecdotes.

INTRODUCTION

Fashion, and particularly its physical embodiment, clothing, is a medium for a designer to render her emotions and visions into material form, and to further communicate them at an aesthetic level through cut, the fabrics, construction and other details. Each art form has its own language. In fashion, it is the aesthetics of clothing that functions as a language; it can produce a conceptual or technical study, or simply visual poetry.

This study aims to trace the process of crafting aesthetics in fashion, but it focuses especially on

designers with an artisanal approach to design and production. As pointed out in earlier studies (see Aakko 2014, Bettiol & Micelli 2013, Sandino 2004), central to the artisanal approach to fashion is the integrated role of designer, which makes possible a high level of craftsmanship, skill, and quality. Based on this premise, this study explores primarily how the concept of artisanship manifests itself in the design process and the creation of an aesthetic.

The paper pays specific attention to the materiality of garments and to the creative process. The study is not concerned with establishing what artisanship could be in the aesthetic sense; rather, it offers the perspectives of different designers regarding the artisanal approach and its significance for the aesthetic of a garment. The study does not attempt to deconstruct that process in detail, but it provides examples and anecdotes. As such, the study should not be considered as a set of guidelines to achieve a certain aesthetic; rather, it offers insight into the various invisible processes that lead to a finished garment or to an entire collection.

ARTISANSHIP IN FASHION DESIGN

In general, fashion design involves different stages. Among them are the creation of the shape and overall aesthetic of the garment, the choice of fabrics and trimmings, the creation of patterns, the construction and finishing of the garment, and, potentially, fabric manipulation (e.g. dyeing and other treatments). However, the design process is not necessarily linear. Fashion designers can work in significantly different ways one from another. Most fashion designers distribute part of the design-related work, like pattern and sample making, to a team of assistants. Depending on the scale of the business, some designers act as creative directors, usually

translating their ideas through sketches and then supervising the work of their assistants, while others are heavily involved in first person in the phases of design, development and production or even execute the work largely by themselves (see Niinimäki & Aakko 2014). Besides an aesthetic vision, the latter approach requires an extensive set of artisanal skills in the areas of patternmaking, construction, and textile manipulation.

Linda Sandino (2004) points out that, although mass-manufactured products and craft objects can be seen as polar opposites, there is also room for practices that do not belong exclusively to either extreme, but rather merge craft and design. Although Sandino's remark concerns design at large, it is a perfect description of fashion that embraces artisanal skills as a notable part of the practice, thus falling somewhere between craft and industrial design.

According to the Merriam-Webster and the Oxford dictionaries, the word artisan refers to "a person who is skilled at making things by hand" and artisanship to "skill in a particular craft". If one adopts the above definitions, the design process in artisanal fashion could therefore indicate a design practice that integrates skillful design and craftsmanship (Aakko 2014). Similarly, Marco Bettiol and Stefano Micelli (2013) provide a description of the collaboration between a designer and an artisan in a design process that focuses on the dynamic of the process itself:

"Developing a prototype [...] was an iterative process that required several interactions between the designers and the artisan [...] time was used to change, adjust, and refine not only the project but even the original idea. The final design was a synthesis of the invention of the designer and the artisanship" (Bettiol & Micelli 2013, p. 8).

In fashion design that integrates artisanship, the designer has many artisanal skills and uses them in the design process to various degrees. Even when some of the work is performed by her team or by local artisans, the designer still plays an integrated role, working closely with them to control and supervise all the phases of design and production (Aakko 2014). To summarize one could say that artisanship in fashion

typically focuses on skill, the making process itself, and, since it deals with the creation of tangible objects, materiality.

While the artisanal approach is central in this study, my primary interest lies in the ideation and creation of an aesthetic. This paper looks at how fashion designers craft aesthetics with particular attention to materiality and the making process, and considers the role these aspects play in their work. Based on interviews with six fashion designers as well as on material and visual data from their collections (i.e. showroom visits, fashion shows and lookbooks), the study combines a qualitative analysis and a conversation about aesthetics and their formation especially with regard to what I call here "artisanal fashion design". Object analysis was partly used to gather data, i.e. looking at the garments, examining and touching them, and at times, even trying them on (see Steele 1998). However, this data merely served the understanding of the designer's intentions.

The concepts that emerge from this multiple case study originate mainly from inductive analysis rather than from pre-established theoretical framework. However, abductive reasoning (Timmermans & Tavory 2012) is applied when addressing the notion of materiality (see Sandino 2004). All the designers included in this study run small, studio-based, independent labels that embody aspects of artisanal and slow fashion, such as an emphasis on local, small-scale production, artisanship, and a high level of skills and quality (Aakko 2014; Clark 2008; Fletcher 2012). Being independent also allows them to have aesthetic freedom, as most decisions fall into their own hands.

CRAFTING THE AESTHETICS OF CLOTHING

Generally speaking, aesthetics is concerned with perception, that is what we can see or hear, and with sensation, the emotional reaction evoked by perception (Welsch 1996). In fashion, aesthetics can be applied to study clothes at a visual level, for example to analyze the silhouette, the fabrics, the trimmings and other details. But as Joseph Kupfer (1994) suggests, the interaction of the body with the garment also produces

a sensuous aesthetic experience. The visual aspect is crucial in fashion design, whether the aim is just to aestheticize a garment (see Welsch 1996) or to convey a conceptual message, and it is equally important in artisanal fashion.

Although aesthetics is preoccupied with the physical object, this study does not aim to "read a dress" (Steele 1998, p.329) nor scout the sources of inspiration behind it (see Petre, Sharp & Johnson 2006). The aim is also not to search for visual similarities between the work of these designers; even if parallels exist, no specific aesthetic is required to qualify a design approach as artisanal. Rather, the goal is to uncover some of the elements that are commonly found behind the aesthetic of fashion that integrates artisanship.

In general, ideation, that is the initial creation of an idea in design, is a multimodal process that involves conceptual, practical and materially embodied activities. Approaches to ideation can include graphic, material, verbal and mental methods, such as sketching and material experimentations (Laamanen & Seitamaa-Hakkarainen 2014). However, this study focuses specifically on materiality, which emerged as a fundamental element in the approach to aesthetics of the designers interviewed. In addition, artisanship, for which the making process and skill are central (e.g. Aakko 2014; Bettiol & Micelli 2014), also plays a role in the formation of their aesthetic, which often evolves throughout the making process itself.

MATERIALITY IN ARTISANAL FASHION

First and foremost, materiality refers to the materials used in the collections; materials play a significant role in the overall aesthetics created by the designers examined in this study. All are adamant about using exclusively high-quality fabrics and trimmings, even if it affects the price point notably. Similarly, they also share a preference for distinctive textures as determined by specific weaves and weight of the fabric, yarn quality and fiber combinations. Generally speaking, they all favor natural fibers such as silk, linen and wool for their visual and tactile characteristics (e.g. texture, feel, weight and warmth). For instance, Italian-based designer Geoffrey B. Small pays meticulous attention to sourcing materials for his

collections. The fabrics he uses are often designed in collaboration with and woven by the oldest factories in Italy, while the buttons are carefully sourced for each garment and always made out of natural materials like horn, wood, shell or bone. Even the thread used for building the pieces is always pure cotton, and for hand sewing the buttonholes is silk. Similarly, Paris-based designer Marc Le Bihan prefers natural fabrics but sometimes uses polyester because of its specific material characteristics rather than for its ability to simulate other fabrics at a cheaper cost.

Whenever possible, all of the designers interviewed develop their own fabrics in collaboration with mills. This ensures the availability of exclusive fabrics that may become a part of the designer's signature. As Italian-based designer Issei Fujita explains, one of their own fabrics, a two-layer wool and linen blend obtained through a specific technique, embodies their brand's aesthetic. Despite having been included in his collections for a number of seasons, it is still popular among customers. Uniqueness can also be created through fabric manipulation: techniques such as cold dyeing, boiling and felting, just to name a few, contribute significantly to the personal aesthetic of many designers. Even small details can make the difference, as in the case of Daniel Andresen, an Antwerp-based knitwear designer who leaves some of his pieces to dry in the sun, a treatment that makes the wool acquire a unique crispness.

Craftsmanship, which is central in the work of the designers considered in this study, is often made apparent in the garment itself. This can be seen for example in the uneven dye, a common result of hand-dyeing, or in the irregularities of hand-stitched details. Such small imperfections and minor irregularities, impossible to replicate by machine, intentionally highlight the artisanal element in the design and are also an aesthetic choice.

The charm of hand-made things is not necessarily visible, but is imbedded in their materiality, which induces a sensuous aesthetic experience (see Welsch 1996) difficult to translate into words. According to Belgium-based designer Jan Jan Van Essche, a hand-made garment often demands attention and respect:

"My hand-spun, hand-made sweater was the

magnet of the showroom. People were just standing there for half an hour with the sleeve in their hands talking [about something else]... You feel that there is humanity in it. It is acoustic; it resonates.”

Materiality in the context of aesthetics also implies a 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. According to Le Bihan, this dimension of materiality is especially important in fashion design for the creation of an aesthetic: “[You have to know] how to build something around the body, the real body... To have a reflection about the cut, how things are made, is very important.” For Van Essche the body and its materiality are also central at an aesthetic level. However, Van Essche is not necessarily interested in form-fitting clothes but in the ideas of “elegance, comfort and openness,” which he materializes into garments “that are not restricting.” Van Essche’s aesthetic is often guided by a principle he learned from studying ethnic cuts: “the body shapes the clothes more than the clothes shape the body.” This results in the loose and uncomplicated shapes typical of his design: “The shapes I make have a certain feeling to them when you are in [the garment] ... a feeling of freedom,” he explains.

DISCOVERING AESTHETICS THROUGH THE PROCESS OF MAKING

Since artisanship pertains to skill and the process of making, in artisanal fashion the same holds true when it comes to aesthetics. The manual skills required, such as patternmaking and garment construction, are important also for the creation of the overall aesthetic of a garment. “Cutting and sewing,” Le Bihan says, “equals to grammar in fashion design.” For him, mastering these technical aspects enriches one’s sensibility as a designer, and this understanding helps to discover alternative ways to carry out these tasks. According to him, “Designing is not just about using fabric, but [it is essential] to know how to use it, and how to change things.”

Patternmaking is often set aside when in discussions about fashion design, where the focus is given to ideation, sketching and draping. Even in the industry fashion design and patternmaking are typically two different professions. But their interdependence is central in the development of the aesthetic and functional elements of a garment. Patternmaking can even be considered essential to the fashion design process, as it may guide the aesthetic of a garment (Rissanen 2013). For Van Essche the initial rough, inspirational sketch represents the feeling and volume of the garment, while the technical sketch includes the exact details. However, the subsequent phase of patternmaking may change the garment dramatically, which is why he prefers to do it himself:

“[Patternmaking] for me is 50% of the designing. We don’t send sketches somewhere because with my kind of shapes it is really important [to keep the patternmaking in-house] since, there is not much. I only have few seams in my garments, so what is there should be in the right place.”

Paris-based designer Anna Ruohonen, whose eponymous label is designed and produced almost entirely in-house, considers the making process as a significant part of her design method: “Sketching serves mostly as my own notes. For me designing is very much a hands-on, material-based process. The ideas often originate and develop through the process itself.” According to her, having an in-house team is fundamental for the fine-tuning of a garment: “Since we have sample making in-house, we never have to be satisfied with a product that is almost-good. We can keep on tweaking it until the aesthetic is exactly what we want.” Additionally, the in-house production grants Ruohonen complete independence also in terms of working methods. As she explains, “Since I have the freedom to create my own system, I can also decide what interests me. If I want to perfect a certain garment, I can do it as long as I want.”

More often than not, designing, prototyping and producing are not linear processes but involve plenty of trial and error. Andresen does most of that work alone, so for him the roles of designer, sample maker and producer are intertwined, which means that he

is equally familiar with all the challenges related to these individual phases. Andresen embraces uncertainty and mistakes, and welcomes those as a part of his design process. Production, which is commonly repetitive and uncreative, can be a chance to learn because making the same garment over and over again directs one towards new solutions. In his opinion, it also allows to come across mistakes or surprises that can better the aesthetic of the design. What these incidents, surprises and mistakes bring about could not necessarily be designed deliberately, and thus spontaneity is an important part of his design process. “The more you try, the less you find” is Andresen’s motto-like conclusion.

Despite being rooted in the tactile process of making, draping, patternmaking and constructing, composing the garment’s aesthetic remains a mystical experience, only unfolded to the designer herself:

“You should never over-analyze the design process; that way you destroy your creativity. Instead you have to trust your intuition. The ideation process is not calculated; the ideas are a sum of many different things” (Ruohonen 2015).

Along the lines of Ruohonen, Small concludes

“You have to find that zen. And there is zen in creating pieces, when you sort of get that groove, and the thing hits. And then you have to know well enough, like any artist, when to stop, when to back off. You’ve got to have a light touch, you’ve got to know when it is right, to leave it alone. It is very important. You have to listen; there is sensitivity about what is going on.”

CONCLUSION

The process of creation is personal for each designer, and so is the aesthetic that each of them creates. However, as this study shows, designers that integrate the artisanal approach to fashion have in common an aesthetic that relies heavily on materiality and matures during the process.

The creation of an aesthetic is difficult to verbalize, as the process is not completely visible, traceable, concrete or linear; on the contrary, it is abstract and excursive. It seems to follow a form of thinking whose

nature resides largely in the realm of the subconscious or even in “zen”, in a meditative state, rather than in logical thinking. There is something mystical about it; perhaps no recipe, but just hints on the ingredients.

The insights presented in this paper follow the premise that, after all, the creation of an aesthetic is so meshed with the creator herself that its architecture cannot be reproduced without the designer, even when the very same elements are at disposal. This study offers a glimpse into the internal process of a designer and does not wish to deconstruct it in detail, as we believe that part of the magic should be kept hidden.

References

- Aakko, M. (2014) “Artisanal and slow – A case of Anna Ruohonen”, in K. Niinimäki (ed.) *Sustainable Fashion - New Approaches*, pp. 56-67, Helsinki: Aalto University.
- Andresen, D. (2014, November 17). Personal interview.
- Bettiol, M. & Micelli, S. (2014) “The hidden side of design: the relevance of artisanship”, *Design Issues* Vol. 30 (1), pp. 7–18.
- Clark, H. (2008) “Slow + Fashion – an Oxymoron – or a Promise for the Future...?”, *Fashion Theory* Vol. 12 (4), pp. 427–446.
- Fletcher, K. (2010) “Slow Fashion: An Invitation for Systems Change”, *Fashion Practice* Vol. 2 (2), pp. 559–566.
- Fujita, I. (2015, March 10). Personal interview.
- Kupfer, J. (1994) “Clothing and Aesthetic Experience”, in DeLong, M. R. & Fiore A. M. (eds.) *Aesthetics of Textiles and Clothing: Advancing Multi-Disciplinary Perspectives*, ITAA Special Publication # 7, Monument: International Textile and Apparel Association, pp. 97–104.
- Laamanen, T.-K. & Seitamaa-Hakkariainen, P. (2014) “Interview Study of Professional Designers’ Ideation Approaches”, *The Design Journal* Vol. 17 (2), pp. 194–217.
- Le Bihan, M. (2014, June 30). Personal interview.
- Merriam-Webster Online, accessed March 14, 2015, available online at <http://www.merriam-webster.com/>.
- Niinimäki, K. & Aakko, M. (2014) “Creative Control in Sustainable Fashion”, *Proceedings of Design Management in an Era of Disruption The 19th DMI: Academic Design Management Conference*, London, September 2–4, 2014.
- Oxford Dictionaries, accessed March 14, 2015, available online at www.oxforddictionaries.com/.
- Petre, M., Sharp, H. & Johnson, J. (2006) “Complexity through combination: an account of knitwear design”, *Design Studies* Vol. 27

(2), pp. 183–222.

Rissanen, T. (2013) *Zero-Waste Fashion Design: A Study at the Intersection of Cloth, Fashion Design and Pattern Cutting*, Doctoral Thesis, Sydney: University of Technology.

Ruohonen, A. (2013, June 28 & 2015, March 9). Personal interviews.

Sandino, L. (2004) "Here Today, Gone Tomorrow: Transient Materiality in Contemporary Cultural Artefacts", *Journal of Design History* Vol. 17 (3), pp. 283–293.

Small, G. (2014, January 13). Personal interview

Steele, V. (1998) "A Museum of Fashion Is More Than a Clothes-Bag", *Fashion Theory* Vol. 2 (4), pp. 327–336.

Timmermans, S. & Tavory, I. (2012) "Theory Construction in Qualitative Research: From Grounded Theory to Abductive Analysis", *Sociological Theory* Vol. 30 (3), pp. 167–186.

Van Essche, J. (2014, November 18). Personal interview.

Welsch, W. (1996) "Aestheticization Processes: Phenomena, Distinctions and Prospects", *Theory, Culture & Society*, Vol. 13 (1), pp. 1–24

Anupam Rana, Hemali Mehta

Wellness of Women Artisans Working in Hand Embroidery Sector, Gujarat through Ergonomics

India
NIFT

ABSTRACT

The major part of the cultural heritage of India is formed by its handicraft industry." It is an unorganized, decentralized, labour intensive cottage industry" (Jadhav). Hand embroidery is one of the many crafts which are being practised in India. There are various types of hand embroidery techniques which are practised in India like Kashmiri embroidery, hand embroidery in Gujarat, Phulkari embroidery and Chikan embroidery. The study will be concentrated on the hand embroidery of Gujarat. Even though there are various changes and transformations done in hand embroidery according to the milieu and times, the essence of the craft remains undisturbed. Life of artisans is influenced by various factors which affect the craft as well as the region like commercialization and industrialization.

INTRODUCTION

Throughout the seventeenth century, Gujarat was probably the most important centre for fine commercial embroidery in the world. Today, the belt comprising of Kutch and Saurashtra up to northern Gujarat to western Rajasthan is considered to be the richest source of folk embroidery in the world. Each caste passes on the craft from generation to generation; with its own distinct designs, colours and range of stitches, together with the cut of their garments. Most of these embroideries are done by women or girls and they work continuously for eight or more hours each day. But sitting in one position continuously does cause lots of health problems.

Research has proved that adaptation of bad posture can result into protruding abdomen, hyper extended knees, rounded or uneven shoulders, curved spine and sunken chest, unusually flat back, swayed back,

uneven hips, neck craned too far forward and chin thrust out (Pandey, 2009).

The problems becomes more complicated among these women artisans as they have poor nutritional value from the food they intake and other health issues due to an unhygienic environment. "Research proves that posture in sewing operators is constrained by both the visual and the manual aspects of the task, the design of the sewing machine and the table. These have a considerable influence on the posture adopted." (Pandey, 2009). This research is useful as the artisans in the hand embroidery industry are also constrained by both the visual and manual aspects of the task.

The purpose of this paper is to study the effects of bad posture among the women working in a hand embroidery industry and promotes the use of ergonomically correct methods to improve their health and thus development of the craft as well.

The hand embroideries are produced by women in the villages of Gujarat. Many of these women have formed self help groups and cooperatives. They manage to supply these women with raw materials and design suggestions, then they buy the products from them to sell to the urban people of India and they even export the products to other foreign nations. This kind of hand embroidery is in demand in India and abroad as stated in (Embroidery Techniques from East to West,) " The fact that this type of work is now enjoying a great revival of interest and appreciation in India, as well as abroad, has opened up new vistas for these women." This craft is now becoming a source of income for these women, once produced for utilitarian needs. Since the demand for this craft is increasing the work force is increasing. These women work continuously for hours to produce a beautiful embroidered piece,

due to their static position and awkward postures there are health problems which are occurring among many women in Gujarat.

LITERATURE REVIEW

There are about 16 different types of embroideries done in the Kutch region. The types of embroidery techniques on which the research was conducted are as follows:

1. Rabari Embroidery

The embroidery gets its name from the Rabari community, who are a nomadic community of cattle raisers living in the western region of India, from Rajasthan to the Kutch region in Gujarat. Rabaris are further sub-divided into the Garasia, Kachela, Dhebaria and Wagadia of Kutch. Rabari weddings are a colourful affair. The girl prepares her own dowry, which includes the girl's clothes, bags, bedcovers and even the decorative camel cover. In this way, she also learns the skills which have passed on through generations. Rabari embroidery is characterized by chain stitches and a generous use of mirrors and motifs inspired by animals and nature a sample of the same is shown in the fig.1.

a textile product by applying fabric on fabric and the edges are sewn down by stitching. This craft is practiced in the Saurashtra, Banaskantha, Patan and Kutch regions of Gujarat.

4. Sadubharat Embroidery

In this embroidery, the design is mostly floral motifs with birds around them. The main stitch used in Sadubharat is the herringbone. Beautiful zigzag embroidery designs can be created with this stitch as seen in the fig. 4. In Sadubharat, herringbone stitch is also outlined with open chain stitch which gives the motif very intricate look and delicate appeal. Mirrors are often embedded in the centre of motifs.



fig.1 Fabric sample of Rabari Embroidery fig.2 Fabric sample of Shisha Embroidery

2. Shisha Embroidery

This embroidery has its roots in Rajasthan. The mirror work is basically done to accentuate the fabric. It produces kaleidoscopic effect in the fabric and at the same time adds vibrancy to it. Along with mirror work shiny materials like mica or hand-blown glass or even sequins are considered to be a good substitute. As shown in the fig. 2 mirrors are not fixed in one shape or design, they could be of any shape or sizes which makes the fabric look more appealing. Bright threads of cotton or silk are considered to be integral to this type of work.



fig.3 Applique being done by the artisan fig.4 Fabric sample of Sadubharat

3. Applique

Applique is one of the oldest crafts practiced in Gujarat. Different patches of fabric, beautiful forms of floral and animal designs are prepared for quilts, hangings, modern household products and apparels. As shown in the fig. 3, Applique is art of decorating

STUDY OF THE IMPACT OF THE BAD POSTURES

The hand embroidery is usually done by women or girls in Gujarat. They work continuously for eight or more hours. Due to this monotonous lifestyle the continuous work involves a lot of awkward postures and muscle flexions and extensions in the neck, shoulder, wrist, elbow and lower back areas. These awkward postures are repeated and often result in serious health disorders making the work tasks more

demanding.

LOWER BACK DISORDER (LBD)

The research has proved that both the physical and the organisational aspects of work can cause higher rates of Lower Back Disorders. "Even though bad posture may not cause discomfort, continual poor posture will in the long term cause back pain," (ref. Back care by Health Education Bureau 2006). Studies have also indicated that monotonous work, high perceived workload, low job satisfaction, time pressure and lack of social support all were related to LBD risk. Similarly manual material handling, bending and twisting were all significant to the risk of the back pain.

"Static means to hold in place, so these are postures where the body is held in one position for long period of time. These types of postures require constant muscle use for the time the body is held in position. This reduces rest and recovery time, which leads to muscle tiredness" (Pandey, 2008).

This research is quite relevant as the artisans are working for long hours sitting in one position without using back support or a frame placed to a certain height. Due to this the health problems are aggravated.

SHOULDER PAIN

"In ideal scenario the elbows, arms, and hands should be maintained at a 90-degree angle while working. Additionally the work area should be large enough to accommodate the worker, allowing the full range of motions involved in performing required tasks, and provide room for the equipment and materials that make up the workstation."(Office Ergonomics manual-2006).

This kind of work environment is very distant dream for the artisans. These women work at their home, during the day time in the window light. Thus due to less work space there are awkward postures and hand movements which may result in serious disorders if they are continued. The table shows the risk factors the movements of shoulder and hand could cause (Salvendy, 2012).

Hand Movements	Risk Factor
More than 60° abduction or flexion for more than 1h per day	Acute shoulder and neck pain
Abduction greater than 30° and 45°	Rapid fatigue at greater abduction angles and at 90°
Repetitive shoulder flexion	Tendonitis and shoulder disorders
Repetitive shoulder abduction or flexion	Acute fatigue
Hand at or above shoulder height	Electromyographic signs of local muscles fatigue in less than 1 min

OBJECTIVES

The study was undertaken with the major objective to document the health issues faced by the artisans practicing hand embroideries like Rabari bharat, Saadu bharat, Shisha bharat and Gujarati bharat in the different parts of Gujarat and to provide them with some ergonomically correct solutions for their well-being and development of the craft itself.

METHODOLOGY

This is a study, involving interviews and focus group discussions. Triangulation of data collection methods have been used to look at the issue from as many perspectives as possible to gain insights into the effect on health of the women working in the hand embroidery industry. This provides insights from different perspectives of the individuals who work in the hand embroidery industry.

FINDINGS

Four types of embroidery techniques were studied. A total 30 women/girls were interviewed for the purpose of gathering information on their routine, health issues, and their lifestyle. The interviews were carried out in the villages and small towns where the literacy level amongst the women/girls was very low so instead of questionnaires, in depth interviews were conducted.

The findings that came out of these interviews were as follows:

- The research subjects are not aware of areas like best postures at work, and they were very used to the awkward postures as seen in the fig. 5.
- They are also not aware of the effects of the wrong postures to their health which they are currently so

use to. But some of these women said they do yoga for being physically fit and healthy.

- As shown in the fig.6 and fig.8 these women work without any hoops as they feel its time consuming to adjust the fabric in the hoop work and then again adjust. The sizes of the hoops available are very small in villages and the quality of material is cheap.

- They are ready to improve their work space and their posture but it should be cost effective as many of them are very poor and can't afford to spend money on anything except their daily bread and butter.

- As shown in the fig.7 they work in the window light, so there is not enough light in the room. Similarly hygiene maintained is poor. The ladies said they would like to work in the environment with proper lights, good ventilation and hygienic conditions. But all these factors are beyond their controls because of the socio-economic factors.

- The ladies complained of chronic lower back pain, neck and shoulder pain in addition to eyesight problems



fig.5 Women working in wrong postures



fig.6 Women working in less space



fig.7 Women working in window light



fig.8 Artisan working without back support and hoop

RECOMMENDATIONS

There are many factors that are affecting the conditions of these women like education, hygiene

and financial aspects but there is no denying that these women need to be uplifted from the condition they presently work in. They were advised to start exercising every morning like going on a walk and doing yoga. They were asked to use rubber thumb coverings while stitching to prevent the injuries on thumb and other fingers.

For them to work in the corrected postures a stand could be designed which would be flexible and have a certain height so that repetitive bending could be avoided. This stand is basically a support for embroidery hoops and the upper surface of the stand where the hoop would be rested can be rotated 360 degrees. This could help women in improving their postures and help them work faster.

This design would ensure that work is not hampered and at the same time it will speed up the process. The use of the stand would be a gradual process but as benefits would be recognised by the artisans and would help them in their overall development. These artisans, who are struggling to get their own identity, facing challenges in the competitive global workplace, deserve a progressive, supportive and comfortable working experience.

DESIGN DEVELOPMENT PROCESS

The first step was to analyse the awkward postures of these artisans with the help of photographs and continuous video tape of their movements and work, using a portable video camera and recorder. It was seen that whole body of the subject is captured while doing the work and the different movements and posture it adapts. As the work was repetitive several work cycles were recorded continuously to get an idea of how many times a certain movement and posture is repeated during the day.

These women work without any back support or any frame which increases their adaptability of to their awkward postures. The awkward posture can be improved by using a stand which holds the hoop in place. The different sizes of hoops could be attached to the stand according to the size of the fabric. The stand allows the hoop to rotate 360°. This will reduce the bending, twisting and stretching the body as the

fabric is in reach and also it is fixed. Also the hoop should be inclined at the angle between 35° to 45° as it would further reduce the need to bend or stretch body to the hoop.

Step 1:

The videos and the photographs were studied and all the awkward postures which were repeated were analyzed and then ideal posture was sketched for the same.

As shown in the fig.9 there is shoulder and elbow extension and back flexion. This posture can strain the muscles and cause muscle pulls and shoulder pain. The ideal posture would be to sit with a straight back with a support given to elbows and in reach so that bending of the back would not be required.

Similarly In fig.11 and fig.12 there is back flexion and shoulder extension seen which could be corrected. The fig.13 and fig.14 are the ideal positions with back straight and hands in reach.



fig.9 Awkward Posture



fig.10 Correction



fig.11 Awkward Posture



fig.12 Correction



fig.13 Awkward Posture

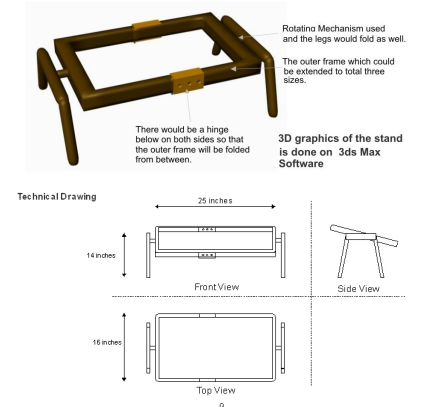


fig.14 Correction

Step 2:

After the postures were analyzed, it was observed that major areas affected were shoulders, spine and neck to some extent. Thus, the design solution was thought to reduce the risks of the shoulder, back and neck pain.

Women were uncomfortable holding the hoop and working and at the same time and it was time consuming to adjust the fabric constantly in the smaller hoops, so the idea of a stand came up. The stand which supports the hoop also allows it to rotate 360° for better working. Further these hoops could be detachable so that at least three sizes of hoops could be used with the same stand. The outer frame as shown below will have screws so that one part is able to extend and there would be hinge on the bottom of the frame on the both sides so that it can be folded from between. The height of the stand would be 14 inches and the smallest size in terms of width would be 25 inches while the largest would be 40 inches.



SCOPE OF FUTURE WORK

High fashion or Haute couture demands lots of hand work or as we may put it euphemistically call it value addition (Pandey, 2009). Thus this embroidery frame would turn out to be very useful as it would help artisans work faster and better. The author will continue this research by assessing the impact of the reengineering and postures on women embroiderers by constructing a model frame to do embroidery-whereby alleviating some ailments connected with hand embroidery for women and also by way of educating the concerned people. If the prototype of the frame turns out to be successful then multiple pieces would be produced and given to the artisans under the various schemes of DC Handicrafts, Ministry Of Textiles, Government of India. This scheme promotes craft in India.

References

Dholakia, A. D. (July 2013). Historical Overview of Kutch Embroideries. Indian Journal of Traditional Knowledge Vol. 12 (3) , pp. 524-529.

Gaatha. (2010, February 7). Retrieved March 9, 2015, from <http://gaatha.com/>: <http://gaatha.com/kutch-rabari-embroidery/>

Gujarat State Handloom & Handicrafts Development Corporation Ltd. (n.d.). Garvi Gurjari. Retrieved March 12, 2015, from <http://www.gurjari.co.in/home>: <http://www.gurjari.co.in/craft/applique-and-patch-work>

Harmeem. (n.d.). Retrieved March 9, 2015, from <http://www.harmeendesign.com/>, http://www.harmeendesign.com/types_embroideries.html

Indianetzone Textiles. (n.d.). Retrieved March 9, 2015, from <http://textiles.indianetzone.com/>: <http://textiles.indianetzone.com/1/gujarat.htm>

Jadhav, M. S. (-). Indian Handicrafts: Growing or Depleting? IOSR Journal of Business and Management (IOSR-JBM)e-ISSN: 2278-487X, p-ISSN: 2319-7668 , PP. 07-13.

NAIK, S. A. (December, 2010). Hand embroidered and Jamdani patterned Dharwad Sarees: A comparative Study. Asian Journal of Home Science, vol. 5 No. 2 , 302-306.

Pandey, T. (2009). Wellness of women embroidery workers. IFFTL.

Salvendy, G. (2012). Handbook of Human Factors and Ergonomics. New Jersey: John Wiley & Son. Inc.

Shrikant, U. (2009). Ethnic Embroidery Of India. Pune: Mrs. Usha Shrikant. Vastrad, S. N. (January 2008). Protection and revival of traditional hand embroidery, Kastuti by automation. Indian Journal Of Traditional Knowledge Vol. .7(1) , pp. 197-203.

Rakhi Wahee Pratasp

Metamorphosis of Ritual and Spiritual Textiles of India into New Fashion

India
NIFT

ABSTRACT

India is a land of diverse religious beliefs that exist in harmony and peace. Each state, caste & community in India represents a unique culture perceived through many subjects one being its traditional textiles, the transition and metamorphosis of which is made visible through the existed and the existing craft that found its niche even in various rituals and spiritual beliefs.

These beliefs have all been reflected in and identified with the textile variance and its growth. This artistic workmanship and exuberance in the textile has revealed different religious and social practices and sentiments that contributed to the nation's cultural diversity and its beauty. To a great extent they have sustained for generations as an age-old tradition and have been passed on as blessed heirlooms to the subsequent generations.

Painted or embroidered motifs in specific and characteristic layouts for generations in meaningful patterns were preserved as our country's heritage that enriched our culture. The age-old understanding of the craft, its form, texture and color have been sensitively observed and improved upon by design experts.

The paper bring forth the adaptability and the possible nourishment of the traditional craftsmen's experimentation besides, a case study of two crafts that would help capture a new prospective commercial market. "Phulkari" elaborately embroidered textiles from the Northern state of Punjab and "Mata-ni-Pachedi" painted and printed ritualistic textiles (Shrine Cloth) from Western state of Gujarat and will be discussed for the paper .The adaptation and infusion of old techniques and patterns by the contemporary

craftsmen, to be sensitive towards the past and alive to the present trends, in their evolving modern methods of designing could leave benchmark products of recognition and of patentable worth, commercially viable and penetrating into the global markets.

INTRODUCTION

Textiles have been one of the vital sources of knowledge of cultural transition between generations. It is a form of non-verbal language and imagery that reflects social, religious and cultural history of the people and their country (Dhamija Jasleen, 2014). Many handloom textiles have survived for centuries as the traditional skills are passed on as heirlooms with appealing merits withstanding time and taste and have been playing an important role in redefining lifestyles of people.

Indian textiles have always attracted the attention of the people around the world, with its craftsmanship, mastery over design and techniques. Many textiles, sometimes popularly referred to as trading cloth, produced in India, were considered ritually powerful and imbued with magical qualities (Dhamija Jasleen, 2014). These were exported to many parts of the world during the ancient period, as it was shown by the discovery of a large number of spindle whorls and dye pots in the Indus civilization, port of Lothal, Fostat in Egypt and Sulawesi in south East Asia.

The dyed yarn material woven in India found its way all over the world. Madras checks are being imported by West Africa as Real Madras Handkerchiefs (RMHK) and are used by the kalabaris in Nigeria. It is rich in symbolism and is an important article in their rituals at funerals and hence are considered very significant (Dhamija Jasleen, 2014).

It was mentioned by the Greek historians in their works that India had been particularly distinguished for its love of dance and folk-songs, drama, legends, performing arts like 'Burra Katha' (art of storytelling) and 'Puppetry', illustrations by acting, dancing and music were very popular forms of folk entertainment in different regions of the country (Varadpande L.M.1992). It helped in communicating religious and social messages and various forms of art. Many handmade-textiles in India used as narrative textiles were of ritual and spiritual significance. They had also been used as temporary architectural and traditional articles at religious places, signifying spirituality.

EMBROIDERED HEIRLOOMS FROM PUNJAB

Phulkari is an embroidery that originated in northern state of Punjab. There are embroidery-work guilds at different parts of Punjab such as Jalandhar, Amritsar, Kapurthala, Hoshiarpur, Ludhiana, Ferozepur, Bhatinda and Patiala. Punjab an agriculturally fertile and culturally rich North Indian state nested in-between Kashmir, Himachal Pradesh, Rajasthan and Pakistan. It was during the regime of Maharaja Ranjeet Singh (1780–1839, King from the Sikh community) that provided security and stability to the state from foreign invaders, prospered and various arts, architecture, music and varied folk crafts were promoted (Hitkari, S.S, 2003). The most important craft that received the royal patronage was "Phulkari". "Phul" means flower and "Kari" means work, therefore it was interpreted as "floral work" with the use of thread...

A reference to Phulkari in literature comes from Guru Nanak Dev (the first religious leader of the Sikh community) who wrote: "Kadd kasidha paihren choli, tan tu jane nari"... It means - only when you can embroider your own choli by stitching, will you be accepted as a woman signifying that a woman who is skilled in such intricate work would be able to swim through the ocean of 'samsar' (the world). The earliest available article of Phulkari embroidery was a "rumal" (handkerchief) embroidered during 15th century by Bibi Nanaki (1469-1539, sister of Guru Nanak Dev). The needlework is widely practiced by the women of

Punjab and holds significance in the life of a woman, from her marriage till her final abode to heaven (Kaur Rajinder, Gupta Ila, 2014)

'Phulkari' was a domestic art entirely done by women for personal use only. There has been no formal training for embroidery; learnt by a girl at her home from her elders during the spare time after completing their daily chores. The women of all neighborhoods meet daily at a comfortable place and carry out these works without much fatigue talking to one another on domestic and other issues. These social gatherings provided them with space and time to strengthen their social relations and friendship (Hitkari, S.S, 2003).

Many 'Phulkari' pieces of multiple designs use to be gifted to the brides while getting married. These pieces use to be personally embroidered by the bride's mother, grandmother, relatives and the girl herself to be worn on the day and other special occasions and ceremonies. These are hardly ever purchased for such occasions. The Composition of various designs, colour and pattern shows her skills in the art of embroidery and highly appreciated by the groom's family. 'Phulkari' would be used to cover women's head and face on various occasions such as the wedding, after the birth of children, during festivals, at the public places, ceremonies and even at the time of death. Various sentiments and beliefs signify embroidering of these textile products, a few of them are stated below.

'PHULKARI' – SIGNIFICANCE OF WOMAN'S PERSONALITY

'Phulkari', reflects the characteristics of the women folk of Punjab. Strong nature of Punjabis resembles the base cloth, soft and colorful embroidered threads 'Pat' resemble the fun-loving lifestyle, the use of different motifs reflect their observation and imagination.

Base fabric of 'Phulkari' is hand spun, hand woven and dyed with natural pigments. It is called 'Khaddar'. It is a coarse, strong and long lasting fabric. Two narrow panels of fabrics get joined before embroidering it. The coarse cloth is suitable to work without frame and facilitates easy stitch count while embroidering

to maintain symmetry of the pattern. The fabrics were normally dyed in various shades of red, orange and burgundy as it represents passion. White or brown base is used by elderly women or widows. Black and blue colours are used for daily usage. It is noteworthy that most ancient fragments of red dyed (using madder) cotton fabric is found in Punjab that dates back to Harappa Civilization (The Bronze Age) (Frederic, 2010).



A Phulkari stole

The fabric was embroidered with colorful high quality untwisted silk thread known as 'Pat'. These threads were embroidered from the wrong side of the fabric with straight darning stitches to create intricate and multiple design patterns. While embroidering exclusive textures, various other embroidery stitches like the running stitch, herringbone stitch, buttonhole stitch, or Holbein stitch are occasionally used.

The embroidery can be done on shawls and big stoles that are used by women to cover their heads. If the embroidery on the fabric is done very closely or all over the fabric then the base fabric is fully covered and it is called 'Bagh' (garden). It is made for special and ceremonial occasions where as simple and sparsely embroidered textiles made for everyday use are called 'Phulkari'.

DIVINE SYMBOLISM OF COLOURS

The colours used for base fabric and the ones used in embroidery threads have deep symbolism attached to it. Red is symbolic for affection, White for purity, Golden or yellow for desire, abundance and fertility. Green represents nature, growth and fertility, Blue for serenity, Purple for symbiosis between red's energy and blue's calm, Orange symbolizes desire and divine energy (ROND Frederic, 2010).

Though the colours largely had specific meanings they were chosen according to the embroiderer's visualization and aesthetic perception. Most of the designs embroidered in 'Bagh' and 'Phulkari' were quite intricate and symmetric. Designers' are always inspired by the aesthetic environment and cultural influence. Flora, fauna and the ambience of a workplace are all the sources of inspiration of the creators. 'Surajmukhi' (Sunflower), 'Genda' (marigold), 'Motia' (Jasmine), 'Kamal' (lotus), 'Kikar da phul' (Cassia acacia tree), 'Tulsi' (basil), Peacock, Parrot, Fish, Snakes, 'Chilly', Cauliflower etc., serve as the design inspiration. Other motifs observed in daily life are taken as inspirations and imitated. Due to the limitations of darning stitch the interpretation of motifs are geometric in depiction and not definite, but however, bear some resemblance to the actual object with some novelty and beauty.

Any minor error in the development of a particular design totally spoils its final appearance as such embroidery is done generally by the same person throughout to ensure consistency in the work. Importantly, being a spare time occupation, it will take six months to a year to finish embroidery of Phulkari or Bagh.



Colourful embroidery in darning stitch

VAST REPERTOIRE OF PHULKARI

There are many different veils or shawls embroidered using variety of stitches, which fall under the blanket term Phulkari. Their dimensions, design, stitches and use may vary, but the beauty of the colourful yarns and the underlying expression of love of the mothers are the same in each article.

Chope - This work on the textile has a ritual significance. When a girl child is born, her maternal grandmother embroiders “Chope” after offering customary prayers and distribution of sweets to all the relatives and friends. All through the years till the marriage of the girl, the grandmother embroiders and decorates “Chope” with blessings for her wellbeing and prosperity (Gupta H. Anu and Mehta Shalina, 2014). ‘Chope’ is embroidered on an auspicious red coloured ‘Halwaan’, a light weight cotton fabric with yellow coloured thread only. Yellow symbolizes affluence, happiness and fertility. It is embroidered in a zig-zag stitch which is reversible and hence results in similar pattern on both sides. This is the only Phulkari which doesn’t have darn stitch but is still considered as “Phulkari” and is an essential part of the wedding ceremony. It doesn’t have closed borders which signify unlimited and endless happiness.

Two to three days prior to the girl’s marriage, she is given a ceremonial bath with herbal pastes after which she is wrapped with ‘Chope’ filled with blessing. Therefore, its size is sentimentally kept bigger. The only motif to be embroidered is that of linear triangles shaped like a bird, it was also called “Chope di chidi” (Gupta H. Anu and Mehta Shalina, 2014).

Suber Phulkari - It is a simple Phulkari with six petals Lotus flower in four corners and one in the centre on red with yellow threads. It is worn by the bride while taking wedding vows in front of “Guru Granth Saheb” the Holy Book of Sikh religion.

Vari-Da-Bagh - It is draped over the bride by her mother-in-law after the marriage and signifies the beginning of her responsibilities as a new member in the family. The main design feature is having

concentric diamonds which represents family units, caring and sharing one another.

Kauri (shell) ‘Bagh’ - Draped in by the childless ladies.

Darshan Dwar - It is meant for presentation purpose to temples and religious institutions after one’s wish is fulfilled. It has an architectural design. The symbolism is that they have come to the door of God to seek His interventions in overcoming their difficulties (Hitkari, S.S., 2003).

CONTEMPORARY SCENARIO

Ritual and spiritual significance is the core inspiration of the textile products of this period, increased commercialization of the products have made it a source of income and undermined the religious significance. The changes in the crafts were gradual and hence were not very obvious. Fashion and visual appeal have been given precedence, women handled the skill as job-works from home. Education for women has led them to work outside therefore not much time was left to pursue embroidery. Professional responsibilities and new options for entertainment didn’t provide much time to embroider. Young women preferred to wear sheer, lightweight fabrics, which are easy to manage in terms of usage and maintenance instead of conventional Phulkari hence chiffon, georgettes and crepes were preferred. Handmade base fabric is substituted with mill-made fabric. Mechanization has brought in new product range into the market catering to the needs, fashions, comfort and the other requirements of the user. Change in the base fabric enabled embroidery to be done from the front side instead of the rear side of the fabric. Instead of silk floss, low quality synthetic silk thread made of viscose and polyester is being used for embroidery as an option to reduce the cost of production and the product. This changed the nature of embroidery stitches and gradually the technique and motifs. From counted thread embroidery, it has become a traced and embroidery technique. Motif repertoire is also reduced to few geometric motifs. Young girls now a days prefer to wear colourful and gold embroidered veils instead of cotton Phulkari. Impact of Bollywood on wedding fashion.

As a period textile, it has become obsolete now and remained a collectors’ item and has moved to the museums. Faster production is ensuring product diversification into many lifestyle products and apparel. Many designers and NGOs have taken an active part in sourcing the craft and improving design, exploring marketing avenues to meet the increasing demand from the market.

Indian film industry has been a major driver and rejuvenating agent of the craft and impetus to develop commercially. The trends in Indian cinema have also triggered the demand for this traditional craft. ‘Saris’, ‘Stoles’, ‘Jackets’, Bags, Shoes etc. are being designed with this art.

Phulkari has created a niche in international fashion trends through its versatility, many home textiles and interior products like curtain drapes, cushion covers, beddings etc. have been in demand in international markets. Popular U.S. brands like “Anthropologie” and “Pottery Barn” have incorporated the technique into monochromatic color pallets and simplified the motifs bearing in mind the market’s contemporary needs. Cotton, silk and linen blends are being used as base fabric.



Outfit embroidered with Phulkari embroidery. Designer: Mr. Manish Malhotra. Autumn-Winter 2013 (Wills Lifestyle India Fashion Week).

SHRINE CLOTH FOR GODDESS

The madder dyed textiles from Western state of

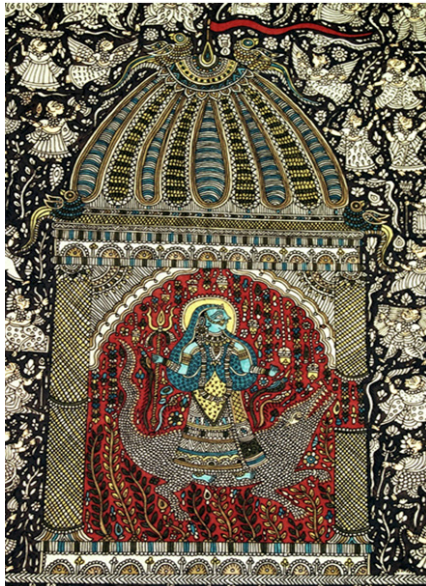
Gujarat are known as ‘Mata-ni-Pachedi’ or “Mata-no-Chandarvo” (Gillow John & Sentence Bryan, 2006). It means “behind the mother goddess”, it’s a cotton fabric which makes temporary temple structure. In olden days these were the handmade ones using natural dyes. Shrine cloth is used as temple hangings offered to Goddesses.



Phulkari bedding, An Anthropologie exclusive from John Robshaw

People of nomadic Vaghri community of Gujarat were barred from entering the temples due to caste discrimination and social inferiority. As in Hinduism idol or image worship is prevalent and is practiced, the community resenting this abhorrent practice they made their own shrines with paintings of the mother Goddess on the cloth. A traditional ‘Pachedi’ is always a canopy of 4 to 5 rectangular pieces of fabric

covering walls and a Chandarvo is a canopy serving as a ceiling in a make-shift shrine. The ingenious solution is believed to be the origin of this sacred art forming a temporary structure (Mishra Jaina, 2015). In the social system of myriads beliefs in India it is common practice to 'take a vow', that connotes asking goddess a specific, a wish to fulfill (Mishra Jaina, 2015).



Mata- Ni- Pachedi
Picture Source: Ms. Anuradha Kumra

In Indian religious culture the Goddesses are linked to various natural calamities and epidemics. Therefore, it becomes quite important to please the goddesses to propitiate by performing prayers for the well-being of the community or avert the disastrous and calamitous occurrences. To propitiate the goddesses for granting of that boon, prayers are offered in a ritualistic and devotional manner under the instructions of the religious heads (Dhamija Jasleen, 2014). In the case of the 'Vaghri' community prayers are

started with animal sacrifices before the Goddess along with an offering of a new Pachedi. The goddess in her nine forms is now worshiped during the nine days of "Navratras" (religious days marked for praying the Goddess) (Mishra Jaina, 2015).

ICONOGRAPHIC REPRESENTATION OF FOLK ARTS AND CULTURE

Each 'Pachedi' has a picture of the main Goddess in the middle surrounded by the images of the legends of her life (Gillow John & Sentence Bryan, 2006). Bold borders are formed around the 'Pachedi' and the 'Chandarvo', termed as a "Lassa Patti" followed by a band of decorative linear patterns. At times images of other gods and goddesses are also painted.

Traditionally the textiles are painted with natural substances and initially only two colors - burgundy and black (Paramparik Karigar, 2015). Black is used not only as a background color but also as the outer linings of the icons and the motifs. The red and black colors are natural dyes sourced from alizarin. Red is associated with the color of mother earth and is believed to possess healing powers. The black colour was meant to repel malevolent spirits and intensify spiritual energy. White (base fabric) was considered the color for purity and contact with ancestral spirits and deities.

Gradually other colors from nature were also added to the color palette without having any religious significance behind them. Natural dyes were substituted with Pigment dyes to paint these textiles. The abhorrent practice that resulted in the birth of this art, is no more in practice. In the last few decades changes in our social systems have put an end to this social evil.

CONTEMPORARY SCENARIO

Vaghri tribe, who were leading a nomadic lifestyle, used Pachedi as portable shrines. Over the years, they have now settled in small towns. Hence the need for these fabrics has diminished. As these were ritualistic fabrics, their usage was limited to Vaghri community only. Screen printed imitations of Pachedi are at least

five times cheaper. Hence the craftsmen had to shift to a new market.

Nowadays 'Mata-ni-Pachedi' is printed in small sizes for art collectors or very limited spiritual usage. Long pieces (2-3mts) are only made against orders for museums, office or hotel interiors to represent cultural heritage.



Mata-Ne-Pachedi in contemporary colour (Picture Source: Ms. Anuradha Kumra)

Many new colours have been added with synthetic base to match contemporary styles. People practicing this technique have reduced due to less demand. A couple of families are left in Sabarmati near Ahmedabad (Gujarat) who are still practicing this art form. The main image of the spiritual textile was the Goddess which is forbidden from being incorporated into the utility products. Therefore, various other geometric elements are being used to print bedcovers, cotton saris, stoles and running yardage. Style of printing is also reflecting some key elements of other Indian hand printing styles like "Kalamkari" or "Madhubani" painting.

Sanjay Manubhai Chitara is among very few artists who is able to maintain this textile art in its original form as wall hangings (Mishra Jaina, 2015). He has been participating in many national and international workshops to demonstrate the rare art he expertise in and for its promotion (Avachat Vishakha 2009).

CONCLUSION

It is evident that these textiles emerged due to social, religious and cultural practices of the times on the canvas of Indian history. Traditional textiles have always included quality elements like the use of natural fabrics and dyes and decorations using meaningful motifs. There are still positive elements for the quality of life. The promotion of natural and organic ingredients with authentic techniques as a part of contemporary style is a growing segment of the market and its demand recognition is reviving.

Overzealous commercialization has changed the nature of many such traditional techniques. Broadly the market has been divided into mass production and exclusivity. It is important to address the requirements of these segments by adapting new techniques for mass production and, at the same time encouraging demonstrative workshops to educate the consumer about the original art forms.

It is imperative that the designers work with traditional craftsmen and also address the issue of using crafts; motifs and techniques in a newer format to bring about metamorphosis. Sensibly mass producing these textiles may be a solution for the craft form to survive. This in turn should be able to renew the interest of a specific consumer segment to provide patronage to the traditional artisans.

References

- Hitkari, S.S. (2003) "Designs and Patterns in Phulkari", Phulkari Publications, New Delhi.
- Varadpande L.M., (1992) "History of Indian Theater", Abhinav Publications, pp. 133
- Dhamija Jasleen, (2014) (Edited) "Sacred Textiles of India "Marg Publications, New Delhi.
- Kaur Rajinder, Gupta Ila (2014) "Phulkari and Bagh folk art of Punjab": A study of changing designs from traditional to contemporary time, American International Journal of Research in Humanities, Arts and Social Sciences, <http://www.iasir.net>
- Gupta H. Anu and Mehta Shalina (2014)"Patterns of Phulkari ": Then and now, Bonfring International Journal of Industrial Engineering and Management Science: 4(4) November.
- Mishra Jaina (2015) "The Sacred Textile art of Mata ne Pachedi", <http://www.jozan.net>.
- ROND Frederic (2010) "Phulkari: Ancient Textile of Punjab" <http://www.indianheritage.biz/Phulkari.html--10/03/15>
- Avachat Vishakha, 3 October 2009: <http://www.dnaindia.com/lifestyle/report-gift-to-the-goddess-1294586>
- Gillow John & Sentence Bryan (2006) "World Textiles", Thames & Hudson Ltd, London.
- Paramparik Karigar, <http://www.paramparikkarigar.com>, 2015.

Ben Barry, Daniel Drak

The Monster in My Closet: Men, Fashion and Embodiment

Canada

Ryerson University

ABSTRACT

Male consumers are relentlessly pursuing physical perfection, turning towards the tall, toned and lean bodies celebrated in men's fashion that dictate standards for imitation (Hall, 2006). The importance placed on male beauty raises concerns about the escalation of men's appearance anxieties (Pope, Phillips and Olivardia, 2000) while also illustrating the postmodern shift in which men define themselves through their bodies (Gill, Henwoods and McLean, 2000). Despite this focus on male physiques and appearances, limited research has examined men's relationship with their bodies. Moreover, despite the important role of fashion in shaping men's understandings of their bodies (Bordo, 1999), few studies have investigated the relationship between men's body image and dress practices. This study fills these gaps by investigating how young men's dress practices influence their thoughts and feelings about their bodies.

RESEARCH CONTEXT

Embodiment and Identity

This study is grounded in Entwistle's (2000a; 2000b) conceptualization of dress as an embodied practice. According to Entwistle, there is a dynamic interplay between dress, the body and culture because the activity of dressing is an intimate experience of the body as well as a public presentation of it. Getting dressed is a personal act because clothing provokes people to think about their physiques and makes them more aware of their bodies (Entwistle, 2000a). Dress is also central to how the body is expressed in social settings because clothing conveys meaning

about identity. The ways in which people dress the body is therefore shaped by outside social norms that influence the identity they desire to convey (Entwistle, 2000b).

Inverting the Male Gaze

The fashion industry has played an instrumental role in intensifying men's relationships with their bodies because it reframed the male body as an object of desire and essential means of expressing masculinity (Edwards, 1997). Fashion magazines present men's bodies in a manner, previously restricted to women's imagery, which invites them to be looked at and desired (Bordo, 1999). By 'inverting the male gaze' (Patterson and Elliott, 2002), fashion images sell men the idea that looking good is an important means of achieving hegemonic masculine goals (Luciano, 2002). The male bodies that the fashion industry glorifies represent two physical polarities: the muscle man and the boyish waif (Mears, 2011) as demonstrated by Giorgio Armani in the 1980s and Hedi Slimane in the 2000s respectively (McCaughey Bowstead, 2015). The disconnect between the fantasy of male fashion imagery and the diverse reality of men's bodies leads men to experience body dissatisfaction (Barlett, Vowels and Saucier, 2008; Hargreaves and Tiggemann, 2009).

Clothing Body Anxiety

Two past studies have explored men's body anxiety through clothing. Frith and Gleeson (2004) examined how men use clothing to manipulate their appearance. They found that men highlighted or hid their body parts depending on whether they met idealized male body expectations. Barry (2015) found that men expressed body anxiety when shopping for clothing because they had difficulty finding garments that fit. These

studies suggest that men's bodies can influence body anxiety when engaging with fashion. Although Frith and Gleeson (2004) and Barry (2015) have revealed the influence of clothes on men's body anxiety, more research is needed. Frith and Gleeson (2004) used a survey method that was unable to access men's deeper thoughts about their bodies. Barry (2015) used interviews but body anxiety was one of his six findings and therefore warrants focused study.

Researching men's body anxieties can be challenging because body image is culturally gendered feminine (Entwistle, 2000a). Participants in Frith and Gleeson's (2004) reiterated the cultural norm that men are not supposed to be worried about their bodies. The men in Barry's (2015) research minimized body concerns as trivial and not masculine. For men, the body has become a polarizing identity project: 'Men must simultaneously work on and discipline their bodies while disavowing any interest in their own appearance' (Gill, Henwoods and McLean 2005: 38).

Social Media and The Body

Emerging research indicates that social media may emphasize body image pressures. Barry and Martin (2015) found that social media had an instrumental role in stimulating young men's experimentation with gender-bending fashion while influencing them to focus on their physical and visual selves. While the researchers did not discuss the relationship between body image, dress and social media, research on this topic is required because studies suggest that social networks influence young men's body image. Walther (2011) and Hum et al. (2011) found that young people aim to create the most flattering visual representations of themselves through their profile pictures on Facebook. This finding suggests that social media propels young men to think critically about how they present their bodies online.

METHODOLOGY

Individual interviews were used to uncover how young men think about their bodies in relation to dress practices and activities. Our sample was comprised of 20 urban men who were between the ages of 19 and 29 and represented a range of heights, weights and

sexual orientations. Participants were recruited using a self-selected snowball method. Semi-structured interviews—each lasting two hours—consisted of two parts. Participants were first asked questions to create rapport with the researcher, such as to describe their style. They were then asked about the influence of their dress practices and activities on their body image, such as to discuss their body concerns when assembling outfits. Although these questions guided the interview, each interview developed in a conversational manner as the researcher probed into each man's comments to understand his body concerns in relation to fashion. Interviews were audio-recorded and transcribed. Analysis of transcripts followed the iterative process of data reduction, data display, and conclusion drawing and verifying conclusions. The 20 interviews led to the emergence of clear patterns—indicating theoretical saturation was reached (Miles and Huberman, 1994).

FINDINGS

Analysis of transcripts revealed three ways in which young men's dress practices and activities propelled them to become more anxious and aware of their bodies. First, participants indicated that fitting the body into clothing influenced how they saw themselves physically because they were affected by the cut and sizing of garments. Second, participants engaged in policing the body as they assembled their daily looks. They selected clothes that highlighted or concealed their bodies in order to comply with social norms of male attractiveness. Third, men's body image was influenced by their practices of sharing the body through photographic representations of their outfits on social media.

Fitting the Body

Interviewees identified the perceived strengths and weaknesses of their bodies and described how they would highlight or hide physical qualities accordingly. They explained that most garments were designed for men with minimal body fat and tall statures, creating fit issues for anyone with physiques outside of this ideal. They were conscious of the transition in menswear towards fitted apparel. One interviewee

noted, 'I would definitely say that slim-fit clothes are the most popular style you see around ... If you don't have the body for it, it can be tough.' The slim-fit trend stirred feelings of pride in those whose bodies fit the ideal and incited feelings of insecurity among men whose bodies did not.

Many interviewees were aware that they didn't have the body types for clothing styles that were in vogue. One interviewee said, 'I wish I had skinnier legs so I could look better in skinny jeans.' Through discussions around dressing, men remarked that the slimness of garments triggered body anxiety. Another interviewee remarked:

"Clothes always pull on me a bit, like in my stomach or thighs... It is a constant reminder that like I need to lose that weight in those areas. I am fine with the fact I will never be built like a mannequin but clothes are always made to fit that shape so things never fit quite right."

In addition to blaming the menswear industry for producing unaccommodating slim-fit clothes, participants noted that men's sizing did not reflect the realities of many men. Men's difficulty in finding the correct waist-to-length ratio in pants fueled body anxiety as a participant explained, 'When my pants trail to the floor, it's a reminder I am not proportionate or have the ideal measurements. No guy wants to feel fat or short and pants shopping can definitely do that.' Despite body anxiety, many men asserted that fashion—not their bodies—were at fault for their difficulty in finding clothes that fit as one participant noted:

"Designers seem to make their clothes while envisioning these beautiful perfect specimens wearing their product... There is a perception that clothes fit skinny guys better but maybe clothes are just made with skinny men in mind... I could look just as good in a pair of pants, if only they were actually tailored for my body."

Difficulty finding the right fit deterred many male consumers from purchasing menswear. An interviewee explained: 'Every time I go look at clothes the thing holding me back is my body type and me

fretting about whether things actually fit me okay because nobody wants to look fatter than they actually are.'

Policing the Body

Interviewees selected clothing that flaunted or concealed their bodies according to whether or not they perceived themselves to match male appearance standards. Men who felt that their silhouettes did not fit thin ideals noted that they would camouflage their bodies through dark colours and other dress techniques. One interviewee explained, 'I often wear black because it creates the illusion of somebody being thinner... I'm obviously not as skinny as I'd ideally like to be.' Participants noted that certain fabrics disguised the 'problem areas' of their bodies. In contrast, men who perceived their bodies to conform to ideals sought clothing that emphasized their physiques because they felt body confident. One participant noted, 'Since I'm a dancer with really muscular legs, I often wear shorter length shorts or slim-fit pants to showcase that body definition... I worked really hard to get this toned why not show it off?' Regardless of body security, men carefully considered which cuts and colours best flattered them.

Depending on their body shape, participants' implemented rules that dictated what styles they felt they could 'get away with wearing.' Physical traits such as shortness and excess body fat were perceived as flaws that needed to be concealed through dress. A interviewee said, 'As a shorter guy, I'm not going to wear a long coat because that would highlight the fact that I'm vertically challenged.' Another man noted that he preferred shoes with thicker platforms as they made him appear taller. Men with larger bodies were apprehensive to wear horizontal stripes, loud prints and chunky sweaters because they perceived these styles to add bulk and emphasize 'problem areas'. While men prided themselves on 'having an eye' for what fit, this knowledge made them more conscious of their bodies. One participant commented, 'I don't wear the super skinny jeans because I'm a bigger guy. It wouldn't look good on me. My legs would look like sausage containers.' By following personally imposed fashion parameters, participants edited their dress

selections in order to project an image that followed male body ideals and avoid embarrassment in public. As one interviewee rationalized, 'Nobody wants to be the one who is too fat for a look and tries to pull it off anyways. There is no bigger faux-pas then that so it's definitely something I avoid... It's probably why a lot of bigger guys go for safer styles.'

Showing the Body

Interviewees asserted that social networking sites influenced their dress decisions because they shared photos of their sartorial choices. Pointing to the narcissistic approach men take on social networking sites, one interviewee explained, 'Go to the explore page on Instagram and there are a bunch of guys showing off the flashy designer shoes they bought or flexing in the gym... When did it become normal for guys to take ridiculously vain photos like that?' Participants suggested that they have become more conscious of their bodies and how they looked in clothes because it was commonplace to 'show off' their appearance on social media. As an interviewee indicated, 'Guys often tease each other about spending too much time trying to take flattering photos of themselves for Instagram but it has become important... probably more than ever to look good and dress nicely.'

Men pointed out that social networking sites allowed for one's body and fashion choices to be put on display for onlookers to gaze at, comment on, and/or critique. One interviewee explained, 'Sites like Facebook create a digital space to see and be seen.' Participants subsequently spent considerable time and energy creating images that presented their bodies in the most attractive and desirable light. Many interviewees would regularly take photographs from a variety of angles in order to capture an attractive appearance and used photo-editing apps to remove perceived body flaws before uploading their self-portrait ('selfie') online. Interviewees placed a high value on having an appealing body to capture for their social media account because social media images provoked comparison, even competition, amongst peers. An interviewee remarked:

Sites like Facebook or like Instagram create this

competitiveness amongst guys ... Guys use their homepages as a place to post pictures of their fresh haircut or their newest pair of sneakers or show off their biceps and fit bodies ... I think that encourages guys to look at each other and see how they measure up: If they're as good looking, if they're as successful, if they're having as much fun.

DISCUSSION

Our findings illustrate Entwistle's (2000a, 2000b) concept of dress as an embodied practice by elucidating the relationship between the body, dress and culture for young men. When men made dress decisions, they scrutinized and policed their bodies according to societal ideals. While the 'inverted male gaze' in fashion images has encouraged men to define themselves through their appearance (Patterson and Elliott, 2002), our study reveals the extent to which men have internalized this gaze. Men were conscious of how colours and cuts enhanced the presentation of their bodies. Supporting the findings of Frith and Gleeson (2004) and Barry (2015), participants highlighted or concealed their bodies through clothing depending on whether or not they met male body expectations and they experienced body anxiety when clothes did not fit. However, in contrast to the men in Frith and Gleeson (2004) and Barry's (2015) studies, our participants openly discussed body image. While the men in these past studies were primarily older, our participants were younger. Millennial men might be less likely to associate body concerns as feminine and instead consider appearance management to be as essential component of their masculine identity.

Our study suggests that the negative influence of idealized male images on men's body image extends from viewing images (Barlett et al., 2008) to making dress decisions. Participants evaluated outfits based on whether or not garments enabled them to emulate the body ideals glorified in men's fashion images. Since the fashion industry displays its newest designs on idealized bodies, men appear to have internalized the association between these body types and fashionable clothing. Participants' association between leanness and fashionable clothing suggests that Hedi Slimane's changes to the silhouette of

menswear and representation of masculinity has influenced everyday men's dress decisions and body image. While scholars (Rees-Roberts 2013; McCauley Bowstead 2015) have praised Slimane for subverting dominant representations of fashionable masculinity, our work suggests that he simply replaced one ideal with another. Most participants expressed body insecurities because they did not embody a tall or lean frame.

Our findings illuminate how social media and fashion intersect to impact men's body image. In addition to internalizing the gaze when they made dress decisions, men internalized the gaze when they took images of themselves to post on social media. Extending the research of Walther (2011) and Hum et al. (2011), interviewees were conscious of how they displayed their bodies and outfits through 'selfies', carefully shooting, editing and selecting images to present their most attractive self for others to consume. Moreover, participants enacted the gaze when they looked at the bodies of their peers on social media. Since men experience body dissatisfaction when they evaluate themselves as less attractive than male models in advertising (Hargreaves & Tiggemann 2009), men's comparison to social media images could have similarly dangerous implications on their health.

Industry Implications

Menswear professionals are encouraged to remedy the dress challenges that induce men's body insecurities. While fostering men's body confidence is a worthy social pursuit, it is also an important business objective. Participants who were heavier or shorter asserted that clothes cut for idealized bodies made them feel body conscious and deterred them from purchasing fashion. Since men craved current styles in their sizes, menswear labels might attract more consumers by designing and producing clothing for a broader range of bodies. Our appeal to the men's fashion industry to focus on diversity as a business strategy extends previous recommendations from advertising to design. Barry (2014) found that men perceived fashion advertisements with models that reflected their bodies as more effective than the single

representation of idealized male physiques. Clothing design processes solely utilizing thin mannequins and fit models similarly do not represent the diversity of male bodies. Everyday men are left feeling disappointed and overlooked by fashion labels.

CONCLUSION

Fashion provides men with an opportunity to deconstruct and re-imagine masculinity (Barry and Martin, 2015) but the potential for such transgressions remain limited because men are constrained by body consciousness. We find that the fit of clothing triggers men to feel anxious about their bodies. They subsequently police their dress decisions by selecting clothing that attempt to conceal their perceived bodily flaws and enable their bodies to conform to idealized physiques. Exacerbating these daily wardrobe anxieties is the role of social media because publishing pictures of the self in one's latest outfit has become a routine practice of men's fashion consumption. This research suggests that in each man's closet lives a monster who can manifest itself in the man's mind when he tries on a garment and then uploads an image of himself into cyberspace.

References

- Barlett, Christopher P., Vowels, Christopher L. and Saucier, Donald A. (2008). Meta-analyses of the effects of media images on men's body-image concerns. *Journal of Social and Clinical Psychology* 27(3): 279-310.
- Barry, B. (2014) Expanding the male ideal: The need for diversity in men's fashion advertising. *Critical Studies in Men's Fashion* 1(3): 275-293.
- Barry, B. (2015) The toxic lining of men's fashion consumption: The omnipresent force of hegemonic masculinity. *Critical Studies in Men's Fashion* 2(2).
- Barry, B. and Martin, D. (2015) Dapper dudes: Young men's fashion consumption and expressions of masculinity. *Critical Studies in Men's Fashion* 2(1): 5-21.
- Bordo, S. (1999) *The Male Body: A New Look at Men in Public and in Private*. New York: Farrar, Straus & Giroux.
- Edwards, T. (1997) *Men in the Mirror: Men's Fashion, Masculinity and Consumer Society*. London: Cassell.
- Entwistle, J. (2000a) *The Fashioned Body*. Cambridge: Polity Press.

Entwistle, J. (2000b) Fashion and the fleshy body: Dress as embodied practice. *Fashion Theory* 4(3): 323-348.

Frith, H. and Gleeson, K. (2004) Clothing and embodiment: Men managing body image and appearance. *Psychology of Men & Masculinity* 5(1): 40-48.

Gill, R., Henwood, K. and McLean, C. (2005) Body projects and the regulation of normative masculinity. *Body and Society* 11(1): pp. 37-62.

Gill, R., Henwood, K. and McLean, C. (2000) The tyranny of the sixpack: Men talk about idealized images of the male body in popular culture. In Squire, C. (ed) *Culture in Psychology*. London: Routledge, 97-114.

Hall, S. S. (2006). *Size Matters: How Height Affects the Health, Happiness, and Success of Boys—and the Men They Become*. New York: Houghton Mifflin Co.

Hargreaves, D. A. and Tiggemann, M. (2009) Muscular ideal media images and men's body image: Social comparison processing and individual vulnerability. *Psychology of Men & Masculinity* 10(2): 109-119.

Howson, A. (2013). *The Body in Society: An Introduction* (2nd edition). Cambridge: Polity Press.

Hum, N. J., Chamberlin, P. E., Hambright, B. L., Portwood, A. C., Schat, A. C. and Bevan, J. L. (2011) A picture is worth a thousand words: A content analysis of Facebook profile photographs. *Computers in Human Behavior* 27(5): 1828-1833.

Luciano, L. (2002) *Looking Good: Male Body Image in Modern America*. New York: Hill and Wang.

McCauley-Bowstead, J. (2015). Hedi Slimane and the reinvention of menswear. *Critical Studies in Men's Fashion*, 2(1): 23-42.

Mears, A. (2011). *Pricing Beauty: The Making of a Fashion Model*. Berkeley: University of California Press.

Miles, M. B. and Huberman, M. A. (1994). *Qualitative Data Analysis* (2nd Edition). Thousand Oaks: Sage.

Patterson, M. and Elliott, R. (2002). Negotiating masculinities: Advertising and the inversion of the male gaze. *Consumer Markets & Culture* 5(3): 231-249.

Pope, H., Phillips, K. and Olivardia, R. (2000) *The Adonis Complex: How to Identify, Treat, and Prevent Body Obsession in Men and Boys*. New York: Touchstone.

Rees-Roberts, N. (2013) 'Boys keep swinging: The fashion iconography of Hedi Slimane. *Fashion Theory*, 17(1): 7–26

Tiggemann, M., Martins, Y. and Kirkbridge, A. (2007) Oh to be lean and muscular: Body image ideals in gay and heterosexual men. *Psychology of Men & Masculinity*, 8(1): 15-24.

Walther, J. B. (2011) 'Theories of computer-mediated communication and interpersonal relations'. In M. I. Knapp and J. A. Daly (eds) *The Sage Handbook of Interpersonal Communication* (4th edition). Thousand Oaks: Sage, 443-479.

Daphne Mohajer Va Pesaran

From Wajiro Kon to Fruits Magazine:Tokyo Street Fashion Culture's Imprint on Collective Memory

Japan
Bunka Gakuen University

ABSTRACT

The goal of this paper is an examination of how images of Tokyo's street fashion have imprinted on the collective memory of the city, thus forming its reputation as a place where new ideas are created in fashion. To explore this idea I chose the subtheme of space, and examined street fashion images that are specifically linked to real places – in this case the Ginza and Harajuku neighborhoods of Tokyo. The publication of these images can create a bridge, which allows us to experience the real place through subjective imagery and imagination, by affecting our memories and our perceptions of the real place. The images form an alternate or fantasy space, a sort of collage of our memories and expectations of the real place. In order to understand the role of street fashion images in generating these alternate or fantasy spaces, this paper will look at two non-institutional fashion movements, which both appeared in the wake of massive societal changes and have now become part of the world's collective memory of Japan and helped shape the reputation of Tokyo as a city known for innovation in fashion.

RESEARCH

Japanese documentarians Wajiro Kon and Shoichi Aoki are responsible for the creation of some of the most important images of dress culture in Tokyo. Kon illustrated the Westernization of Ginza in the 1920s and Aoki photographed the bricolage of Harajuku street fashion worn by disillusioned youth during the recession of the 1990s (Kon 1925, Aoki 1996). The cultural changes these areas were experiencing at the time they were being studied had materialized in the way people dressed on the streets and in the living environment — in surfaces of non-verbal

communication conducive to visual documentation. By publishing illustrations or photographs of these manifestations in weekly or monthly magazines, Kon and Aoki each produced an archive of images that would inform the collective memory of the real places they were documenting and helped shape the collective memory of Tokyo, giving it a reputation as a city known globally for innovation in fashion.

French philosopher and sociologist Maurice Halbwachs considers collective memory to be a social practice structured by inter-subjective relations (Halbwachs 1992). In Kon and Aoki's case these relations were represented through images, visual representations of real people, dress and spaces on the streets of Tokyo. The images then act as a representative of memories and experiences that become transferrable to the viewer via the format of a magazine.

German sociologist and film theorist Siegfried Kracauer considered memory to be unreliable, fluid and not tied to one specific time, while the photographic record acted as a fixed memory. However, to Kracauer, photographs cannot create memories, but are artifacts. These artifacts act to pervert the truth about actual events and replace memories with static images (Esther 2010). This form of documentation can lead to the phenomenon of visual records entering the collective memory of a real place and becoming the iconic representation of dress culture.

A contemporary documentarian with the ability to publish their observations in a consumable format extends beyond Baudelaire's "passionate observer" (1863) or Benjamin's "flâneur" (2008). The acts of publishing and categorization elevate the flâneur in

contemporary society to the role of documentarian or participant-observer and are therefore not capable of producing an accurate truth (Nichols 2001). In his paper titled "Documentary and the problem of 'truth,'" Blumenberg asserts that authenticity is often mistaken for objectivity, which is as unattainable in the medium of cinema as it is in street fashion photography or any other medium in which choices are being made by the person creating the record. Blumenberg continues by defining the two elements of authenticity as legitimacy and significance. Much like actors who would appear in *Kino-Pravda* or *Cinéma Vérité* films, Aoki's subjects in Harajuku, as they are not chosen with scientific objectivity, are subjective representatives of truth or factual reality. The street fashion documentarian is affecting the material that enters the historical record by virtue of the fact that they use their personal judgment to categorize and decide the subject matter viable for documentation. Photographs are not representations of objective reality, but can legitimize an act or moment as having occurred while simultaneously proposing the significance of the same moment by memorializing it via a photographic record (Blumenberg 1977).

Therefore, if photographic documentation cannot be used as truthful evidence of a period in time but still retain authenticity, it acts as a tool for the generation of an alternate space that has the potential to affect the collective memory of a real place.

Wajiro Kon (1888-1973) was an ethnographic documentarian who, through illustrations and writing, researched changes in Ginza after the 1923 Great Kanto Earthquake. His illustrations and textual observations of material desires and the human interaction with space at that time are now part of the national identity of Japan and used as a historical record of Tokyo's material culture during that period (National Museum of Ethnography 2011). Following the earthquake, he directed numerous studies on fashion and housing in which he witnessed young men and women with disposable income increasingly dressing in Western clothing. They were thought of as hedonistic delinquent youths at the time — manifestations

of modernity and the Westernization of Japanese culture in the Showa period (Usui 2014, Mansfield 2009) — and given the title of *moga* (modern girls) or *mobo* (modern boys). His findings helped establish Ginza as a significant district for cultural formation, a district that has continued to influence fashion trends (National Museum of Ethnology 2011).



Kon's illustration juxtaposing Western and Eastern dress culture (National Museum of Ethnology 2011).

In 1996, almost 80 years after Kon studied Ginza, magazine publisher and photographer Shoichi Aoki would document changes in dress on the streets of Tokyo's Harajuku neighborhood. He has created a body of work that can be considered as culturally significant as Kon's was in defining a new category for dress culture in Tokyo, and whose visual documentation has greatly affected the collective memory of Harajuku.

Unlike Kon, whose documentation of Ginza was informed by quantitative and qualitative sociological research methods, Aoki was more akin to Baudelaire's "passionate spectator" (1863), and his subjects were selected based on his personal emotional response to what he calls an "aura" — an ironic reference to

Walter Benjamin's description of a quality retained by artworks in the age before mechanical reproduction. Aoki sees his subjects as living sculptures who exist within a specific time and space (Aoki 2012).

Stretching back as far as 1949, Harajuku has been a place that is distinct from other districts in Tokyo. Post-war Harajuku was rebuilt as an American Army base for soldiers and their families — Japanese citizens were not allowed to enter. Owing to its foreign residents and imports, low-cost rent and the car-free Sundays that began in 1977 on one of its main roads (which acted as a place for young people to congregate), Harajuku would earn a reputation as a place of counter-culture and rebellion that facilitated youth-led subcultures, artists and fashion designers — notably Rei Kawakubo and Yohji Yamamoto (Godoy 2013). The area would become a place which allowed young people to experiment with various dress styles and transform themselves during their formative years, some individuals would even go as far as changing their dress to something more appropriate to the district before exiting Harajuku train station (Aoki 2012).

In the mid-1990s, Aoki noticed a new trend in self-styling among young people in Harajuku and began photographing those whom he considered to be influential in this new mode of dress. In June of 1996, he began publishing these images in a monthly magazine titled "Fruits," created during what economists would call the "lost decade": the decline following the prosperous bubble economy of the 1980s (Saxonhouse and Stern 2004). It was a time in which Japanese youth felt helpless and unsure of their future, causing them to mistrust traditional establishments and to seek alternative modes of consumption (Wood 2005). The changes after the consumption-driven culture of postmodernity in the 1970s and 80s stimulated growth in art and creative cultures in Japan. When the 1990s began, young creative people had begun to search locally to find the means and materials to create their own culture. This introspection was concomitant with a move away from the conspicuous, import-driven vertical consumption

of the 1980s to a trend of horizontal consumption of local brands. This resulted in tighter bonds forming between local consumer-producers of fashion items, facilitating the birth of a unique location-specific dress culture (Matsui 2007).



Cover image of issue No. 1 of Fruits Magazine (Aoki 1996).

The resulting dress culture was identified as a bricolage that challenged established rules of garment usage and facilitated a horizontal system of consumption in which participants traded ideas and challenged one another on the street during social interaction. It is this moment in time that Harajuku is now known for, and Aoki's memorializing photographs of the crowds gathered along the district's Omotesando Street on the car-free Sundays in the 1990s were instrumental in generating this association (Kinsella 1995, Aoki 2001, Godoy 2013, Johnson and Okazaki 2013, Sims 2014).

Through actively dichotomizing the people in the street by selecting certain people to appear under his

“Fruits” label, Aoki acted as a participant-observer in the formation of this new mode of self-styling (Nichols 2011). While Aoki states that he never styled or posed his subjects, he affected his subjects simply by categorizing them. Through naming and classifying selected subjects chosen from the people in the street, he catalyzed aspirations to appear on the pages of his magazine.



Inside image of issue No.1 of Fruits Magazine (Aoki 1996).

In effect, his publications acted as a vehicle for the legitimization of the new mode of self-styling that was appearing in Harajuku. Aspiring subjects would do something called Aoki-machi, meaning they would emulate the manner of dress seen in Fruits magazine and wait for Aoki in areas he frequented. Ostensibly this would enable the documentarian to historicize them in his magazine, but in reality the subjects affect themselves in a manner that made it difficult for the documentarian to create an authentic representation of cultural shifts (Aoki 2012). Once a category has been established — when a movement is named —

can new participants become part of the movement or are they considered followers, simulating the originating members of the group?

Halbwachs (1992) offers some insight into the relationship between a group and the milieu in which they form their material culture:

“A group not only transforms the space into which it has inserted itself, but also yields and adapts to its physical surroundings. It becomes enclosed within the framework it has built. The group’s image of its external milieu and its stable relationships with this environment becomes paramount in the idea it forms of itself, permeating every element of its consciousness, moderating and governing its evolution. This image of surrounding objects shares their inertia. It is the group, not the isolated individual but the individual as a group member, that is subject in this matter to material nature and shares its fixity.”

According to Halbwachs, a space retains something from each of its inhabitants through time. By situating themselves in Harajuku, a neighborhood with a reputation for creative culture formation and experimentation, the participants in this new dress culture were subjecting themselves to alteration by the space, meanwhile they were imprinting on it their own actions which would be then be memorialized in Fruits magazine. Today, although the architecture, pavement, trees and shops in Harajuku have changed, it still holds its identity as a place for culture creation and consumption. Even the arrival of foreign fast-fashion retailers like H&M and Forever 21 have not interrupted the ability of Harajuku to act as a place that exerts an influence on fashion trends, as long as its permanent fixtures such as streets and signage exist (Halbwachs 1992).

Although Aoki’s original moment has passed, his images remain as representations of an alternate space, one that doesn’t really exist, but appears when one thinks of Harajuku.

CONCLUSION

Kon and Aoki are important street fashion documentarians whose memorializations of post-quake Ginza and recession-era Harajuku now inform the collective memory of Tokyo, and the national identity of Japan.

They were in the right place at the right time to witness societal changes materializing on surfaces on the street. Stimulated by intuition, these street fashion documentarians went on to create some of the most important images of dress culture in Tokyo. The images they created of pivotal moments in time in Ginza and Harajuku become records of an alternate space — an authentic, subjective telling of a moment in time. Access to these spaces was easy, available for a consumer through purchase of the magazines in which they were published. The proliferation of these publications and images would legitimize the members and affect the direction of the new culture being documented.

Modern-day Ginza and Harajuku are very different to what they were when Kon and Aoki first examined them. However, the identity of both districts as places of cultural influence continues. Designed by Rei Kawakubo of Comme Des Garçons, in 2006, Dover Street Market opened a branch of its avant-garde high-end department store in the back alleys of Ginza. While in Harajuku artists like Sebastian Masuda and Kayri Pamyu Pamyu are continuing the legacy of colorful bricolage and youth-led resistance to the adult establishment in Harajuku (Kinsella 1995). Their numerous appearances in media continue to have strong influence on the modern aesthetic image of Japan.

FURTHER STUDY

Cameras have become ubiquitous and it is easy to publish images for mass consumption online. The market for street fashion photography is experiencing a boom illustrated by a steady rise in blogs and books. Further study on this subject could extend into a critique of professional bloggers who publish street fashion photography using the internet as their

medium. A study of how location-specific fashion movements as products of rapid globalization and information sharing could a valuable direction for research. Fashion subcultures thrive under circumstances in which their members can see and be seen by members of the subcultural group. As the number of cameras and individual perspectives grow and are communicated online, how will this change our understanding of our world? How do these virtual spaces converge? Can algorithms be created that can catalogue and synthesize digital images to create virtual renderings of the alternate space created by the documentarian? How will this change our perception of our world?

While this paper only discusses the role of the documentarian in the process of collective memory formation and the creation of alternate spaces, it has not gone on to consider the presence of competition, possible economic gain, shareholders and professional connections to the fashion industry in blogger culture. If an examination and critique is to be done of contemporary practices in street fashion blogging and documentation then a consideration of trend forecasting and aggregation practices must be done in tandem.

Fashion movements now can appear in more than one location around the world and look strikingly similar. An examination of the cultural factors unique to each place could elucidate the unique cultural meanings attached to significant local movements in consumption and material culture.

References

- Aoki, S. (1996) FRUITS, (1), p.19.
- Aoki, S. (2001) FRUITS. London, UK: Phaidon.
- Aoki, S. Interviewed by: Daphne M. (Numerous occasions between 2012-2014).
- Baudelaire, C. (1863) The Painter of Modern Life. Paris, France: Le Figaro.
- Benjamin, W. (2008) The Work of Art in the Age of Mechanical Reproduction. London, UK: Penguin.

Blumenberg, R. M. (1977) Documentary Films and the Problem of "Truth". *Journal of the University Film Association*. 29 (4), p.19-22.

Crane, D. (1999) Clothing Behavior as Non-Verbal Resistance: Marginal Women and Alternative Dress in the Nineteenth Century. *Fashion Theory: The Journal of Dress, Body and Culture*. 3 (2), p. 241-268

Esther, L. (2010) Siegfried Kracauer and Walter Benjamin: Memory from Weimar to Hitler. In Radstone, S. & Schwarz, B. (eds.). *Memory: Histories, Theories, Debates*. New York, USA: Fordham University Press.

Godoy, T. (2007) *Style Deficit Disorder: Harajuku Street Fashion - Tokyo*. San Francisco, USA: Chronicle Books.

Halbwachs, M. (1992) *On Collective Memory*. Chicago, USA: University of Chicago Press.

Hebdige, D. (1979) *Subculture: The meaning of Style*. London, UK: Routledge.

Johnson, G. And Okazaki, M. (2013) *Kawaii: Japan's Culture of Cute*. : Prestel.

Kinsella, S. (1995) *Cuties in Japan*. In Brian Moeran and Lise Scov (eds.), *Women, Media and Consumption in Japan*. Honolulu, USA: University of Hawai'i Press.

Kon, W. (1925) *Ginzagai Fuzoku*. Japan: Fujinkouron.

Mansfield, S. (2009) *Tokyo a Cultural History*. New York, USA: Oxford University Press.

Matsui, M. (2007) *The Age of Micropop: The New Generation of Japanese Artists*. Tokyo, Japan: Parco.

National Museum of Ethnology (2011) *Kon Wajiro Retrospective*. Tokyo, Japan: Seigensha Art Publishing.

Nichols, B. (2001) *Introduction to Documentary*. Bloomington, USA: Indiana University Press.

Polhemus, T. (1994) *Streetstyle – From Sidewalk to Catwalk*. London, UK: Thames & Hudson.

Saxonhouse, G. Stern, R. (2004) *Japan's Lost Decade: Origins, Consequences and Prospects for Recovery*. New York, USA: Wiley-Blackwell.

Slade, T. (2009) *Japanese Fashion: A Cultural History*. London, UK: Berg.

Usui, K. (2014) *Marketing and Consumption in Modern Japan*. London, UK: Routledge.

Wood, C. (2005) *The Bubble Economy: Japan's Extraordinary Speculative Boom of the '80s and the Dramatic Bust of the '90s*. USA: Solstice Publishing.

Group Trendtank

(Bernina Chan, Kasia Luczak, Abigail Rands, Mylène Lemercier)

The Science of Fashion. Looping the Memento.

Italy
Polimoda

ABSTRACT

A Lab is where concepts emerge, evolve and find their applications. In a Lab, experiments grow into breakthroughs and vision turns into reality. The Lab is an archive of the future where prior rationalities are reconstructed – looped into new values. The lab is the space for momenting the memento.

The new Polimoda Lab has the potential to moment the memento in a looped process for progress. Florence is already an age-old museum. Bringing to life an age-less lab allows for new interactions of matter and energy. As a Heimat of Science and Art, Florence is the ancient source of the fashion's futures. The Lab becomes its Brain – the future in the mem[brain] of the past. Having in common the physicality of body and meta-physicality of mind, Brain is understood as a bridge between the imaginary and the world of artefacts. Warping the city into a looped Möbius Bridge, we seek to foster the brain of fashion to change its dimensions and directions, momenting its memento in infinite amount of ways in a looping future.

The Science of Fashion is an experimental academic ambition to moment a new methodology for the future of fashion craft and design education, provoking creation of a new body of knowledge that can be [re][re]applied. Unlike rebellious movements, we aren't trying to break with the status quo, we aim however at breaking through it. We take on a looped encyclopedic structure as a symbol of an attempted system based on the theory in process. The writing takes its form from its content. Looping becomes the form of writing, creating, designing. Form and content merge together in a continuum of an alphabetic order. The main concepts of The Science of Fashion, the next

step for

Florence, translate each other and explain one another – past Renaissance being loops into the future.

It aims at becoming a starting point in the middle of the way, an erratic turn leading to a new path of evolution, an open door to visionary and science-related concepts. We construct a free-flowing algorithm that may help us identify a path able to overcome today's static cycle. An endlessly repetitive circle, seen in a looping process is a process of repetitive evolution. Regarding Science as the richest resource for fashion innovation gives space for revolutionary loops within a progressive unfolding. Redefining existing fashion dictionary, we propose new interactions for future scenarios. An analysis rooted in sociological, anatomical and mathematical research gives prescriptions rather than forecasts. We try to understand the dimensions and qualities that will determine the reinvention of our current system, reconstructing new semantics of the old language. Having defined the Möbius Bridge as the starting point, ours is an exercise regarding the quest for a way and a new pact among the fashion system's existing actors.

Encyc[loop]aedia:

A

Analogue |'an ələg|

Fashion suffers from the syndrome of easy creativity. Caused by an overabundance of the digital, research became an unhealthy skill with no training necessary to acquire. Quantity replaced quality, with no manual work involved and no physical space occupied. The

analogue is the remedy, allowing for [re]creation of the creative mind cells. Quarantine in a workshop is necessary to reconnect the sense of touch with the metasense of thought. The patient is cured.

[Arc]hive: |' a:kAIV|

To mediate the 'lived'. An inverse pathway not only restricted to historical constructions but also social, political, technological and discursive horizons. Cultivating knowledge and culture to activate unharvested opinions. Never straight shooting, it is a developmental process curving a[way] in memory and reference of a certain fashion and moment in time.

B

Body |'b ɒdi|

As Leonardo Da Vinci drew the body proportions through the Vitruvian man, the human body becomes the principle source of proportion among the classical orders of architecture, fashion and city. Linking man and nature, art and science, our anatomy works as an analogy of the universe and the cosmos of design. A natural repetition of golden ratio developing physical and non-physical solutions, the body perpetuates the quest for future – a design renaissance.

Boundary |'ba ʊnd(ə)rɪz|

No breakthrough without breaking through. Only solid boundaries can provoke a quantum leap and a change of direction. Bridges can be built solely between

separate territories. We call for reconstruction of a border, a Möbius limitation that fosters creative re[turns].

Bridge |brɪdʒ|

Two sides have in common what is placed between them. For both of them, that something is on the border. The bridge brings two sides together, letting them overlap their territories. It facilitates processes. In fact, a bridge is a metaphor of process – of be[coming] and giving a[way]. A corridor being in-between, it acts as a meeting point, therefore acquiring a central

position. It is only possible for the bridge to be at the edge but at the same time in the centre – the centre out of a traditional centre. This constructed passage changes the perception of the duality of elements it usually divides and connects. Bridge - middle - brings together two ends of the same spectrum. It is an instrument of [re]placement and [re]contextualization, dynamic change of the notion of place.

C

Cartography |kɑ:'tɒgrəfi|

Drawing from one point to another, cartography maps through city, mind and body. Geo[locate]ing Florence between layers of knowledge, navigation is optimised within a labyrinth of thoughts and facts. Latitudes and longitudes intersect at key coordinates, leaving blank spaces for future mapping. Establishing a grid system, Florence's story becomes part of a visual repertoire acting as a thought atlas.



43.7833° N, 11.2500° E

Curation |kjʊ(ə)'reɪf(ə)n|

Cu[ratio]n is the new currency. Necessary to regain order and control, cue[rating] emancipates the mind and body through skilled editing. Challenging one to express freely under the rules and laws of design, to cure the overload of unnecessary noise and

impressions. Creating undiscovered meanings of existing artefacts.

D

Delete |dɪ'li:t|

Every equation needs balance, which got lost when fashion started multiplying its average between infinite clothes and singular couture.

There is only 0 and 1. From the positive value, fashion turned into a negative positive. Deleting it, will lead to a positive negative, creating potential for a positive positive.

[De]sign / De[sign] |'d ɪzAɪn| / |dɪ'sAɪn|

Design rehab is necessary, as the symptoms show an enormous bursting bubble. Automation causes reduction of human factor in terms of creativity. The use of the word 'design' significantly surpasses the usage of design artifacts.

[De]signers divest of the core of design, becoming irrelevant.

As the ubiquitous overload stimulates the need for ID, signature becomes a fundamental benchmark for encoding value. More than form, we strive for substance, de[sign] and its meaning. Handwriting replaces monogram, labels turn into anachronisms of no matter.

E

Error |'erə|

verb

to unpredict, to wander, to turn on a perfectly straight path origin: from Latin errare 'to stray'

Evolution |,i:v ə'lu:ʃ(ə)n,'ev-|

There is a design re[evolution] where fashion design can evolve as in nature, reproducing patterns and ideas. Reflecting the psychoanalytical workings of the mind, both inventions and errors reveal a transparent methodology for the next generation.

Standing as valuable inputs for future momentum, the traces of our experimentation will give impetus to

past, present and future.

F

Florence |'fl ɒrəns|

Characterised by the multiplicity of its bridges, the city becomes one Möbius Bridge. Warping around a multitude of connections and concoctions in a Möbius loop. Through its archive of knowledge and craft, it moves the mind into a sequence of circuitry freedom. Bridging the relative attribute of time and the absolute character of space, there is no more chopping of fashion but rather the cultivation of infinite individual waves looping its way. Being a dynamic arc for opposites to meet without losing their core.

Future |'fju:t ʃə|

Forecast: to calculate in advance.

Unknown: unidentified facts often referred to as x, y or z.

Time: duration of a sequence of events.

Unexplored: no examination leaving space for the imaginary.

Random: in a haphazard manner.

Estimate: approximate calculation of value.

G

Galaxy |'gal əksɪ|

Coming in and out at random, mass of matter float while crossing paths within a galaxy-like structure.

Every particle enriches substance by creating a looping community of individual pieces that all together form a puzzle tribe. Belonging to a borderless spiral of possibilities, isolation through vast gaps of space allows for personalised focus while simultaneously being influenced by mutual gravitation and communal energy.

Gravity |'grav ɪtɪ|

Keeping wandering loops from getting lost in momentum, gravity provides essential kinetic force to resource the cycle. Gathering concepts together for thorough development of the mind. Attracting bodies

towards mass with a focus on bringing structure to evolving movement. Gravitational waves influence vision answering to theories of relativity where space and time cannot go without one another.

H

Humanism |'hju:m ənɪz(ə)m|

An emphasis on the power of the mind and on common human needs. Signalling the ever beginning of an error era, it is a return to elemental approach to design. Man (center) and machine (periphery) merge harmoniously as nature remains the driving force for originality. A deep universal interconnectedness between all fields and disciplines.

I

Improvisation |ɪmˈprɒvəɪˈzeɪʃn|

A world where there is neither right nor wrong. Errors can be [RE]solved and variations accepted. The process of improvisation allows for the [RE]connection and manifestation of uncontaminated ideas and imagination. Prioritising the fabric of thoughts and design uniquely to one's rhythm.

Inversion |ɪnˈv ɜːʃ(ə)n|

A recurring rhetoric effect forcing the mind to shift perception and question what is perceived, inverting the order of thought to moment boundless ingenuity. The role of the designer is to invert future models in a vice versa game of invention.

J

Juxtaposition |ˌdʒʌkstəpəˈziʃ(ə)n|

A side-by-side position for any dual relationship: di-, con-, entre-. Generated contrast develops into process of pairing. Layers are seen as adjacent angles rather than fluid entities. Proximity becomes a substitute for synthesis.

K

Kinetics |kɪˈnɛtɪks, kɪ-|

The virtues of kinetic energy shift as space perceptions loop between illusion and reality. To be one-dimensional or multi-dimensional, the display of movement challenges the textures, silhouettes and style of fashion.

The momentum in which a garment possesses impact and motion becomes a moving force in the message behind its body.

L

Laboratory |ləˈbɒrə,t(ə)rɪ,ˈlæb(ə)rə,t(ə)rɪ|

The [muse]um of the future. The laboratory serves as a futuristic but ancient space for research and experimentation, meeting point between past and future, congress of designers and scientists. An arc[hive] of creative activation.

It initiates the momentum, bringing the memory of design and philosophy alive. An erroneous and erratic space that fosters erosion of today by yesterday's tradition and tomorrow's innovation.

Laws |ləː|

Written laws are fundamentals of floating improvisation, giving structure to free creativity. Bringing order to an otherwise chaotic world, they do not limit but rather control properties of physics.

Laws of craft make for an archive of algorithms and template designs – allowing the comprehension of metaphysical, cultural and arti[actual] evolution.

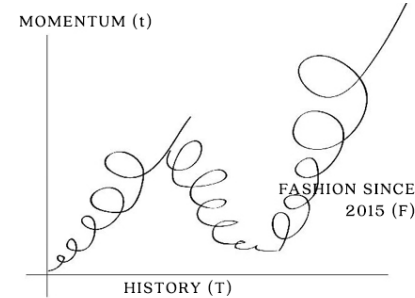
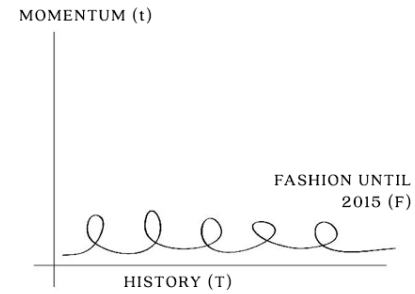
Loop |luːp|

Momenting the memento in a continuously looping future. There is a deep universal interconnectedness between all fields and disciplines, finally visible in fashion. Before, we understood fashion in historical loops, as [decade]ent trends returned without turning, on the horizontal axis of history.

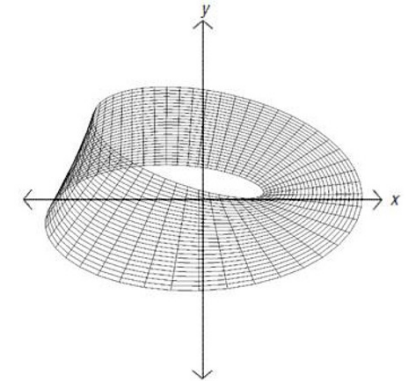
We need to provoke another dimension of looping, on the vertical axis of moment, on the base of concepts of template and de[sign].

The Möbius model allows it to loop, while re[construct]ing, re[form]ing and re[morph]ing infinitely on its way. It is not considered as a repetitive circle thanks to the progressive perspective of processuality and

countless nodes of connections.



right – as one and only – direction. This one-sided-surface is both [in]side and [out]side at the very same time. It makes it possible for the seemingly unconnectable not only to connect but even to overlap in a most true sense. As not bound to any specific shapes nor dimensions, it has potential of infinite change, showing the ability to shift the metaphoric into the literal. A Möbius loop has power to turn around the – lessness of anything applied.



M

Mem[brain] |'m ɛmbreɪn|

Filtering content through layers of the mind as a means to re-morph substance.

Accessing alternative arteries through intangible membranes. Memory stores fundamentals and x-rays out the unnecessary. Thin margins connect and edit the flow of in[form]ation. Permeating selectively among influencing factors of the mind and body, it refers to the brain's unsaturated flexibility.

Möbius |'moʊ biəs|

The Möbius strip is a band with only one boundary. It encourages continuity of paradoxes. It is mathematically non-orientable, however giving the

N

Network |'n ɛtwɜːk|

Enhancing simultaneous connectivity within an infinite multi-disciplinary circuit.

Constructing a wired grid system of co-existing nodes and pathways to calculate potential links and develop algorithms for progress. Networks measure algebraic equations to combine and resolve pending solutions. Endlessly spiralling between neighbouring galaxies.

O

Order |'ɔːd ə|

A value of the era of post-chaos. A quiet way to transmit the iconoclasm into the dismantled reality that belongs to introverts. A state-of-the-art madness

achieved through logic and discipline. A re-active pro-activeness, where contemplation comes before action, where best choice is a limited choice.

P

Pathway |'p ɑ:θweɪ|

Directional process for progress. The science of fashion is applied through a loop of thoughts and actions along which impulses a path towards evolution. End goals are sustained where process is pushed and preserved.

Pattern |'pat(ə)n|

The DNA patterns of design rely on mythology to moment relationships, stimulated through rituals of scientific storytelling. Mankind's ability to visualise patterns is as supportive as it is beautifully confusing. Recognising patterns allows us to process large quantities of information at once, shifting our

perception on design and its symbiosis to the universe, becoming the key to self-exploration.

Pi |pɪ|

Abstraction and practicality, peripheral and central. Like human intuition, π is irrational, but when given context, has countless applications. It embraces complexity and infinity of solutions to the same complexity. A paradox on its own, pi is a modifier enclosed in a perfection of a circle.

Q

Quest |kwɛst|

Feeding the curious mind with blind knowledge discoveries becomes the daily quest of educational analysis. Seeking the unknown as a means to edit processed research. Investigating past, future and present within a sequence of ideas. Frequencies of the quest come in random order and result in unexpected algorithms.

R

Rhythm |'r ɪð(ə)m|

Rhythm is the organism of our brain and society. The particle between emotions versus action, sound... So small versus silence, freedom versus restrictions

holds the power in altering and controlling our state of consciousness. To recondition the current system is to implement an alternative meter. Impacting the frequency of our thoughts, movements and sensory perceptions with new rhythmic patterns.

RE |ri:, ri, r e|

Frequentative and intensive forces applied into a specific context a[re] human.

Being trapped in a loop of RE guides you to a state of freedom.

[RE]naissance

[RE]plica

[RE]petition

[RE]construction

[RE]spect

[RE]turn

[RE]prise

[RE]boot

[RE]morph

[RE]invent

[RE]fresh

S

Structure |'str ʌktʃə|

To create new relations and control in an increasingly chaotic environment, structure constructs order. Making sense of complexly simple patterns running through the cycles of chaos. Permitting designers to conceive shapes past the limits of Euclidean geometry, the quality of being organised moves in response to the evolution of technologies and materials. Finding deep appreciation for imperfection in perfect harmony as like in nature.

Substance |'s ʌbst(ə)ns|

Feeding the mass of matter with resourceful content. Sub[stance] holds itself within body and mind as well

as in relation to time and space. Fueling layers of

knowledge and providing essential foundations towards the building of structure. Pattern-drafting layers of fashion.

Symbol |'s ɪmb(ə)l|

As humans cross-culturally pollinate, differentiation through symbolic design will show anthropological signs of membership and identification. Using symbols to create an anatomical structure, designers experiment as fashion alchemists of the future, searching through shapes and signs to transform matter into meaning and vice versa. Guiding unexplored pathways of design education and technique experimentation.

T

Template |'t ɛmplɛt, -plɪt|

A new method for design. In template we use patterns for processes used as models for one-an[other]. It serves as a guide to describe function, from which form develops. Hyper-standardization leads to new innovation of self-similarity that can be magnified in scale, a zoom-in zoom-out effect, as in mathematically replicated but natural fractals. The tem[plate] serves as an armour protecting the somewhat predictable future of fashion. Design adapts its DNA as living cells do, driven by the laws of nature.

Time |taɪm|

Time is the paradoxical frequency embedded within the Mobius Bridge. It begins, it ends, it's real, it's an illusion. Navigating amongst body and space it designates things and processes like the horizontal X-axis. With no independent existence, it evokes dynamism looping amongst a static world. A mysterious flow lending the impression of living moment by moment, an extra dimension akin to space, analogous to its landscape.

U

Uncanny |ʌn'kani|

Singularity + Curiosity - Ordinary = [Spectre]um

V

Vision |'v ɪʒ(ə)n|

Vision is the art and science of seeing beyond borders, the bridge between reason and intuition, the spine of possible futures. Momenting what is subjective and metaphysical into the collective consciousness of the human mind. As a source of controlled madness, vision is the tool of the Zukunfftgeist. It is the visionary insight that gives the imaginary technique to design possibilities in undefined scale.

W

W(e)ave |w[e]ɪv|

Threading through time, body and mind, waves intertwine, tying loose ends into the Möbius Bridge. Weaving in and out of the fabric of fashion, unique patterns of knowledge emerge. Creative waves meddle in different frequencies, resulting in abstract yet practical pattern diagrams. Fabrics of the mind become the future of the fashion craft.

X

Xenolith |'z ɛnəlɪθ|

The strength of being xenophile. Derived of geological terms, it carries the out[side] within its intrusive igneous body. Un-influenced by its engulfed chamber, it maintains its identifiably different form and nature. An evolution from

the monolith, the xenolith is a pillar of all things foreign. The strength in keeping fashion [in]sane.

Y

Y-Axis |wɑɪ|

The vertical Y-axis. Embodying one of the most important visual properties, the

Y-axis determines the motion/process of our waves, mapping how high and low and fast and slow we

move. We derive many of our metaphors from the ideas of vertical direction; being up is good, being down is not. Fashion is to eliminate this fundamental difference and rethink the semantics of our highs and lows.

Z

Zeitgeist |'z aɪtʃaɪst|

A ghost that materialises in the moment of time. Responsible for the School of Now built on the fundamentals of humanity. Both momentary and timeless, the *geist* often comes unexpectedly but understandably. He is the god of history who guards the archive of today's.

References

- BBC Science. (n.d.). Vitruvian man. [Online] [Accessed 15th March 2015].
- Haverfield, F. (1913). Ancient Town Planning. . [Online] [Accessed 15th March 2015].
- Weisstein, E. W. (n.d.). Möbius Strip. [Online] [Accessed 15th March 2015].
- Starostin, E. L. & Van Der Heijden, G. H. M. (2007). The shape of a Möbius strip. [Online] [Accessed 15th March 2015].

Alyssa Choat

Fetishisation of the Image: the Ugly/Beautiful Paradigm

Australia
University Technology of Sydney

ABSTRACT

We occupy an era with an abundance of modes of communication and devices through which we communicate. Technology has allowed for the development of multiple screens through which images are perpetuated, copied, commodified and networked. Photocopiers, hand-held devices, computer screens and televisions have become the windows into and projections of the aesthetic world, providing perpetual information and imagery to the viewer. This advancement in information delivery has produced an information society, one in which there is more and more information and less and less meaning according to Baudrillard (1988). Baudrillard exclaims that we live in a world in which despite efforts to reinject meaning and content, meaning is lost faster than it can be rejected. The image itself has become the new reality; simulation and hyperreality are the new authentic so that 'real' is displaced by the virtual. This perversion of reality detaches the image from its context, ultimately objectifying the whole act of viewing, to the point where the gaze passes over a subject without seeing in it anything other than the objective subject. For representations of the body, this decontextualising of the image and projection of the body into virtual perpetual simulacra, disengages the body subject from a fixed contextual and experiential understanding. The sheer abundance of images and replications means that images of bodies are now speculative, fracturing meaning and read with the same objectifying gaze that is typical of viewing any other image of an object. The body is stripped of its fixed contextual and political situation, and the image is held up as a reality. We can now choose our own projection of ourselves through the internet; series of avatars and collections of photographs

become our own projection of self in the virtual. We make copies of ourselves and of others through photographs, perpetually transporting ourselves into the hyperreality of the virtual. While this is not a new or profound understanding it does offer some interesting provocations to aestheticism and the notion of the ugly in relation to the privileging of the image.

INTRODUCTION

This paper will examine ways in which photographic images of a subject essentially aestheticise the subject. It will consider the current cultural privileging of images over the sensory or contextual enquiry, and the ways in which this manifests across disciplines. Notions of spectacle images that displace the authentic self into aestheticism will be explored, and a grounding of paradigms of culture.

It is important to note that the term image is used in this paper to describe the photographic image rather than a perceived image or the act of looking upon a physical subject; it is the capturing of a subject by the photographic medium, replicating it and rendering it into a flat photograph. Contextually this takes place across all forms of photography, from a political art practice to the common 'selfie', with photographic images being abundant and now a personal and political practice.

The subject is that which is photographed, the object or body subject within the frame of the camera lens, rendered into a photograph. According to Neil Leach in *Anaesthetics of Architecture* (1999), photography has the ability to convince the onlooker of the legitimacy of the image as truth through the realism of the image produced. There is the perception that what is depicted is an authentic representation, when in

truth photographs are themselves as artificial as any other form of visual representation. Photographs are convincing as they say to the onlooker, this is exactly what existed physically, there is no interpretation needed to understand this image, you need only recognise it, and therefore it provokes a passive gaze. In terms of the gaze, the camera lens acts as a seeing eye to the world, recording it within the frame, and the completed photograph then requires a gaze in order for the 'seeing eye' of the camera lens to be complete. In relation to fashion, the convincing nature of photography has led to a privileging of the image over the sensory and a regarding of the image as the authentic.

AESTHETICISED THROUGH THE IMAGE

The binary notion of ugly and beautiful, while an often limiting and oppositional understanding of aestheticism, can be explored through many design disciplines, such as the architectural movement of Brutalism. An architectural style characterised by buildings that are often described in critique as imposing and insensitive living environments, however recent architectural commentary and photographic documentation, these brutalist structures have been described as displaying a sensitivity to materials, an exposure of the beauty of form. In the *Anaesthetics of Architecture*, Neil Leach (1999) hypothesises that the privileging of the image in architectural structures has led to poor understanding of the built environment, making social spaces into 'fetishised abstractions'. Objects, when documented in photographs are catapulted into the virtual world of representation and photography, are fetishised through aestheticism. This is also true for representations of dress and the body in imagery, where the experiential and social provocations of the form of garments on the body subject are impoverished in favour of the virtual reality of the image but at a cost to the lived experience and to cultural provocations.

With this understanding it is interesting to compare the differences between the sensory in relation to value and the aestheticisation of the fashion image. As with the critique of aestheticism of Brutalism through image making, fetishisation of the image is

manifested in the spacial interaction with a physical person, in comparison to the rendering of the body within a fashion photograph; two very different acts of seeing and interacting with aesthetics and notions of desire and beauty.

An investigation of this comparison is evidenced in the contrast between the experience of meeting a model, a physical body that is constantly rendered as photographic images, and viewing editorial fashion photographs of the model as is outlined in Joanne Entwistle's (2000) *The Aesthetic Economy: The production of value in the field of fashion modeling*. A meeting with an editorial model is discussed; the model, described by the agent as a 'beauty', is perceived to be quite awkward and unattractive, yet upon viewing the photographic portfolio of editorial work, the 'beauty' of the model is revealed in the photograph. The immediate aestheticisation of the body through fashion photography is in stark contrast to meeting the model in person. This encompasses through anecdote the very distinct differences between viewing an image versus interacting with a person in relation to aesthetics.

This has interesting implications for context and image making. The experience of an object, a person, a space has a very specific and singular context, the situation in which it is located; however, once the subject is represented within a photograph, contexts for viewing are opened up infinitely as each gaze on the image has its own specific context. (1972) In the process of image making – photographing – the original subject's meaning is fractured into multiple codes of expression, and infinite readings of the original subject then follow. In relation to the above example, the viewing of the fashion photographs of the model allow for a renewed outlook on the model. Regarding fashion, aesthetics are a series of experiential and contextual tropes that collide in the sensory rather than an ethereal and unhinged notion of beauty that is expressed through an image, as commonly argued.

It then follows that the representation of bodies,

spaces and objects in photographs has the ability to aestheticise the lived experience; they reflect on the physical and spatial world. Aestheticism is experienced not through corporeal interaction or experience but through viewing the image, through the photographic lens. There is an interaction between the image and the physical that is represented in this encounter, a collision of life and the spectacle of image. Images have the ability to imbue spatial interactions with bodies and architectural spaces with an aestheticised view. The categories for this aestheticisation regarding the image relate directly to cultural paradigms of what is deemed attractive and what is repulsive, in essence the ugly and the beautiful.

FASHION AND THE UGLY BEAUTIFUL PARADIGM

In relation to fashion, the ugly versus beautiful paradigm is a shifting one. The social constructive theory of aesthetics and the definitions of words such as 'beauty' and 'ugly', are shifting and are thus a means of social control: beauty is to be desired and ugly is to be rejected, upholding the dominant values of a culture and maintaining order. The theoretical position of these aesthetic terms remain elusive and ambiguous as these terms are fluid and remain not wholly within the object or the mind, nor are they a definitive aesthetic judgement. It is, however, a definitive tool through which we are able to organise the world, with particular manifestations throughout history.

Many fashion and art theorists have speculated upon the changing notions of ugliness within visual subjects. Pop and Wiendrich (2014) describe modernism as the key to any analysis of ugliness. They argue the visceral and the abject are embodied within the 'ugly' subject, while beauty is developed through performance. Other theoretical depictions of the 'ugly' paradigm are discussed within the notion of the Abject according to Julia Kristeva's *Powers of Horror* (1982) and summarised within Dani Cavallaro's *Critical and Cultural Theory* (2007). Abjection is defined within these texts as the ridding of defilement elements and the shedding of all associations with death and

decay in order to maintain the boundaries of our self-containedness, our rejection of the Other. The abject 'ugly,' is a repulsion at the depiction of these materials and denouncement of them as ugly that allow us to distance ourselves from them. The definitive term ugly allows for this denouncement of that which threatens the boundaries of ourselves.

While historically fashion has been based around seduction of the fashion object, it is now also about the seduction of the 'ugly' as the boundaries of aesthetic definition intertwine and overlap. The fashion practice is now a boundless play with aestheticism, with objects no longer adhering to categories of beauty and ugliness. Elizabeth Wilson explains in *Adorned in Dreams, Fashion and Modernity* (1985) the aesthetic of the ugly in fashion is in constant flux as trends in garments and bodies come into popularity. What was once abhorred is renewed as trends come and go on the catwalk.

This can partially be attributed to the postmodernist challenge to conventional categories of aesthetic definition. Designers now develop their work drawing on artistic complexities of aestheticism that destabilise epistemic certainty are definitions become boundless and ever-reaching in relation to the fashion subject. The ugly/beautiful paradigm in image making and fashion design's representation of the body is not binary but a fluid mode or expression of aestheticism in current visual culture colliding at the contextual and representational.

Garments and body representations in the photographic image can no longer be defined within a binary state of ugliness versus beauty but rather are themselves projected into the realm in which all is political. Fashion consumption is not solely a perspective of the pursuit of the beautiful object and the rejection of the non-beautiful or the ugly. It is a complex ideological system allowing consumers to engage with contradictory and juxtaposing aesthetic meanings in relation to dress and representation, rather than presenting a unified, hegemonic viewpoint of fashion and desire. Fashion representations create

divergent connotations that reflect a dialogue between a multitude of cultural meanings that are associated with the fashion phenomena. This complex system of representation allows for conventional social categories to be contested, boundaries of aesthetic definition become permeable and the ugly beautiful paradigm therefore is erased, as fashion designers are drawing from infinite codes and meanings in which all signs, symbols and constructed narratives on the body are upheld. As Baudrillard (1992) announces in *Transpolitics, Transsexuality, Transaesthetics* that when everything becomes aesthetic, nothing is either beautiful or ugly any longer.

CONSUMPTION AND IMAGERY

Fashion imagery has long been considered the currency on which fashion is projected, consumed and commodified. The aestheticisation of the fashion garment or fashion object and the rendering of this into an economy of images is an increasing practice. The increasing interaction between audiences and fashion photographs and digital imagery means that viewers require multiple simulations across many different platforms. The historical progression of fashion from the tangible to the virtual and the capacity of readers to engage with photographic fashion imagery as ever increasing across both static and moving representations of fashioned bodies, there is a progression of the fashion product from garment into the image. We now collect and categorise these images through multiple devices, commodifying the fashion subject through spectacle of the image within virtual spaces. The privileging of the fashion image perpetuates a culture of copies. Fashion is now both a tangible product to be touched, lived in and, more importantly, a virtual image, an aestheticised spectacle for consumption.

This rapid progression into virtual has interesting implications for the consumption of in relation to the gaze. The abundance of images available and ease of access means that the nature of the gaze is progressively passive. Philosopher Guy Debord has written about the spectacle and the ways in which the dominance of the aestheticised or spectacle imagery

results in a lack of critical thought and reflection. It is a degradation in knowledge that prevents individuals from understanding spectacle images as moments in history that can be revolted against as society progresses to valuing appearing over having.

DISENGAGEMENT FROM THE LIVED EXPERIENCE

Guy Debord demonises the aestheticised image as the 'inversion of life, the autonomous movement of the non-living' (1983, p.2). Images detached from every aspect of life merge into a common stream, and the former unity of life is lost as representational images have the power to fracture meaning infinitely. In current culture there is a constant stream of images that fracture the lived experience into spectacle, a saturation of the spectacle of imagery of bodies, across multiple platforms and mediums that we interact with often simultaneously, passively and with an objectifying gaze.

For fashion, the dominance of imagery requires new interaction with other mediums in order to provoke the viewer into acknowledging their own gaze on the image. It is through the deliberate construction of situations that bring a progressive re-ordering of life, politics and art that this disruption can occur.

One such project that explores this notion of the happening is the *Reveal/Conceal 2014*, performance that elaborated on concealment and the gaze. Digitally printed leather masks and a series of fashion garments were produced for the purpose of performance apart from the dominant presentation of fashion on the catwalk. The audience confronted with a blinded, masked and costumed performer who was lead around the space by a string set up between supports.



Revelation Through Concealment Opening Night Performance Look 1, NG Gallery, Carlton St Space (2014) Alyssa Choat



Revelation Through Concealment Opening Night Performance Look 3: Gaze Between Spectator and Subject. (2014) Alyssa Choat

This performance enabled the immediacy of the dissonance and uncomfortableness of the physical encounter with a masked body to elaborate on notions of the gaze. The conspicuousness of the act of gazing becomes apparent through the performance in order to 'lead the spectator back to his specific mode of existence' (2000, p.8 par. 1). Hybrid disciplines of fashion, art and performance open up fashion enquiries into sensory spaces, and attempt to destabilise consumption of the body in visual practices.



Revelation Through Concealment Opening Night Performance Look 3, (2014) Alyssa Choat

A constructed situation or 'happening', through experience and presence, brings the sensory experience back to the forefront of reality and denounces the image as the spectacle.

One such artist whose practice elaborates on the parameters of the corporeal is Vanessa Beecroft in her collaborative performances with fashion designers. Beecroft's practice began with the need to develop

work apart from the representational. Art critic, David Hickey, describes the development of Beecroft's practice:

"She is not particularly interested in marks. To see what they portray, we must somehow read them out of our knowledge, expectation and desire,... [rather something] richer and more opaque than that. Some equivalent to the model's physical immediacy... simulacrum of the draftsman's gaze." (Hickey, 2000, p.1)

Hickey expresses Beecroft's work as born from a desire to get around the parameters of our own situational reading of an image and display instead the singular notion of immediacy and physicality in her work. The gaze on a naked body, as in Beecroft's work, within the spectacle of representation, the image, is a very different and much more comfortable and common experience while the confrontation with this body in the flesh is an entirely different experience altogether. This confrontation is met with a gaze that is immersed in the experience of viewing within a singular context, while the image fractures meaning (1972) as each gaze has its own context. The encounter with body subject that is animated, exposed and uncovered in Beecroft's work denounces the spectacle through the abject, exposing all that we wish to hide. Beecroft's female performers are described as demonstrating the confrontation of that which spectators are accustomed to acknowledging in representation, 'undeniable products of the photographic imagination' (2000 para4). Beecroft's performers are both inaccessible to our understandings in their presence while wholly available to our gaze. Evidenced in Beecroft's many collaborations with fashion, such as Louis Vuitton and Helmut Lang, designers are engaging with more corporeal and experiential parameters of fashion practice to distance from the spectacle and engage with the spectator apart from the representational and into a more corporeal and performative space. Both *Reveal/Conceal* and the recent performance practice of Beecroft offer an elaboration on the gaze, through concealment and exposure of the body creating an immersive experience for the viewer that is immediate and unaestheticised through images. Both

practices create an environment in which the viewer is confronted with the abject and uncomfortableness of the naked or masked body and this self-consciousness enables the awakening of the gaze. The difficulty comes when such performance pieces must be documented and rendered into film and imagery. Revolution against the spectacle can be achieved, through the creation of a particular environment that promotes conspicuous awareness of existence as a lived sensory experience. There are emerging codes apart from the representational and the fashion image that decentralise the fashion subject in favour of an autonomous object or happening, the sensory becoming subject.

References

- Baudrillard, J. 1992. 'Transpolitics, Transsexuality, Transaesthetics'. Chapoulka, W & Stearns, W (eds) *The Disappearance of Art and Politics*, pp. 9-26. Macmillan, London.
- Berger, J. 1972. *Ways of Seeing*. British Broadcasting Corporation and Penguin Books, London.
- Cavallaro, D. 2006. *Critical and Cultural Theory*. The Athalone Press, London.
- Debord, G. 1983. *Society of the Spectacle*. Black and Red Press, Detroit, MI.
- Entwistle, J. 2002. 'The Aesthetic Economy: The production of value in the field of fashion modelling'. *Journal of Consumer Culture*, pp. 317-339.
- Entwistle, J. 2000. *The Fashioned Body: Fashion, Dress, and Modern Social Theory*. Polity Press, Malden, MA.
- Entwistle, E. & Wilson, E. 2001. *Body Dressing (Dress, Body, Culture)*. Berg, London.
- Evans, C. 2007. *Fashion at the Edge: Spectacle, Modernity and Deathliness*. Library of Congress Cataloging-in-Publication Data, Italy.
- Evans, C. 2008. *Shop of Images and Signs*. Ed. Shinkie, E (eds). 'Fashion as Photograph: Viewing and Reviewing Images of Fashion' I.B Taurus & Co Ltd, London. pp 17-29.
- Evans, C. 2000. 'Yesterday's Emblems and Tomorrow's Commodities: The Return of the Repressed in Fashion Imagery Today'. In S. Bruzzi & P. Gibson (eds), *Fashion Culture: Theories, Explanations and Analysis*, pp. 93-113. Routledge, Oxford. Chapter 6.
- Hickey H. 2000. *Vanessa Beecroft's Painted Ladies*, Hatje Cantz, Berlin.
- Leach, N. 1999. *The Anaesthetics of Architecture*. The MIT Press,

Cambridge, MA

Leach, N. 2006. *Camouflage*. MIT Press, Massachusetts.

Pop, A & Wiendrich, M. 2014. *Ugliness: The Non-Beautiful in Art and Theory*. I.B Taurus & Co Ltd, London.

Satre, JP. 1969. *Being and Nothingness*. Methuen, London.

Shildrick, M. 2002. *Embodying the Monster: Encounters with the Vulnerable Self*, Sage, London.

Thompson, C. & Haytko, D. 1997. 'Consumers' Uses of Fashion Discourses and the Appropriation of Countervailing Cultural Meanings'. *Journal of Consumer Research*, Vol. 24, No. 1. pp. 15-42.

Tseelon, E. 2001. *Masquerade and Identities: Essays on Gender, Sexuality and Marginality*, Routledge London.

Vergine, L. 2000. *Body Art and Performance*. Skira Editore, Milan.

Weiss, G. 1999. *Body Images: Embodiment as Intercorporeality*. Routledge, Great Britain.

Binwant Kaur

3DPrinting in Fashion: from Futuristic Conceit to Pragmatic Realization

India
NIFT

ABSTRACT

3D Printing, an additive manufacturing technology offers an alternate form of production. Goods are built layer-by-layer adding fine layers of material in a sequential form.

This technology has traversed a path of hype and publicity for almost three decades and has found applications in wide variety of industries such as Aerospace, Automotive and Medical to name a few. The paper explores how this innovative technology where the design is based on computation involving digital files has impacted the production of goods in Fashion Industry. We walk the journey of crests and troughs of 3D printing and examine how it seeks to revolutionize creativity in fashion offering new medium of aesthetics. The fact that complete ensembles and accessories created on 3D printers are prominently visible in the Fashion Weeks at the fashion hubs, indicates the inroads this technology has made in this area. There are designers collaborating with technologists to experiment its capabilities. Development in communication technologies has also helped in furthering this partnership leveraging creativity and new designs. The paper elaborates on 3D printing as an effective alternative tool for manufacturing having potentials to support personalized designs based on individual tastes. 3D technology is allowing user-centric innovations instead of remaining manufacturer-centric thereby democratizing innovation.

In addition to highlighting the inroads made by this groundbreaking technology we also examine the challenges that it faces in its present form that inhibit its complete acceptability by the mainstream.

With the main focus on on-demand printing, the paper addresses following questions while understanding the journey traversed by this unique digital fabrication technique:

- What is the level of acceptability of this technology in its current form in the world of Fashion?
- In what ways does the technology support customization in this ever changing field of fashion ruled by user demands?
- What are the concerns and constraints that inhibit the adoption of this technology in apparel Industry?

While the technology offers a medium to experiment with complex shapes and designs that cannot be achieved by traditional modes there is a lot that is desired still. To increase the wearability index of the product and to make it more functional a breakthrough is required in various aspects of technology. It may be in the form of variety of materials that can be extruded by the nozzle or the print head, options of multi-material printing or increased resolution. All this and more could be achieved only if there is an involvement of in-house professionals from the Fashion Industry who would come forward to embrace this alternate form of manufacturing pushing the boundaries of this technology to produce unique and complex Fashion Products creating the MOMENT, making the disruptive technology viable in all spheres of Fashion Industry and not for prototyping alone.

INTRODUCTION

Printing is an expression that was born out of man's yearning for immortality, to leave "footprints in the sands of time". From Mesopotamian seals 5000 years ago to woodcuts, engravings and other replication techniques we have come a long way to the present

and evolving technology of 3D printing. An addition of the third dimension has given us an option for alternate approach to manufacturing tangible objects rather than just printing across a single plane.

Since fabrication involves adding material in sequential layers, one layer at a time, 3D printing is addressed as “Additive Manufacturing”. Layers can be added prominently in two ways, either by spraying or extruding material through a nozzle or by solidifying liquid or melted powdered material by tracing laser beams. This gives rise to two methods of printing, one of them being “Fused Decomposition Modelling” (FDM) that involves extruding melted material from the print head or nozzle. I have had the opportunity to print with FDM printers mostly with different forms of plastics. Some of these FDM printers have achieved a resolution as high as 16 microns (Lipson & Kurman, 2013) encouraging production of marketable goods and not prototypes alone. This technique is mostly used in the consumer desktop 3D printers in schools, offices or at home. Alternately, layers are added by binding the raw material with the help of laser beam or adhesive. Stereo lithography (SL) and Laser Sintering (LS) techniques respectively are two methods that are used to fuse liquid polymers and powdered materials in layers using laser beam.

With application of 3D printing causing serious disruption in diverse fields, translation of ideas into realistic three dimensional analogue forms is not anymore a thought from a distant future. General Electronics Co. has been working with the technology for last five years in Aviation and Oil and Gas to produce complex machine parts that are not only light weight but also more durable. Aircraft manufacturers such as Boeing and Airbus are also utilizing the increasing capability of 3D printing. Airbus is using 1000 3D printed parts in its A350 XWB aircraft (Krassenstein, 2015). This alternate form of manufacturing involves fairly simple processes to translating ideas to digitized forms. It starts with design conceptualized using a 3D modelling tool or simply capturing optical scans of existing physical forms using 3D scanners. The design data thus produced is in the form of a STL file that is

fed to the printer to carry out necessary preparations towards instructions for mechanical movement and path of the print head to finally produce a real object. Healthcare is another sector which has experienced success with the technology be it for fabrication of crowns and bridges or prosthetic limbs. Almost 90% of the hearing aids that are produced today are using 3D printing technology. My inherent interest in fashion and its interface with technology initiated my quest to understand the inroads this evolving technology has made towards creation of apparel and fashion accessories.

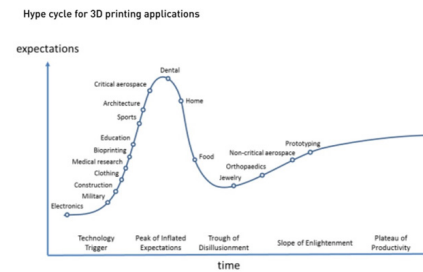


Fig.1, Source: IDTechEx Report

Figure 1 as in IDTechEx Report on 3D printing with its current status (Applications of 3D Printing 2014-2024) illustrates the expectations from this emerging technology in diverse fields. In the path traversed by the trajectory we observe that there has been a growing interest in the space concerning clothing and jewellery. Impact of 3D technology is evident from its adoption by big names such as Amazon, Autodesk and Nike. Introduction of 3D printed range of products with Jewellery as part of 200 print-on-demand items, mark its adoption by the online retailer Amazon (Clark 2014). Launch of 3D modelling software, Autodesk 123D by the CAD solution provider and 3D printed cleats in football shoes from Nike illustrates the conscious steps taken by large enterprises to embrace the technology and their willingness to take calculated risks riding on both the possibilities and increasing popularity of the technology.

Wohlers Associates Inc. who have been tracing the

growth of 3d printing technology over last 25 years, published trends and analysis in annual Wohlers Report for Additive Manufacturing which also reflect the fast pace at which the growth is taking place in this direction. According to its reporting the 3D printing global market has progressed exponentially. In 2013 Global market achieved turnover of \$ 3 B which was in fact a forecast for 2016.

Year	2010	2011	2012	2013
Growth rate	24.1 %	29.4 %	28.6 %	34.9%
Global Market	\$ 1.32 B	\$ 1.71 B	\$ 2.20 B	\$ 3.30 B

According to Wohlers, the recent hype and publicity of the expiry of patents held by some of the companies have brought low cost FDM printers accessible to the mainstream consumers. According to the report one of the major reasons for the growth of global market in 3D printing is due to the increase in sales of sub \$5000 level personal 3D Printers (3ders.org - Wohlers Report 2014). Affordable printers have given rise to the ‘maker’ community and hobbyists who are constantly experimenting with the open source thereby pushing the boundaries of this technology to new avenues of product domains. In the field of fashion, the designers are boldly innovating to printing novel pieces of jewellery, head-gears (Firth, June 2014), eyewear (Shupnick, 2014), belts, footwear (Sergio D. Jul/Aug2014) and even complete ensembles or merely buttons, trims and accessories to go with. Neri Oxman, Iris Van Herpen, Bradley Rothenberg, Francis Bitonti are some of the designers who have contributed extensively with their path breaking work in fashion, utilising the technology that the ordinary manufacturing techniques could not have achieved.

Iris van Herpen, a creative Dutch fashion designer relates to the digital world effortlessly and uses 3D Printing techniques to produce futuristic couture collections that are showcased during the Fashion Weeks. Her collection “Crystallization” in July 2010 marked a milestone in the history of 3D printing as one of the garment was entirely made with this technology (WSA: Performance & Sports Materials. Jan/Feb2014).

Over the last few years she has incorporated unique printed structures in the form of laces, shoes or other accessories combining the traditional materials and techniques with contemporary ones.

For broader acceptability of this transitional technology, “comfort” and “wearability” would be the key driving force. Jessica Rosenkrantz and Jesse Louis-Rosenberg from the, “Nervous System” have honed the technology into designing, a wearable dress that is flexible and moves effortlessly with the body contours thereby classifying it as a ready-to-wear ensemble. Another significant milestone achieved in the process has been the ability to create pre-assembled piece in folds on the small build area of the 3D printer thus requiring almost no post production interventions of putting printed components together. All this is being achieved by the designers using mathematical computational, geometry and algorithms.



3D Printed Dress on Display at MoMA, NY. 1

In Feb 2015 I had an opportunity of attending an Exhibition “This is for Everyone: Design Experiments for the Common Good” at the Museum of Modern Art (MoMA), New York where this Kinematic Dress was on display. This black nylon intricately patterned outfit fabricated with laser sintering 3D printing methodology is now a part of MoMA’s permanent collection and thereby a harbinger of things to come. Its fabric is a mesh of triangular tessellations of

varying sizes and hangs aesthetically with colourless strings, thereby creating an illusion of being draped on the imaginary body form.

In the same genre, another abundantly functional piece of clothing that is endorsed by 3D printing professionals is the N12 bikini which is a first ready-to-wear clothing that was completely 3D-printed without any sewing operations (Sung, 2014).

For this technology to be truly disruptive it is important to understand the departure it offers from conventional processes for designing, manufacturing and retailing. Designers' interface with this technology is revolutionary, to put it mildly. Their artwork on the virtual screen requires skills to visualize a finished product in the material they plan to use. Process of designing in digital medium may pose a disconnect for some but with training and design iterations most will improve the visualization skills enormously over time. According to Stephen Hoskins, who is an expert in the technology, unless you can think in 3D you cannot visualize in three dimension (Hoskins, 2014). Developments in design tools and computer simulation are closing the gap between virtual designs and their physical representations. In addition to the design process it is imperative for a designer to be aware of the material and manufacturing processes. While designing a piece of jewellery, the designer must think beyond the shape of the finished piece. For apparel, the traditional tools and techniques of pattern making, cutting and stitching are replaced by visualization and computational algorithms. The focus also shifts to the resolution of the printer, materials used for printing and the size and shape of tessellations repeated to develop the fabric structure. Collaboration is an important aspect of a successful 3D printed innovative project. Recent developments in this field demonstrate that some of the successful designs in 3D printing in Fashion have involved expertise of people from entirely different disciplines. People with same vision but different expertise are coming together. In its present form, the technology requires collaboration of experts who are skilled in 3D modelling, designing, printing and engineering

for producing a well thought of fashion product. For instance, for developing "Crystallization" collection Iris van Herpen collaborated with architect Daniel Widrig and printing services, MGX by Materialise, thereby marking the convergence of experts from fine arts, science and technology a success. She collaborated with "United Nude" to launch her line of 3D printed shoes in 2010. On similar lines, retail brand "Target" has partnered with printing services, "Shapeways" for 3D printed jewellery. Among significant cross-discipline collaborations yielding rare synergy has been between architect Francis Bitonti and costume designer Michael Schmidt where they together created exquisite dress (Abraham, 2014).

To reiterate, for three dimensional printing technology to make definitive inroads in fashion, the technology needs to progress in the direction that significantly enhances product attributes such as increased wearability index achieved from material flexibility and its compatibility with body movement and options for fit, range of colours, suitable texture, durability, safety and price sustainability. Technological innovations are taking place at a remarkable pace on these fronts to match each of these characteristics with the traditional fabric properties and material types. Among the woven, non-woven and knitted fabrics there has been significant progress that is being made to produce structures similar to the loops in a knitted fabric and non-woven material (Indian Textile Journal, Feb. 2014). Technology is also evolving to enhance the drapeability of the fabric by increasing the resolution of the printer. Seminal technological breakthroughs often come in spurts rather than a linear curve. Accordingly, efforts are being made in back-room studios and large design houses alike to align emerging technology to not only achieve parity with features that are the mainstay in traditional mode, but to take them forward to hitherto uncharted territories. In terms of application of 3D Printing in fashion, its enormous potential is evident in two distinct areas. First and foremost, it provides a medium to create complex structures that may not be possible through conventional means. Technology allows production of intricate interconnected parts and inside hollow

without manual intervention. It is path-breaking to create a singular product in which all its components are pre-assembled at the time of printing. Since the design data is managed digitally and the machine operates on instructions, complexity in design comes at no extra cost. Therefore, unlike traditional modes of production, complexity of design can be attempted only at a marginal cost of additional raw material and nothing else. Designers and producers can attempt creating avant-garde products unmindful of key limitation factor of economies of scale that goes with traditional mode of production where the cost varies with the size of order. Finally, not only does 3D printing save time and effort in fabricating intricate pieces but it also accomplishes it without imperfections.

PERSONALIZATION

Fashion is a way of life and in more ways than one is an expression of an individual's style. Thus, incorporating individual preference is a unique demand that a client makes in fashion industry. However, we know that customization is not feasible in a mass production scenario due to economies of scale which translates into standardized, one size-fit-all strategy to keep the cost down. 3D printing, on the other hand has a potential to provide an alternative form of production, overcoming the dichotomy between mass production and personalization by offering customer participation in design, manufacturing and retail process. Modifications in the design according to customer preferences can be achieved without major additional costs.

Historically, custom-made clothing and accessories were the order of the day a century back till the World Wars brought in the concept of mass production. This industrial revolution brought an end to customer engagement and participation in the design process. It continued to get the back seat as customers align their preferences according to the available silhouette, colour, size and material in ready-made products. In the process, individual tastes and preferences are sacrificed. Now, once again, the technological innovations in 3D Printing promises to renew the communication between the designer and the customers (Yap, Y.L. & Yeong, W.Y. 2014). An example

in this area is "SOLS", a company offering 3D printed insoles customized to fit the individual's foot, at an affordable price. Their business model is based on providing a customized mass manufacturing solution enabled by 3D printing techniques. The product remains the same but is modified and is adapted to customer's demand. Like footwear, lingerie is another specialised market that requires customization. Taking advantage of this technology offering options of customer engagement, "Continuum Fashion" has launched N12-3D printing bikinis.

Application of 3D printing in jewellery has been around for more than a decade now. Initially it was used only to develop prototypes. Now there are a lot of online start-ups that are using this technology for production of actual customized pieces of jewellery. French jewellery startup jweel.com is making personalized 3D printed pieces of jewellery in the form of named rings, message or customized pendants that are hand finished in Belgium at i-Materialise making their designs accessible to the entire online community through their website (Claire, 2013).

The design modifications are done through specialised, playful and intuitive apps available on the web. For instance "Cell Cycle", a web-based design app is offered by "Nervous system" that can be used by the customer for making personalized 3D printed jewellery. The company also offers the app "Kinematic Clothing" to customise the Kinematics Dress thus giving the customers freedom to change the size, tessellations and colour according to their individual preferences. The enterprise, bowanddraped.com offers choice of customised 3D printed belts and buckles to go with the dress sold on their site (Abraham, 2013).

3D customization has taken the technology to another level. French Retail chain, Auchan is offering in-store software facility, Twikit, that can be used by the customer to personalize the products such as jewellery according to their tastes. The product so designed is printed by i-Materialize through forward integration thereby providing a symbiotic bonding between commercial enterprises. To sum up, specialised niche

businesses such as Jewellery, footwear and lingerie are trying to take benefits from the technology which promises to favour personalization in a big way. This could be one of the main drivers of the technology in Fashion. In future we can hope for 3D printable design templates bought online that may be used as it is or may be tweaked to suit our personal needs.

Technology is enabling printing of complex structures in higher resolution with wide variety of materials especially metals such as gold, silver, bronze etc. Recent experiments on multi-material printing have been successful. (Stratasys Staff, 2015) To top it all, it has potential to be disruptive in Fashion with increasing mainstream acceptability as it supports on-demand custom printing. Though the technology has a short build time, does not involve expensive tools and can produce complex shapes quickly, there are challenges.

CHALLENGES

For 3D printing to get a wider public acceptance and be disruptive in the true sense, it is desirable to be able to print with innovative materials having favourable physical properties in terms of color, strength, flexibility and stability at varying temperatures while it is extruded from the print head or solidified with laser beam. Though we have achieved freedom to print with materials such as plastics, nylon, metals, ceramics, wood, paper etc. materials are still a big barrier for producing more realistic 3D printed garments. Most of the printing of apparel so far has been achieved with materials such as nylon or plastics resulting in a product mostly having a synthetic look. Another area that is still developing is printing with multiple materials simultaneously that will open up innumerable design possibilities. Objet, a company in Israeli, also a pioneer in material exploration in multi-material printing (Lipson, 2013) is engaged with serious experimentation of mixing materials to get whole range of composite printable materials having different properties. Apart from limited options of resins there are issues related to achieving high resolution in 3D printing, however, increase in resolution ensures finer finishes. Recent participation

in the International Conference and Exhibition "Inside 3D Printing" at New York in April 2015 gave an opportunity to see some of the jewellery, footwear and apparel products developed by designers using the technology. One realises that the technology is still at an embryonic stage and there is a long way to go before it disrupts the conventional mode of manufacturing. Since we cannot achieve high resolution using low cost and lower-end machines the technology is still only used to produce castable wax moulds in the Jewellery Industry instead of directly manufacturing actual finished pieces even though printing with metals is possible today. The 3D printed ensembles and the accessories designed by the designers on display during the Fashion Show at the event also reflected the evolving stages of interface of Fashion with 3D printing technology. Among other skills required for a designer expertise in coding and visualization are highly desirable while designing from the scratch. Another rationale for slow acceptability of this technology by the mainstream is that it is cost prohibitive. A single piece of 3D printed Kinematics Dress produced by 3D printing Laser Sintering technology costs more than \$3000.

Even though the technological innovations in 3D printers is advancing exponentially, their growth in specific areas will be dependent upon the enthusiasm with which the end-user industry embraces this technology. We are likely to see higher growth and application of 3D printing in industries such as Aerospace, Automobiles and Healthcare which have dedicated technology professionals working at the cutting edge level. For 3D printing to realise its true potential in Fashion Industry, the Industry's own professionals must show the same enthusiasm in tweaking the 3D printing both at hardware and software level to reflect the needs of the Fashion Industry. However, in the current scenario the pool of professionals in Fashion Industry who are working in the field of 3D printing are not large enough to allow it to get to the tipping point from where exponential growth can take off. This pool of professionals needs to expand so that the Industry can reap the dividends of this still nascent technology. Looking at

the limitations one realises that the climb is still in the uphill position as far as 3D is concerned. In this age of enquiry there is bound to be experimentation in development of new materials and methods around 3D technology that would reduce environmental distress that contributes to global warming. At some point there will be a convergence of ethics with aesthetics. To a perceptive mind, things are looking up to endless possibilities. As Bill Gates has observed : "We always overestimate the change that will occur in the next two years and underestimate the change that will occur in the next ten years." So while 2017 may or may not be a watershed year, 2025 will certainly be a different era, possibly beating our best estimation on where 3D printing will take the Fashion Industry.

It forces us to think, will the technology be used by the enthusiasts for printing better versions of existing products or for making newer, unique and hybrid products those that cannot be created by conventional means thus creating those special MOMENTS in Fashion Industry?

References

Applications of 3D Printing 2014-2024: Forecasts, Markets, Players: IDTechEx. 2015. Applications of 3D Printing 2014-2024: Forecasts, Markets, Players: IDTechEx. [ONLINE] Available at: <http://www.idtechex.com/research/reports/applications-of-3d-printing-2014-2024-forecasts-markets-players-000385.asp>. [Accessed 12 March 2015].

CLARK EVAN , 2014. Amazon Adds 3-D Marketplace. WWD: Women's Wear Daily. , Vol. 208 Issue 20, p2-1. 1p.

3ders.org - Wohlers Report 2014 uncovers annual growth of 34.9% for 3D Printing, highest in 17 years | 3D Printer News & 3D Printing News. 2015. 3ders.org - Wohlers Report 2014 uncovers annual growth of 34.9% for 3D Printing, highest in 17 years | 3D Printer News & 3D Printing News. [ONLINE] Available at: <http://www.3ders.org/articles/20140503-wohlers-report-2014-uncovers-annual-growth-for-3d-printing-highest.html>. [Accessed 12 March 2015].

Lipson, Hod & Kurman, Melba, 2013. Fabricated: The New World of 3D Printing. 1 Edition. Wiley.

Steve Hoskins, 2014. 3D Printing for Artists, Designers and Makers: Technology Crossing Art and Industry. Edition. Bloomsbury Visual Arts.

Haute Couture | Iris van Herpen. [ONLINE] Available at: <http://www.irisvanherpen.com/haute-couture#crystallization>. [Accessed 14 March 2015].

Sung, M. W. (2014) 3D printing for textiles: Ready for prime time?. Textile Asia, Vol. 45 Issue 1, p3-3. 1p.

Sergio D. Jul/Aug2014 Advances in 3D printing. World Footwear, Vol. 28 Issue 4, p16-21. 4p. [Accessed 14 March 2015]. [Accessed 5 January 2015].

Young V. M. (2013) Bow & Drape Offers 3-D Printed Hardware. WWD: Women's Wear Daily. 9/20/2013 , Vol. 206 Issue 60, p17-1. 1p.

Abraham, R. (2014) The Extra Dimension. Wearables. Oct2014, Vol. 18 Issue 9, p37-37. 1p.

Claire B. (2013) 3D printing will infiltrate fashion through streetwear, not haute couture. 5 June 2013 . [ONLINE] Available at: <http://www.dezeen.com/2013/06/05/3d-printing-fashion-print-shift/>. [Accessed 14 March 15].

Shupnick, M. (Nov.2014). Did you know that eyewear frames are one of the best examples of digital technology in a fashion world? Vision Monday. 11/17/2014 , Supplement Dynamically Digital Eyewear, p11-11. 1/4p.

Stratasys Staff. (2015). Intricate Italian Fashion Pieces Designed and Produced in Hours With Stratasys Color Multi-material 3D Printing, 4 Mar. 2015. [ONLINE] Available at: <http://blog.stratasys.com/2015/03/04/3d-printed-italian-fashion/>. [Accessed 10 March 15].

Claire, (2013). How to choose your custom charms. [ONLINE] Available at: <https://www.jweel.com/en/blog/p/2015/how-to-choose-your-custom-charms/>. [Accessed 14 March 15].

Fabrics: The next step in 3D printing? WSA: Performance & Sports Materials. Jan/Feb2014, Vol. 20 Issue 1, p10-13. 4p.

Yap, Y.L. & Yeong, W.Y. (2014). Additive manufacture of fashion and jewellery products: a mini review [Abstract]. Virtual & Physical Prototyping. Jul2014, Vol. 9 Issue 3, p195-201. 7p.

Firth, E. (2014). Boffin tops. Financial Times. 14 June 2014. Gale Power Search. Web. [Accessed 16 December 14].

3D printing creates disposable nonwovens. Indian Textile Journal. Feb2014, Vol. 124 Issue 5, p101-101. 1/3p.

Krassenstein, E. SOLS: A 3D Printed Insole & Orthotic Offered by Podiatrists Looks to Come Directly to Consumers By 2015. February 9, 2014, <http://3dprint.com/401/sols-a-3d-printed-insole-orthotic-offered-by-podiatrists-looks-to-come-directly-to-consumers-by-2015/>.

Krassenstein, B. New Airbus A350 XWB Aircraft Contains Over 1,000 3D Printed Parts. May 6, 2015 <http://3dprint.com/63169/airbus-a350-xwb-3d-print/>.

Tony Kent, Claire Phipps, Eva Schwarz, Marta Blasquez Cano

Fashion Space and Place: Convergence of Consumer Experience

United Kingdom

Nottingham Trent University / University of the Arts London / University of Manchester

ABSTRACT

The aim of this paper is to assess the accessibility of online technologies and interactivity in fashion stores, define how these are applied and their implications for fashion space. Such spaces can be minimal but also boundless, increasingly co-created rather than contested. "Momenting the Memento" calls for an exploration of the relationship between these dimensions as it seeks the boundaries of fashion in time and space, and to find inspirational opportunities to reactivate humans, society and industry. In this, space to be welcomed as a metaphor for the discovery of new territories.

LITERATURE REVIEW

The concept of the 'moment' is found in Lefebvre's (1991) spatiology and his explanation of interdependent 'moments' of space as a generative process of social relations. Moments have a certain constancy over time, with elements common to a number of instants, events and situations. Dialectically, space is explained as both a flow and temporarily fixed thing, and the production of space by the mobile material flows of commodities, information, capital and money (Weller 2013). A moment creates a situation although it is more than situated; space needs to be understood in the context of the mode of production of a particular epoch. Lefebvre is concerned with retaining an abstract sense of time alongside examinations of 'live time'. His conceptualisation recognises that Cartesian space is calculable and controllable, consequently enabling social and technological domination. Space is the ultimate locus and medium of struggles, and therefore is political, demonstrating instants of dramatic change and disruption to everyday life (Elden 2004).

Space, in this conceptualization, expresses specific representations of the interaction between the social relations of production and reproduction, which serve to maintain social relations in a state of co-existence and cohesion. This gives rise to a "conceptual triad" of conceived -perceived- lived space, defined as representations of space, representational spaces, and spatial practice (Kerr 1993). Representations of space are official spaces codified by knowledge of experts, conceived by physical spaces and their architecture. Representational space is perceived through signs and images of its users and inhabitants. Spatial practice is the third moment, enacted in the everyday lives of embodied actors. Moreover, as a moment of space, place is wherever everyday life is situated (Merrifield 1993):

"In Lefebvre's terms, a fashion event is a perceived space where the idea and image of fashion become a unifying ideology that brings garment, cosmetic, beauty, footwear, personal accessories and personal services sectors into a single frame. The event defines physical and social networks of fashion people—of retailers, wholesalers, importers and manufacturers; designers; intellectual property lawyers, management consultants and accountants; marketing, events and media specialists; logistics organisers and various intermediaries" (Weller 2013).

Conceived, perceived and lived space, as representations, representational and enacted spaces provide a valuable framework in which to examine fashion. Lefebvre's spatiology provides the basis to examine the spatial processes of the physical store

itself, codified by the brand, and its representation: its perception by networks of users, suppliers, designers and commentators. Both are implicated in the continuing growth of fashion through online and social media and the opportunities to contest the role of the store as online connectivity, e-commerce and social interaction. The social processes of perceived moments of space are found in fashion brands located in stores and shopping centres. Into these are inserted, or exist in parallel, online places and spaces of the virtual world (Rosenblum and Rowen 2012).

This conceptualisation of space can be extended by the application of the servicescape theory (Bitner 1992), which hypothesises the contribution of the physical setting in customer and employee interaction. Specifically, its environmental stimuli have three dimensions: ambient conditions, spatial layout and functionality, and signs, symbols, and artefacts (Hightower et al. 2002; Kotler 1973). Moreover, the store environment accounts for consumers “being in the marketplace”, and their involvement in the production of products and services. This approach recognises the symbol dominated and media-cultural environment of the late twentieth century (Gottdiener 1998) in which service designed environments define consumption processes and meanings (Peñaloza 1998). From this perspective, a servicescape can be understood as “a material and symbolic environment that consumers build with marketplace products, images and messages” (Sherry 1998 p.112).

The symbolic environment with its visual, and non-physical dimensions is expanded through the conceptualisation of the brandscape (Kent 2003; Klingmann 2007; Ponsonby-McCabe 2006; von Borries 2003; Sherry, 1998). The brandscape transforms the brand into a location (Riewoldt 2002) in which experimentation with creative ideas and innovative spatial concepts is crucial to adequately counter prevailing notions of place in the context of globalisation (Klingman 2007).

The implications for the fashion store are the recognition that boundaries between images and

material forms are obscure; and that they define the process of merger between building and sign, decoration and architecture (Klingmann 2007). This approach foregrounds the significance of spaces and surfaces, which tend to be marginalised by their very intangibility in other definitions of the physical environment. In brandscape environments, experiences become identical with the message of a given brand (von Borries 2003). They take the form of events as well as environments, and include exteriors or interiors, and which communicate a brand through its environment and create strong associations with a brand by experience (Bonn et al. 2007; Ursprung 2006).

These three perspectives form the basis of the research, and the proposition that the physical environments of fashion space can be re-conceptualised through social, interactive and intangible experience of online media and technologies.

METHODOLOGY

The research was undertaken in three phases, an initial review of literature including technology reports and surveys, an ethnographic study of fashion stores in the West End of London, and thirdly twenty-six in-depth interviews undertaken with consumers to explore their use and experience of mobile and store-bound technologies in fashion shopping.

First, the researchers carried out an extensive review of media reports on innovations in physical fashion stores using trade and academic databases and journals. They create an initial categorisation of different ways of integrate the ‘physical’ and the ‘digital’ that served as a guide to the non-participant observation.

Observations were undertaken in selected mid-market fashion retailers in three central London locations. 106 fashion stores were visited in London. Fashion stores form an important and yet relatively underexplored retail sector, by comparison with grocery retailing and other sectors. Moreover they are characterized by design-led differentiation strategies

in which the environment contributes to the brand. Flagship and other prestigious stores act as beacons or showcases for fashion brands in particular (Kent and Brown, 2009). Consequently these retailers might be expected to lead in the development of new technologies to engage, or entertain their customers. Interviews took place with a purposive sample of male and female consumers aged 20-34. The transcripts were coded and analysed with NVIVO.

In servicescapes research Bitner (1992) records that a variety of methods will be appropriate. Direct observation of environmental conditions may be most appropriate in some cases, for example, in researching the effect of facility layout options on customer interaction patterns. The application of direct observation methods has gained acceptance among Consumer Culture theorists (Belk Wallendorf and Sherry 1989) and applied to consumption environments. Interviews are held to be an important element of ethnographic research, extending the approach to ‘how things work’ in field settings (Watson 2011) and as a basis of contextual ethnography (Healy et al. 2007).

FINDINGS

The rapid adoption of touchscreen smartphones and tablets by consumers suggests that retailers might develop ways to interact with consumers through these devices and that ‘screens’ or surfaces in general, have an increasing level of acceptance as an interface.

The illusion of space is created by instore screens and interactive mirrors combined with the feeling derived from many different items and products. The most evident form of consumer-facing communication technology was found in the use of conventional videoscreens and light boxes with illuminated images. The impact of these forms was dependent on the size of screen, the use of moving image and their location in the store layout.

The opportunity for consumers to directly interact and engage with the retailer was through touchscreen

terminals, less often ipads, and smartphones, primarily as a look-up facility for merchandise availability. Free in-store wifi was provided as a valued service in a number of instances. The provision of click and collect facilities was not as pervasive as expected, and tended to be a very functional operation. In general, it was found that department stores are distinctive in the way they use technology to create social space. In part this is due to their size, typically spread over a number of floors, with large spaces on each that provide marginal areas, surfaces and viewing points in which to locate interactive devices and screens.

Interaction

The research demonstrated the extension of social networks through online connectivity to build relationships, supplement or replace human service and assist in overcoming consumer anxiety of shopping. The use of technologies can facilitate human closeness. Online social interaction extended into the storespace, mostly through photo exchanges primarily with instagram, but also twitter, blogs, and email, connecting the social network to friends and family. In some cases interactivity is invited by the store to create memorable, engaging experiences, for example through the use of quizzes.

A particular example of innovative technology for social interaction is the “Selfridges Denim Studio and Jeanious Bar”, an interactive table designed to entertain and educate consumers about all things denim. The bar has horizontal and vertical dimensions, the horizontal table is interactive, enabling consumers to browse different jeans through its touchscreen, while the vertical one shows the chosen styles. Moreover, the table connects with social networks in real time, so consumers can share photos with friends, chat and ask their opinions.



Selfridges Jeanious Bar

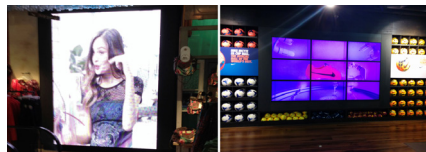
Burberry and NikeTown demonstrate consistent approaches to the convergence of intangible, interactive and social online experiences in their stores. Burberry's store design, inspired by their online site, combines digital theatre, magic mirrors, and iPads carried by shop assistants. NikeTown is a point of reference in the use of technology for hedonic and utilitarian purposes. Touchscreens provides technical product information, mobile apps enable interaction with social networks and the runner lab, enables individualised customisation of running shoes. For some respondents, they make life easy and exciting, stimulating the consumer in an environment where it's fun to "play with a device like a kid". Together, they create intimate, personalised spaces, reducing the impersonality of the large store environment.

Sensory environment

Retailers can offer a superior experience in store, using the materiality of store design and multisensory stimulation in order to create an experience that cannot be replicated online, and this is evident in the case of Anthropologie and Chanel. Hackett has created an immersive store experience that adopts technologies to support brand values and brand heritage that are presented in a carefully designed and predominantly male space. The club-style experience is achieved through the provision of wifi to enjoy the experience from a comfortable Chesterfield sofa or iPads for kids to be entertained while parents are shopping.

Screens contribute to the visual sensory environment and convey a myriad of brand cues by showing the advertising campaigns for the brand, video images of collections on fashion catwalks and for a larger number of retailers single images promote specific pieces (designs) from their current collections. They can show how the products are handmade to convey the luxury element of the brand: respondents were aware of their capacity for story-telling. The hedonistic content can be customised to communicate young and creative brand values. Videos, of which the Pradasphere is a significant example, but more commonly videos of celebrities are perceived to contribute to the glamour of the store. Moving between

physical and virtual spaces enables consumers to access the brand's website, and through this merger, to catch their imagination.



Screens: Desigual (left), Niketown (right)

Time

Window displays for example Adidas's, catch the moment with a sense of the dynamic and interactive, to entice the consumer into the store. The lure of technology can contribute to a short visit, a pop-in, and the absorption of a few minutes in time-constrained day. More generally, the fashion shopping journey for some respondents was anxiously rushed, with a need for more time to make better decisions. However, through online interaction before and during the shopping journey, their experiences can become more carefree and timeless. Connectivity of consumers, fashion media and the brand becomes faster and easier through online media and personal interactive devices. Access to online media compacts time by providing immediacy in the shopping experience: searching online can provide real-time information. Other respondents reflected the moment in the need for instant gratification through customised services.

Wayfinding and navigating a store is a second, more utilitarian aspect of temporality. Wayfinding around complex spaces in a large store can be literally worrying but also frustratingly time consuming. Personalised information through online connectivity and instore devices can overcome these problems. The research consistently points to the importance of finding the right product, size and colour and minimising the time it takes to access it by shop staff.

CONCLUSION

These findings suggest that there are two main dimensions in which the 'real' and 'virtual' merge in

the store. Firstly, an Experiential Dimension in which the creation of a superior shopping experience is the most important element that define the stores' space. In this way retailers offer a physical experience that cannot be replicated online, through a shopping environment that enables consumers to feel they are engaged with the brand, which presents the brand as "premium" experience.

Secondly, a Virtual Dimension defines the digital experience which comes to the store and where consumers can find a similar environment to the virtual channel. These retailers strive towards an integration of the physical and digital channels with the objective of offering a totally integrated experience of the brand; they make an extensive use of technology in the store to facilitate space as a social process.

A mediated brand dimension integrates the experience of spaces in the building, the building itself in its location and the non-physical environment: the flows of people and virtual worlds that envelope and permeate the store. Through these dimensions, retail stores demonstrate the use of technologies to implement brand experience and engagement in-store and point to the ways in which the physical experience is changing.

In Lefebvre's terms, representational fashion space is perceived through the convergence of physical and online signs and images of its users. Spatial practice enacted in the everyday lives of embodied actors is evident in new ways, as it merges in present time the lived physical and virtual world of consumers. It demonstrates the evolution of fashion stores as converged experiential spaces and moves the focus of fashion to engagement and co-creation. Thus, the places and spaces of consumption create bridges from the past and present to the future, across which fashion and its consumers travel.

References

Belk, R.W. Wallendorf, M. and Sherry, J.F. Jr. (1989) The sacred and profane in consumer behaviour: theodicy on the odyssey. *The Journal of*

Consumer Behaviour, Vol.16, No.1, pp. 1-38.

Bitner, M. J. (1992) Servicescapes: the impact of physical surroundings on customers and employees. *The Journal of Marketing*, Vol. 56 April, pp. 57-71.

Bonn, M., Joseph-Mathews, S., Dai, M., Hayes, S. & Cave, J. (2007), Heritage/Cultural attraction atmospherics: Creating the right environment for the heritage/cultural visitor. *Journal of Travel Research*, Vol.45, pp.345-354.

Elden, S. (2004) *Understanding Henri Lefebvre; Theory and the Possible*. Continuum: London.

Gottdiener M. (1998) The semiotics of consumer spaces: the growing importance of themed environment. In J.F. Sherry (Ed.) *Servicescapes; The Concept of Place in Contemporary Markets*. Chicago, IL: American Marketing Association, pp. 29-54.

Healy, M. Beverland, M. Oppewal, H. and Sands, S. (2007) Understanding retail experiences: The case for ethnography. *International Journal of Market Research*, Vol. 49, No.6, pp.751-778.

Hightower, R. Brady, M. and Baker, T. (2000) Investigating the role of the physical environment in hedonic service consumption: an exploratory study of sporting events". *Journal of Business Research*, Vol. 55, pp. 697- 707.

Kent, A.M. (2003) 2D23D: Management and design perspectives on retail branding. *International Journal of Retail Distribution and Management*, Vol.31 No.3, pp.131 – 142.

Kent, A. M. and Brown, R. (2009) *Flagship Marketing: Concepts and Places*. Routledge, Abingdon.

Klingmann, A. (2007) *Brandscapes*, MIT Press, Cambridge MA.

Kotler, P. (1973), Atmospherics as a marketing "tool". *Journal of Retailing*, Vol. 49 No. 4, pp. 48-64.

Lefebvre, H. (1991) *The Production of Space*, transl. by D. Nicholson-Smith Oxford: Basil Blackwell.

Merrifield, A. (1993) Place and Space: A Lefebvrian Reconciliation. *Transactions of the Institute of British Geographers*, Vol. 18, No. 4 , pp. 516-531.

Peñaloza, L. (1999) Just doing it: a visual ethnographic study of spectacular consumption behaviour at Nike Town. *Consumption, Markets and Culture*, Vol. 2, No. 4, pp. 337-400.

Ponsonby-McCabe, S. and Boyle, E. (2006) Understanding brands as experiential spaces: axiology implications for marketing strategist. *Journal of Strategic Marketing*, Vol.14, pp.175-189.

Riewoldt, O. (2002) *Brandscaping : Worlds of Experience in Retail Design*. London : Momena.

Rosenblum, P. and Rowen, S. (2012) *The 2012 Retail Store: in Transition, Benchmark Report*". Retail Systems Research, May.

Sherry, J.F. Jr. (1998) The soul of the company store: Nike Town Chicago and the emplaced brandscape. In J.F. Sherry Jr. (Ed.) *Servicescapes: the Concept of Place in Contemporary Markets*, pp. 109–46, Chicago, IL: American Marketing Association.

Ursprung, P. (2006), *Architecture as a brand device. Art and branding*. Zürich: Swiss Institute for Art Research, pp.139-152.

von Borries, v. F. (2003) *Niketown Berlin: The city as a brand experience*. *Advances in Art*.

Watson, T.J. (2011) *Ethnography, reality, and truth: the vital need for studies of "how things work" in organizations and management*. *Journal of Management Studies*, Vol. 48, No. 1, pp.202–217.

Weller, S. (2013) *Consuming the city: Public fashion festivals and the participatory economies of urban spaces in Melbourne, Australia*. *Urban Studies*, Vol. 50, No.14. pp. 2853-2868.

Sanjeev Kumar Jharkede, Anshoo Rajvanshi

Craft Redefined: an Expression

India
NIFT

ABSTRACT

Around the world, craft is conceived as a process. 'Craft only exists in motion. It is a way of doing things, not a classification of objects, institution, or people' (Adamson, 2007)

In India, during the five thousand years of urban evolution since the Harappan period, the artefacts were produced for local consumption and, to a lesser extent for use in trade or barter. All the artifacts were utilitarian, be it for everyday use or for ritual purpose, and concern of the community as a whole. Its original function became extinct once the artifact had served its purpose and the religious ceremony had been performed. The artist-craftsman was intimately bound up with the caste and trade he was born in with seemingly no religious restriction in professional activities. He has always fulfilled the needs of the entire community as well as worked for patrons on ambitious artistic court and temple projects, where his work would reflect the desired aesthetic sensibility.

Post-independence, machine made alternatives gave more options to choose from; hence the craftsmen's exclusive masterpiece took a back seat. On the other hand, many rural/tribal level social structures collapsed or got absorbed into modern industrial society. This led to the alienation of various crafts products /practices from the society. Hence future generations of the craft community with restricted opportunity to practice them, lost their technical and artistic skills.

In India, during the latter half of the twentieth century, rapid changes in the society and lifestyle led to the formation of new psychographic zones. These major

changes in the lifestyle of the average Indian were also observed internationally, which can be summed up in the statement by Margaret Thatcher during an interview in *Women's Own* magazine that "... there is no such thing as society. There are individual men and women, and there are families..." (Keay, 1987). In the Indian society, earlier every product had specific cultural connotations, which were understood within the regional communities. The new cultural institutions have stripped away the age old meaning and purpose associated with each product. Now the product is individualistic with emotive connotations and global in its application. These connotations appeal to the psychographics extending to an individual's own persona and surroundings and have risen from cross cultural interactions across the globe. For instance, gifting a rose to express one's love and amorous feelings for the other is not mentioned in Indian culture anywhere, but its connotations are now well understood within Indian communities.

For the new and highly individualistic product, a new skill set was required which was made possible with the varied use of technology. Technology became craft; the way it is applied and the will and the idea behind it paved the way for a new generation of techno-craftsmen.

This paper would focus on innovative application of technology to create an exclusive product for an individual vis-à-vis a community.

INTRODUCTION

The concept of craft is perceived across the world as a process; it is any work done by hand and requires a certain skill set. 'Craft only exists in motion. It is a way of doing things, not a classification of objects,

institution, or people' (Adamson, 2007). Whereas, in India, till independence and in many sectors even today, each product created has been the concern of the community as a whole. Since the Harappan period, through five thousand years of urban evolution, traditional practices and knowledge have been handed down from one generation to the next within the community. Each product, be it for utilitarian or for ritual purpose contained in itself community specific meanings, symbolism and aesthetics. It was hand-crafted by the artist-craftsman, to always fulfil the needs of the entire community and his work would reflect the desired aesthetic sensibility as well as community specific cultural connotations.

Since the beginning of the twentieth century, major and rapid lifestyle changes noted globally, reflect the formation of new psychographic zones and consumer segments. This is substantiated in the statement given by Margaret Thatcher during an interview with Women's Own magazine that, there is no such thing as society, there are individual men and women, and there are families (Keay, 1987). Similar changes are reflected in the Indian subcontinent / society post-independence, when the country worked towards industrial development and looked to synch global sensibilities.

Across the world Indian lifestyle is known through its rich cultural heritage and handicrafts. With modernization, the craftsmen's community specific yet exclusive masterpiece took a back seat. Many rural/tribal level social structures collapsed or got absorbed into modern industrial society, which led to alienation of various crafts products /practices from the society. Future generations of the craft community with restricted opportunity to practice them, lost their technical and artistic skills. On the other hand, with its innovative applications technology became craft, and paved way for a new generation of techno-craftsmen.

India became independent in 1947. With its rapid industrial developments, technological advancements, cross-cultural interactions and influences from across the globe impacted the length and breadth of the

country and paved the way for new lifestyles. These new lifestyles led to the rapid formation of new psychographic zones made up of the individuals Margaret Thatcher talked about. These individuals, risen from cross cultural interactions create psychographic centered consumer segments across the globe. They crave new products with emotive connotations created for individual psychographics, persona and surroundings; products that are global in their application instead of products with culture and community specific meaning. In the Indian context this could be well understood with an example a rose which addresses the needs of the psychographic specific consumer.

CULTURAL CONNOTATIONS OF THE ROSE

It is interesting to note that gifting a rose to express one's love and amorous feelings for the other, is not mentioned in Indian culture anywhere, but its connotations are well understood in the Indian community. This is in spite of the fact that India's association with roses goes back more than 5000 years, and is known through traditional myths, legends and folklore. A rose would typically have been used as an offering to the gods. The founders of Ayurveda from around first century BC used roses mainly for their medicinal properties. For its rich fragrance and its influence on the human senses, the book Ananga Ranga written about 1172 C.E. by the poet Kalyana Malla, mentions the lavish use of rose water for amorous interludes (Burton, 1885). Two Portuguese travelers, Domingo Paes and Fernaz Nuniz during their visit to Vijayanagar Kingdom in 1537 observed that roses were integral to the daily life of both aristocrats and commoners, who adorned themselves with roses. The king, Krishna Deva Raya, would dress in pure white silken robes embroidered with golden roses. Every morning he would shower his audience and courtiers, favorite horses and elephants with white roses (Sewell, 1980). Mughal emperor Akbar took camel loads of roses to give to the wives of his allies. There are many portraits in Mughal miniature painting traditions that feature the subject holding a rose.

EMOTIVE CONNOTATIONS OF THE ROSE

Rose is naturally grown, yet is as a product of consumption bearing emotive connotations worldwide. Moreover, within the family of roses all the different colour varieties have acquired different meanings through cross cultural interactions across the globe. Gifting a natural rose has very specific emotive connotations with a potential to convey a message that sometimes words cannot express. It bears a physical as well as symbolic manifestation of emotional and amorous feelings of one person towards the other. If the receiver is not sure of the feelings towards the giver, the immediate emotional impact may be an ambiguous one. A rose is perishable and the freshness, colour and form of the flower plays a highly decisive role in conveying/perceiving the intensity of the emotion and strongly indicates the occasion and intention of the giver and relationship between the two. When the rose is sold, thorns are already removed by the florist.

Moreover, if the flower is dried and preserved in the books to keep afresh the memories associated with it, this could be perceived as an intense and positive emotional response to the gift. On the other hand, throwing away the flower once it has dried, could be considered a bad omen for the relationship; so the receiver may choose to preserve it.

The rose now serves as a memento or a souvenir of feelings experienced and moments spent together. It becomes a meaningful object in itself, taking on a special emotional value that can trigger powerful, long-lasting emotions. The gesture of gifting the rose and symbolism of the act contains these emotive connotations more than its fragrance. There has always been a desire for a non-perishable rose to cherish the very moment and for an extended experience. It further acquires new connotations when it is artificially recreated.

In modern times, the requirement of a non-perishable rose was perceived and artificial rose/flower production has progressed to a point where it is hard to visually differentiate between real and artificial.

Some of the main advantages of an artificial flower are longevity, low maintenance, appearance, practicality and availability of a range of colours. However, artificial flowers available in wide range of materials and colours have not been able to reflect the connotations of a real flower, as the artificiality of the rose tends to weaken the emotional impact on the receiver. This drawback has been identified and viewed as an opportunity to address this desire to have a non-perishable rose reflecting the connotations similar to a real rose. The techno-craftsmen have evolved an innovative application of electroforming techniques, to create a rose in gold. This charts new territories of individuality, emotion and exclusivity.

ELECTROFORMING TECHNIQUE AND ITS INNOVATIVE APPLICATION

ASTM B 832-93 describes it simply and concisely as follows: "Electroforming is the production or reproduction of articles by electro-deposition upon a mandrel or mould that is subsequently separated from the deposit." Technically, in the process of electroforming, a metal or conductive material is immersed in an electrolytic solution with a DC power source to deposit electroplatable metal. Nickel and copper are preferred over other metals such as silver, platinum, gold, tin, iron, etc. because of their physical and chemical properties are more suitable for electroforming.

The process allows high-quality production of interesting shapes from conductive and non-conductive mandrels. Non-conductive manmade objects as well as natural objects—leaves, flowers, shells or nuts can be made conductive with the application of a layer of conducting paint.

Compared to other basic metal forming processes such as electroplating, casting, forging, stamping, deep drawing, machining and fabrication; electroforming as a technique is very effective to achieve fine surface finishes and to maintain complex interior configurations. The process addresses extremely close dimensional tolerances and complexity and helps to reproduce light weight form with extreme

precision without shrinkage and distortion.

The precision offered by electroforming allows finer geometries with superior edge definition and near optical finish. It enables retention of the aspects of a rose such as delicacy and softness and permits excellent edge definition of the rose petals. Plating is controlled and kept much thinner with desired wall thickness as it grows molecule by molecule on the natural rose which eventually is not removed. The process facilitates high volume to reach the masses with low production cost, vis-à-vis mass customization at affordable prices. The fine process of depositing electroplatable metal onto a conductive patterned surface ensures no loss of metal, though it may require adjustments in chemistry, operational parameters, and methodology depending on the properties of the metal used. Due to its refined crystal structure, electroformed metal is extremely pure to the extent that electroforming is possible in karat gold ranging from 8 karat to pure 24 karat. Gold has the strength and coherence to support itself and to perform the task for which it is designed.

Use of electroforming technique with an inherent ability to accurately capture intricate surface details has always led to innovations in the field of design, art and craft. One such innovative and inspirational endeavour is electroforming the natural rose in gold giving a new dimension to a naturally available product. The fabrication of the golden rose requires a fresh flower every time as a mandrel, it is selected with a keen eye towards a perfect desired form. A rose with even the slightest flaw is discarded.

THE EXCLUSIVE GOLDEN ROSE

The gold electroformed rose leads to the ambiguous feeling which depends on the perception of the giver and the receiver. The natural rose after being transforming into a golden rose acquires new connotations and has taken emotive expression to a different platform. With these connotations, it has become an icon. It could now be gifted to someone precious to you; your daughter, lover, wife, sister, mother. It amalgamates the emotive connotations associated with a natural rose and the connotations

associated with gold as precious material. It could be flaunted, displayed, cherished instead of preserving in a book where it stays hidden. The rose in gold has acquired this value not because of the precious and expensive metal but because of its enhanced intrinsic value, because of the aesthetic appeal and emotional impact on the giver and the receiver. At once, the tangible value of the material is taken over by its intangible value.

When it is time to judge the gold electroformed rose, it is difficult to categorize it in terms of product development with enhancement or as an innovative product development. "Enhancement means to take some existing product or service and make it better. Innovation provides a completely new way of doing something, or a completely new thing to do, something that was not possible before..." (Norman, 2004). It is much easier to categorize it as an enhancement, as the existing product could definitely be perceived as improvised. At the same time it is an innovation, as in this category existed previously to provide a similar experience. It is further established when the said product is judged at the three levels of design: visceral, behavioural and reflective.

At the visceral level the product is dealt with by the intuition and not the intellect; it is the immediate emotional impact as well as sensuous experience. "Because visceral design is about initial reactions, it can be studied quite simply by putting people in front of a design & waiting for reactions. In the best of circumstances, the visceral reaction to appearance works so well that people take one look and say "I want it"..." (Norman, 2004). At the behavioural level the product is dealt with in terms of the pleasure and effectiveness of use. Good behavioural design is full of content and tells a story. It is human centred and satisfies the needs of the people who use the product; and at the reflective level the product is dealt with by looking at the meaning or message it contains and sends to others and the culture it belongs to.

When the two different forms of a rose: the artificial available in different materials and colours and the

gold electroplated rose are judged against the natural rose at the three levels of design: visceral, behavioural and reflective, the artificial rose lags behind at the behavioural level as it lacks the pleasure and effectiveness of the gesture. It lacks content and has no story to tell. Whereas, the gold electroformed rose performs well at all levels: it conveys the message (emotion) and fulfils the desired function very well. It has the potential to do the trick and leads to utmost satisfaction.

CONCLUSION

The response or emotions as well as the sensuous experience connected to a natural rose, are so constant across all societies and cultures that its connotations are perceived in a similar fashion across the globe. The technology has enhanced the elegance and sophistication of the expression creating an instinctive response, re-conjuring and validating the emotion originally connected to the natural rose. Moreover, it would be appropriate to categorize it as an innovative application of technology to create an exclusive product for an individual vis-à-vis a community that has led to new fashion which is a 'Classic'.

The golden rose is a brand in itself, it is symbolic, and it plays at the emotional and cognitive level simultaneously. Its innovative approach, originality, simplicity, elegance and sophistication in form and material create an appreciation as well as a desire to not only possess but to feel empowered and gift it at the same time. It promises to make an ordinary action extraordinary and transform it into a special experience.

References

- Keay, D., 1987. Thatcher Archive: COI transcript . Woman's Own.
- Burton, R. F., 1885. The Ananga-Ranga. Kindle ed. London and Benares: Kama Shastra Society.
- Sewell, R., 1980. A Forgotten Empire (Vijayanagar): A Contribution to the History of India. 1st AES reprint ed. New Delhi: Asian Educational Services.
- Norman, D. A., 2004. Emotional design. Paperback ed. New York: Basic Books.

Kavita Saluja

'Absent' is the New Present

India
NIFT

ABSTRACT

What is the color of the dress that isn't? How do you unbutton a shirt with no buttons? How to project an image without an object? When familiar points of viewing are blocked, new possibilities arise. As we set out to examine the essence of a design, carefully closing the familiar points of discussion about the product, we knock at the doors of a dynamic element called 'space'. In Japanese it is the Ma* and in Hindi it is the Akash*, that holds the key to a successful design. It is the space between the components that determines the impact on the mood and impact of a finished work, be it a piece of art or design of a garment. Space is like a womb within which things exist or take place, stand out and have a meaning. The 'emotional impact' of a design is determined by the composition of its elements in a given space. This silent yet dynamic element is more like a principle that governs our true visual emotional identity. Design practitioners have utilized this element consciously in their work but the usage is more for the aesthetic appeal than orchestrating emotion, more as a measured 3D entity than as an experience, more accidental than a planned outcome of heightened awareness.

"Emptiness does not have to be subordinate to the figuration. It need not be nothingness, it can also mean something." - Heart Sutra

This paper explores the function of 'space' as the key principle of design responsible for servicing the emotional self(identity), where space is not a sense of enclosed, measured entity but a consciousness of place and time/an experience. This research examines the work of contemporary artists and designers

to locate their technique and medium that fosters 'space' as a tool to see beyond outward appearances into a realm of pure experience. With reference to developing practices in this spatial approach, I sought to study Zen Buddhist practices for awareness to support the usage of 'space' in fashion practice in order to manifest a relation between our body, mind and environment (emotional identity) which may be defined as: "Intuitive Fashion".

OBJECTIVES & METHODS

All "Design" is a composition and it is in the act of composing that we play with 'Space'. Conscious playing with the positive visual elements (form) in the womb of empty space is a 'perception' as well as 'practice' in Design. Perception because of the way we 'see' (with visual bias towards form) and practice because it is habit. 'Space' is seldom a conscious realm of approach as it seem the most imperceptible (subtle), unfamiliar and empty and yet it is rather an intriguing one. This paper attempts to knock at this unfamiliar point of entry (a rabbit hole) to explore a new world of available methods or insights.

Methods: firstly, the attempt is to review the existing theories in context of 'space' as a key principle of design. Secondly, this paper develops a systematic approach to analyzing the qualities on offer, as we take up designing from space as a point of entry (a spatial approach) and lastly, considering the revelations, the investigation on possible conditions to practice spatial approach and create new experiential design, in context of fashion. In this quest, deep revelations, from the Buddhist Zen practices were correlated to the works and practices of contemporary fashion designers unraveling the secret of 'space'.

Space – An unfamiliar point of entry

“I almost wish I hadn't gone down the rabbit hole and yet ..it's rather curious, you know, this sort of life!” - Lewis Carol, Alice in Wonderland

I have deliberately chosen not to address space as 'negative space' due to its psychological connotations. Also, I have chosen to deal with space as 'space- time continuum' or 'experience'.

Definition: In visual term, 'Space' may be simply defined as an entity, devoid of details and specifics, surrounding an object. Also, 'space' can be defined as a gap, interval or pause between happenings in experiential terms.

Space is a concealed value or component of a composition; not in the sense of being 'invisible' but in the sense of not fitting into the way we habitually see or perceive. To understand this, it becomes important to understand how we see or perceive. On investigation, I came across the famous Gestalt Theory of visual perception. The theory suggests that the human mind tends to simplify a visual image in order to make it easier to perceive. It also states that parts of each image / composition may be analyzed and evaluated separately but the impact of whole visual image / composition is completely different from the sum of its parts.

To further understand the application of these laws in 3D and perspective, I studied the graffiti composed by the students of NIFT on the institute walls, walkways and pillars: a walk through the 'SPACE'.



A walk through the 'SPACE'

It is a metaphorical as well as direct representation

of the Gestalt's Laws in third dimension. As we start moving towards the 'hidden space' (the corridor), it starts becoming apparent as all the Gestalts law of proximity enliven, the sentence starts to disintegrate as the words separate, due to increasing space between them, yet the words that are painted together with frozen spaces on the same wall stay together and offer a further contrast and clarity.

Impact

Gestalts laws of Visual Perception revealed that:

- Human mind perceives objects as patterns or compositions rather than separate entities. In addition, whole composition is something more structured and cohesive than separate elements.
- Perception of a composition is governed by quality of space between its elements.
- Human mind views a composition / pattern with emphasis on the form as well as the collective sense of composition, discerningly avoiding conscious focus on the 'Space' between the elements.

Ad Reinhardt's Solid Black Canvas



Ad Reinhardt's 'black Painting'

Artist Ad Reinhardt's work of Abstract, Black Painting, canvases painted in 'solid black' conveys yet another, very important aspect of 'space' – Space is not empty even if it appears to be empty to our habitual seeing. Reinhardt points to the 'space as void full of possibility'.

Charles Cohen's Erasures



Charles Cohen's Buff 2007 are representation of 'absence as a presence'. In these photographic images with figurative erasures, he creates a 'space' that does not reiterate absence of something but a presence of something. As we look through his works, we find that we confront the spatial erasures as objects rather than passive backgrounds. This sets up an ideal and final reflexive effect (Cooley 2006).

Learning

"Emptiness and nothingness are pure experience. It is the very foundation of our being and thought" (Westgeest 1996 p. 17-19).

Role of 'space' as a point of entry into 'Experiential Design

'Space' defines perceptual quality in a design and yet remains unnoticed if not deliberated . A visual composition is an expression, which invokes a psychological response in terms of 'Perception'. To enhance perception, "contrast is the sharpener of all meaning; it is the basic definer of ideas/perception" (A primer of visual literacy, p. 96). Two interrelated yet distinct categories of Perceptions that all the expressions can lead to:

- Visual / sensory perception
- Emotional / Experiential perception.

Visual/ sensory perception of a design is based on creating emphasis on either 'form' or 'space' at a time. Deliberating on the nuances of form and emphasizing its qualities by contrasting it with space or vice versa. In this format, 'space' plays a passive or contrasting role.

'Space' and visual perception

In the visual arena, 'space' has many important roles

to play such as:

- Creating Visual Barrier
- Emphasizing the point of interest
- Communication tool
- Generating new forms
- Impact: visual tension and asymmetrical dynamism created by play of 'space' and objects
- Illusion: to extrapolate or construct from the suggestive cues (Ex. Kanizsa Triangle)
- Abstraction and possibilities: Devoid of specifics, space as a starting point allows for definition of a design
- Represents unknown and provides room for error.

Emotional/Experiential perception of a design is based on simultaneous awareness of form and non-form (space), more as consciousness of place and time or a collective unity called the experience. In this category, the 'space' has an active role to play as it works as a tool to create necessary visual expression that is perceived in the mind of a viewer.

'Space' and Experience –The Living Space

'Space' supports experiential and emotional perception by providing a pause or rest (from the engagement with the positive elements) to enable the viewer to see (perceive) things as a group, individually and emphasize or offer a platform to subconsciously fill it with emotions and thoughts. Hence, 'space' emerges as new 'living entity' that acts as a point of entry into our emotional selves. "It is dynamic, interdependent, bilateral play of object and itself from which living space – time continuum of 'here now' emerges as an ambience" (Shigenori Nagatomo, 6.3, Japanese Zen Buddhist philosophy).

Fashion Design and Space

In fashion design, the dialogue between two elements namely 'body' and 'dress' is to be played to create and fulfill desires and satisfy emotions. In this dialogue, role of emphasizing the 'space between the two' (hidden to us as we focus on the contrast), is played by the designer, in order to offer an experience.

Zen- Buddhism and Fashion Practices

According to Zen, 'awareness to present moment experience' can only be cultivated by 'preparedness' for the moment by exercising nondiscriminatory wisdom, without prioritizing the visible over the invisible, the explicit over the implicit, and vice versa. Zen demands an overcoming of this paradigm by practically achieving a holistic perspective in cognition. (Shigenori Nagatomo, Japanese Zen Buddhist philosophy). It may mean a new way of training our minds and cultivating a 'new way of seeing'.

The Awareness- Practices

A detailed study of the 'new way of seeing/ preparedness practices to cultivate this were identified with examples from contemporary design maestros who have dared to challenge the logical, everyday approach in order to gain entry in the port of 'space-time awareness'.

1. Deliberate Imbalance – The skill of a designer lies in catching the moment when awareness of the gap (space) starts to form. It is a moment when balance between the elements is broken and gap starts to emerge. In an effective use of this technique, the visible parts of the design come together with respect to 'space to create new dynamic symmetry called 'harmony'. A student of Fashion Design, Ms. Sujaya, experimented with such imbalance in everyday jacket-shirt proportion; breaking the gender bias, without any extra bulk.



Sujaya's gender bender asymmetrical jackets



Yohji Yamamoto

"My dream is to draw time". One thinks of all those oversized capes, unstructured coats, and asymmetric jackets. "Symmetry – the symbol of perfection is not sufficiently human". A garment should become one with a person who wears it, so much a part of him that it is entirely subordinated to the force of his personality. (Fashion Memoir-Yohji Yamamoto; Pg12, 13, Francois Bandot)

2. Non attachment to appearance – Zen's mode of seeing is non-dualistic in nature, occurring in zero time and zero space, which arise from a nondiscriminatory state of meditational awareness. Non attachment to a recognizable pattern, object, shape, material, form or symbol allows us to see a new reality. Attachment to appearances creates Fetishism. It is a sort of confusion between visual and essential. In Zen, the metaphor of the finger pointing to the moon suggests this attribute in which moon is the point of view and not the finger. Example: Mashallah Design and Linda Kotowski.



Mashallah Design and Linda Kotowski

"Fashion is an interface between thoughts, desires and expression. Technology is poetry. In order to create thoughtful and meaningful piece of clothing, it is crucial for us to step out of traditional point of view of fashion and embrace the perspectives and approaches of other disciplines." (shapeshifters; pg. 91)

3. Seeing connectedness – In this technique of preparation, a designer may see and define reality in a continuance from past into the future as they are viewed as expressions of things in present continuous. This offers a possibility of re-contextualization of

cultures. In Zen, this may have reference to a dynamic flowing river. "I do not create a fashionable aesthetic. I create style based on life, not a style for its own sake. [...] In Miyake's work, lines move and flow freely in an intermediate space. I wanted to create things that could be free both mentally and physically [...] fashion world trapped by its references that are remote indeed" (P. 10, 11 Universe of Fashion: Issey Miyake by Marie Andree Jouve). Example: Kenzo



"With Kenzo everything is suggested, nothing is imposed... composed of objects from so many different places... each object seems to be there quite naturally in its place and yet nothing is fixed." (Fashion Memoirs; Kenzo, Pg 16, 17, GinnetteSaidenchin)

4. Absence of obvious – Absurdity rejecting the idealistic and seeking whole experience devoid of perfection. A designer may use paradox or a seemingly irrational point to go beyond the reasoning mind. Yamamoto celebrates the space between body and fabric. His loose-fitting clothes emphasize the independent volume of the garment and its spatial, even architectural, character. Yamamoto revels in imperfection: "I want to see scars, failures, disorder [...] I think perfection is ugly" (Brooke Hodge, p. 250, Skin+Bones). It may be a non-customary way to open new arenas of human consciousness but as MC Escher said "only those who attempt the absurd will achieve the impossible". Example: Jum Nakao.



Brazilian designer Jum Nakao at Sao Paulo Fashion week with "Sewing the invisible", a collection of... paper dresses and laser cutwork... "dream of the unsayable, the impossible, the inexplicable and the indefinable and to associate the visible trace with the invisible..."

(shape shifters; Pg 68,page one)

5. Spontaneity – "What motivates the Zen person to action, is a thrust he or she feels, surging from the creative source" (Shigenori Nagatomo, Japanese Zen Buddhist philosophy). In this approach to preparedness, an object is allowed to announce itself without an intentional constitution. It is an uncontrived phenomenon without presuppositions. This opening up is accompanied by anti-logic and de-objectification. "It is what it is".

"Because things are experientially *constituted* [...] without presupposing the Gestalt psychology's distinction between foreground and background, focus is on dynamism and the experience of it and not on the outcome" (Shigenori Nagatomo, Japanese Zen Buddhist philosophy). Example: "No rush, everything is done with exceptional grace and attention always alert but very calm. Although all tasks are interchangeable, there is a feeling of crossing invisible boundaries, dresses slide on the floor, there are transformations every second. Miyake gets up, loosens collar, crumples the silk, rolls up the sleeves, rearranges colors, his assistants seem to take up his gestures in a ballet of it is almost as if the room changes size to allow them space to move around" (Issey Miyake, P. 9-10, by Marie – Andree Jouve).

6. Performing Space – 'Space' is dynamic and so needs to be invited in an act/ performance. Celebrating the unseenness of space by making it deliberate is

equivalent to performing space. This unseen, not visible space connects and appears as we fill it with reality of emotion and acceptance. Ex. The inside of a garment beholds several details that are hidden though not invisible such as seems, linings, facings yet they hold the key to a fit and comfort. Example: Asia Wysoczynska



Asia Wysoczynska

'I look at myself as a distant observer. I create and observe the process of creation'. In the end, it's all about emotions and feelings, allowing people to find a way to express themselves through garments I designed'. (Asia Wysoczynska, from the taste of life, pg.31, Shape Shifters).

CONCLUSION Intuitive Fashion

It has been eureka moment ever since 'space' revealed itself to me, as the master key to intuitive relationship between body and mind experiences. A precious tool at the hands of a fashion practitioner, it points towards a new method of creating a united continuum of clothes and self-identity. Awareness of 'space' needs to be heightened amongst design students and practitioners, in order to support emotional and experiential values in fashion. This awareness may lead to diverse ways of integrating human body and mind through clothing and take us through very advanced alternatives to current fashion. With this approach, in future, we may never see body and mind as separate anymore and each of us may dress in fashion that is developed through nuances and artistry created by a practice of 'now-here'.

This fresh perspective in Fashion with a focus on this 'Absent' element of design called 'Space', promises

to resurrect 'connectedness' in our diversities, destroy our fetishes, shift our focus from the outcome to pure experience of being, and breathe fresh energy into our relationship with self – "An intuitive Fashion" where the word 'intuitive' means perceived directly without rational thought, as a person or the mind, resulting from involving and engaging in the present moment.

References

- The visible and the invisible, Merleau Ponty M.1968 Evanston : North Western University Press.
- The Art of looking Sideways, Alan Fletcher, 2007, Phaidon
- Japanese Zen Buddhist Philosophy, Stanford Encyclopedia of Philosophy, Fri 08th Oct 2010, Shigenori Nagatomo
- Mapping and Maps and Minis, Johnn , Feb 01, 2010
- Leaving things out : Negative space in RPG's, Mike Bomke
- When less is more: concept of Japanese "MA", WAWAZA
- Universe of Fashion; Issey Miyake Marie – Andree Jouve, 1197, Editions Assouline, Universe Publishing
- Fashion Memoir ; Yohji Yamamoto, 1997, Editions Assouline, Francois Bandot, Thames and Hudson Ltd.
- Fashion Memoir; Kenzo, Ginette Sanderichisn 1998 Editions Assouline, Thames and Hudson Ltd.
- Shape Shifters , Shaping Fashion Silhouettes, Page one publishing PTE Ltd 2010
- Karl Gerstner: Designing Programs. Lars Miller Publishers 2007
- Envisioning Information : Edward R.Tufte, 1990 by Edward Rolf Tufte, Graphics Press LLC
- A primer of visual literacy, Donis A Dondis, 1973 The Massachusetts Institute of Technology
- The Heart of Buddha's Teaching, Parrallax Press, Hanh, T.N. 1998, Berkely, California

Rhian Solomon, Katherine Townsend, Amanda Briggs-Goode Crafting Anatomies: Material, Performance, Identity

United Kingdom
Nottingham Trent University

ABSTRACT

Crafting Anatomies is an ongoing research project initiated and coordinated by the authors of this paper. The enquiry places the human body at the centre of a multidisciplinary dialogue, exploring and questioning how this site is interpreted, crafted and reimagined, within historical, contemporary and future contexts. The project has already resulted in two significant outcomes in the form of an exhibition (7 Jan-4 Feb 2015) and symposium (30 Jan 2015) staged at the Bonington Gallery in the School of Art and Design at Nottingham Trent University.

The exhibition featured panel-selected artworks, most produced since 2014, by national and international researchers and practitioners in response to the corporeal: their approaches being framed through the lenses of material, performance and identity. The symposium provided the opportunity for a selection of these artists to discuss their works relationship with the body with an audience comprised of the general public, fellow researchers, postgraduate and undergraduate students.

In light of this new exhibition and with reference to selected exhibitors, this paper will explore the body as a meeting place within collaborative and multidisciplinary practices. It will review a variety of disparate approaches that have been adopted to reconceptualize, speculate upon, modify and fashion the body through discussion of their influence on medical, design and sociological practices.

MATERIAL

Throughout the Crafting Anatomies exhibition, physical and virtual materiality of the body was

investigated in works that incorporated advanced textile, surgical and medical imaging technologies. The embracing of principles of biotechnology in its application to fashion and digital fabrications of bodies were also emphasised, as whether skin and cloth is coupled metaphorically, literally or conceptually, the coupling offers a fruitful vision of the futures of textiles (Simonson, 2008, 8).

Considering skin as a material, designer Amy Congdon is fascinated by a future world where materials are not made, but grown and luxury goods are fashioned from skin cells, not fabric. Her work, Biological Atelier, imagines the sorts of jewellery and adornments that could be created, through biotechnology.

Inspired by Ellis Developments embroidered implants for orthopedic surgery, Congdon's research explores not only the opportunity for producing the ultimate in bespoke, culturing our skin, our largest organ, in doing so, but is forging a line of enquiry into the parallels to be drawn between the textile design studio and the laboratory.

Working between these sites for practice and experimentation, Congdon has begun to develop a hybrid language based on a recent residency at SymbioticA Australia – the infamous research centre that facilitates biological arts collaborations. Famed for the provocative artworks of its director Oron Catts, whose projects include the production of Victimless Leather through the Tissue Culture and Art (TC&A) Project, seeking to 'deconstruct our cultural meaning of clothes as a second skin by materializing and displaying it as an art object' (Victimless Leather, 2014). Congdon's practice extends this mode of

thinking through her 'semi-living' structures. Other designers featured in the *Crafting Anatomies* exhibition, drawing parallels between skin and cloth, the body and dress, included Juliana Sissons and the collaborative network sKINship.

Sissons, a couture pattern cutter and knitwear designer has fashioned garments using plastic surgery 'cut and construct' techniques. Developed from observations of surgeons at work in the operating theatre, she explores the materiality of skin – in particular its grain to inform fit and to accentuate form of the garments that she creates.

This cross-disciplinary dialogue, developing between seemingly disparate body-centric worlds, has stemmed from Sisson's collaboration with sKINship, a consultancy whose expertise lie in facilitating interactions between medical and design related fields.

sKINship's aim is to develop access for designers to medical contexts. It applies the languages of materials and making to connect its collaborators, whom in this case are bespoke pattern cutters and reconstructive plastic surgeons. Similarities in stitch, cut and construct techniques and the ability to visualize the human body, working between 2 and 3 dimensions are just some of the places where these professions collide. Sissons, in her application of surgical technique to cloth, is quite literally performing fashion surgery through the garments that she creates.

Exploring anatomies beneath the skin's surface, Dr Amanda Briggs-Goode and Dr David Fairhurst explored forensic examination techniques of blood at crime scene investigations.

This collaboration between a textiles designer and physicist, resulted in innovative fashion print concepts informed by the visual impact of the drying process on droplets of blood, documenting the phases of change that the droplets underwent – particularly noting the rheology, the crystallization process and how patterns form on the surface.

Briggs-Goode was drawn to these images for their pattern and textural qualities, which questioned traditional ideas of 'identity' and 'sampling' within the fields of forensic science and textile design. For Briggs-Goode, the process of working with a physicist has opened up a new dialogue with the origins of images and the various ways that we can document and visualize the body. The outcomes emphasize the opportunities for designers and scientists, both of whom are seeking new lenses to visualize the human body, through wider access to cutting edge imaging technologies.

'Emerging designers are now hybridizing computational and material languages and challenging the established understanding of surface, textures and skins.'
(Harris, 2013, 245)

Other works in the *Crafting Anatomies* exhibition that emphasized the translation and interpretation of complex medical imaging data, to offer specific solutions in clinical settings included projects by Richard Arm and Julian Ellis – whose research highlights the role and importance of hand and digital crafting knowledge to synthesize 'scientific' data in the creation of pioneering devices for the body.

Arm, interprets and translates the tissue densities of the human body to craft phantom organs to train cardiac surgeons while Ellis, applies machine embroidery techniques, incorporating precision engineering, design and manufacture processes to create components that inform the repair and enhancement a damaged shoulder.

Both inventions serve to reduce the duration of operating times through informing the planning and conducting of surgical procedures. When viewed out of context however, these support structures exist as beautifully crafted sculptures.

Additional featured artists, whose work underpinned the materiality of the human body within *Crafting Anatomies* included Emma Montague and Veronica Ranner .

PERFORMANCE

In the context of performance, the body was explored in *Crafting Anatomies* through the development and testing of fabrications as second skins within fashion, sport and science. Interactive accessories, controlled through the performative actions of the wearer were presented alongside projects that monitor our emotional response or connectivity with such devices.

Exploring future contexts for wearable technologies, *The Human Harp* project, developed by Di Mainstone, literally turns its wearer into a human harp. When attached to the wires of a suspension bridge, the architectural garment allows the wearer to 'play' the bridge by translating the structure's vibrations into sounds.

Mainstone's practice, stemming from conceptual fashion design, celebrates the true nature of collaboration. Fearlessly combining disciplines, she engages multiple audiences and stakeholders globally, to make the unimaginable, imaginable. The actions and expressions of the human body are amplified at a truly gargantuan scale with fashion becoming a conduit to performance and engineering.

Also focusing on the intricacies of human expression and performance, yet in stark contrast to Mainstone, exhibitor, Marloes ten Bhömer, has studied anatomy in detail to inform future concepts for footwear design.

In her film *Material Compulsion* (2013), Ten Bhömer systematically conducts a series of experiments in which the complex biomechanics and forces that are exerted on the human foot are graphically visualized using high-resolution motion capture techniques.

A female foot, adorned in a towering stiletto heel, is shown precariously navigating differing material terrains – cake, jelly, oil, foam and coal are just some of the structures that the foot encounters.

What is mesmerizing about this piece - displayed during the *Crafting Anatomies* exhibition as a large scale projection - is the visual recognition, in slow motion, of the two-way interaction between body

and matter - the integral role that footwear plays as a structured interface between the two.

Collating accurate data, through this performance, to utilize in future designs for footwear, Ten Bhömer playfully comments on both physical and social pressures exerted upon the body.

Fascinated by the subtle and dramatic movements of the body, artist and exhibitor Fo Hamblin investigates the intricacies of human expression – this time however in the context of her own body – that of a maker.

A project with production company, R&A Collaborations, *The Choreography of Making* (2015), commissioned for the *Crafting Anatomies* exhibition, visualized the unspoken languages of embodied craft knowledge through filming the installation of a large scale textiles piece over the course of five days.

Exploring methods for communicating this process, using stop frame animation, the artist describes her experiences during the project.

'The maker's arm span creates the nucleus of the piece and is an opening from which materials and the body extend, connect and transform. The form allows threads to contain space, playing with the idea of boundaries (body/space/materials) and relationships.'
(Artist's statement: Hamblin, 2015)

Dissecting not the subtle languages of the performing body but that which is embedded within its adorning dress, was the focus of a featured research project by Dr Katherine Townsend, Dr Sarah Kettleby and Sarah Walker.

Seeking to study the past, to inform and shape the future (Bailey, 2008), *The Electric Corset and Other Future Histories* emphasizes the importance of examining fashion archives as a resource to inform the design of wearable technologies. Through their selection of key garments from the historical dress collections held by Nottingham City Museums and Galleries at Newstead Abbey, it became apparent that wearables are not solely developments of the late 20th and early 21st century but are present as concepts integrated into historical artifacts. (As was the case in terms of the Victorian advertisement for an 'electric corset' which inspired the title).

Following a number of exploratory visits to the archive and through consultation with the curator, Judith Edgar, different items, including a corset, livery coat and four different collars, were selected for their functional and aesthetic design qualities and potential to inform contemporary products. The project sought to communicate and the represent the ensuing practice-led research, as an integral, choreographed aspect of the creative design process, how this involves numerous actions and takes many forms. The resulting film, shown in the exhibition, reflects the creative and collaborative nature of the practice: from entering the archive, photographing and recording pieces (that cannot be touched) and the empirical work carried out in ideation sessions combining e-textile components, images and wearable prototypes. The project poses a methodology for looking back to move forwards; how studying wearable technologies across time can inform the way that we connect with such devices.

Other Crafting Anatomies exhibitors, whose work is underpinned by performative aspects of the body include Boudicca, David Gates and Lois Pittman.

Identity

Constructions of identity within Crafting Anatomies looked to the genetic building blocks of the physiological form and psychological self, through interpretations that reflect on how we craft our identities with reference to gender, culture and dress.

'We are invited to play this game of fashion, and perform our identity through our choices of dress.' (Entwistle, 2010, 26)

Exhibitor, Ania Sadkowska proposes a phenomenological approach to explore the experience of ageing, fashion, gender and identity - Her research aiming to develop a deeper understanding of human actions, where fashion and clothes, as the communicators and mediators between self and society become the key to understanding ageing male identities. In Crafting Anatomies, Sadkowska exhibited three creative responses in the form of customised

jackets, to reflect different themes emerging from her case studies, including 'Peacocking', 'Dis-Comforting' and 'Mirroring', which she has identified as key male behavioural traits. Sadkowska observes that it is precisely in the context of mundane everyday practices that the phenomenological understanding of the lived body can emerge. (Sadkowska, 2015)

'Identity is a modern obsession and fashion has become a particularly modern way to articulate components of it. There is, however, no straight forward relationship between them.' (Entwistle, 2010, 26)

Personal narratives that are embedded within clothing are also explored within the works of exhibitor Shelly Goldsmith in her collection 'Every Contact Leaves a Trace' (Chisum, 2000). The title for this project, taken from the pioneering forensic scientist Dr Edmond Locard, forms the starting point for her exhibited works, Mothers Touch.

Funded by The Wellcome Trust in 2008, her research project explores the phenomena of serial killing, particularly when acted out by women. Goldsmith, working into reclaimed garments, seeks to explore aspects of the self in material evidence at crime scenes, being particularly interested in how personal narratives of our lives may be read from this. Applying photographic images to carefully selected garments, using dye sublimation techniques, the artist seeks to visualize the physical and psychological state of a garments wearer in cloth.

Also exploring traces of human existence, exhibitor Amanda Cotton, questions the beauty of our material make up in her practice that views human traces of dirt and bodily bi products as portraits of the self.

In Portrait, 2013, Cotton created a visual diary from face wipes that she used during a three-month period to remove the make-up and natural oil from her face, questioning whether this "mask" is indeed dirt or beauty.

Cotton has also collected bodily bi products to innovatively create composite materials, including her

own ear wax, urine and human hair to create jewellery and other fashion items. The Artist is careful to utilize the waste materials of her own body, enabling her to consent fully to its use within the experimental works that she creates. In contrast to Amy Congdon, however, whom must adhere to laws imposed by The Human Tissues Act, receiving only donated material from tissue banks where anonymity and informed consent are strictly controlled and regulations imposed upon profit being made from any products created.

Practitioners like Cotton and Congdon challenge the very boundaries where design and science converge. Could their speculative applications for human tissue, in non medical fields, inform new laws for tissue use under the human tissues act?

From crafting human tissue of the body itself to mimicking its material qualities, this essay concludes with a powerful representation of how craft has meaningfully reconstructed the identities and lives of individuals - conveyed in the works of Ocularist, John Pacey-Lowrie.

Experiencing visual impairment himself since birth, Lowrie hand crafts ocular prosthesis and has done so for 35 years.

Building relationships with patients over consultations that span a lifetime for some, Lowrie uses a combination of casting, moulding and hand painting techniques to construct these emotive objects.

Traditionally crafted from glass, prosthetic eyes now are created using acrylic resin. Digitally printed prostheses are also entering the market, made from calcium sulphate and acrylic and manufactured, at a rate of 150 pieces per hour.

Lowrie, unable to compete with this high level of output, undeniably triumphs over qualities of craftsmanship, colour matching and true likeness—emphasizing the importance of the skills of the maker and the value of face to face interaction between patient and clinician in this process. How long might it be until digitally printed ocular prosthesis surpass Lowries abilities? Might there be fundamental flaws currently in this

digital process in the geographical disconnection between clinician and patient – impersonalizing the experience but perhaps also offering an incorrect reference point for manufacturers. Lowries practice questions whether the professions of prosthetist and tailor really that dissimilar?

Other exhibito exhibitors whose work reinforces narratives of identity include Karen Ingham, Sandra Fruebing and Aminder Virdee.

CONCLUSION

The Crafting Anatomies exhibition has celebrated the diversity of contexts that contemporary designers and makers are now operating in and in doing so, has opened debate around the future role of creative practitioners within scientific, technological and engineering fields. This has been with reference to The Crafts Council's Manifesto on making in innovation (Bennett, 2014) running parallel to their Make Shift summit held in Nov 2014.

The curation of the exhibition has also overlapped with themes raised in the Power of Making exhibition 2011, particularly in terms of it being an ingenious assemblage of 'things' that in many cases highlighted the diverse nature of craftsmanship employed by artists and artisans in relation to the defining and articulation of the human body.

However, whereas Daniel Charney presented 'everyday objects of desire' and the 'ordinary as unpredictable' (Glover in Townsend, 2013: 118), the Crafting Anatomies team of curators presented the reverse of this, often revealing unusual responses and unpredictable outcomes, informed by fundamental and in some cases, basic human functions.

The exhibition also highlighted a return to 'the body' in informing how we design and make for it, particularly through accessing varying imaging techniques to understand this entity from a variety of new perspectives – the materials, mechanics, psychology, and expression.

Significantly, Hamblin acknowledged the notion of her body being: 'the fabric into which all objects are woven, and it is, at least in relation to the perceived world, the general instrument of my comprehension' (Merleau-Ponty, 1962: 235), a theme that permeated the exhibition.

Speculative projects within the show enhanced our understanding of the human condition, forging new relationships to be nurtured by future generations of practitioners. Innovative dissections of past technologies to inform and shape design futures have also offered new perspectives on wearable technologies.

In addition to the research outputs showcased within this exhibition, key trends in approaches to collaborative practice have also been recognized - an openness to collaborate, to take risks and synthesize abstract ideas, the ability to apply concepts to new and unexplored fields acting as prerequisites for successful interactions.

As well as being visually intriguing, the artifacts in Crafting Anatomies also made reference to the boundaries that exist within collaboration including hierarchies within disciplines, ethical regulatory guidelines, subject specific languages. These have been highlighted as areas to challenge through creative practice within emerging contexts.

It appears that we are only just beginning to uncover the true value of craft and design practice within and across unrelated fields – by acknowledging its role beyond its traditional applied realm. paying it its deserved due. However, for collaborative dialogues to evolve and be nurtured we must continue to develop imaginative routes towards fashioning the future body.

References

Bailey, P. (2008) 'Henry Wellcome the Collector', The Wellcome Trust website, [accessed 10 Feb 2015]

Bennett, J. (2014) 'Measuring the Craft Economy-Defining and Measuring Craft: Report 3.' [accessed 3 Mar 2015]

Chisum, W.J., & Turvey, B. 'Evidence Dynamics: Locard's Exchange Principle & Crime Reconstruction,' Journal of Behavioral Profiling, January, 2000, Vol. 1, No. 1

Curtis, S. (2014) '3D Printed Human Heart to Help Trainee Surgeons', The Telegraph [accessed 2 Feb 2015]

Entwistle, J. (2010) 'Fashion, Clothing and Identity: A Modern Contradiction. Exhibition catalogue - Aware: Art, Fashion, Identity' 2010. Bologna: Damiani Editore.

Harris, J. (2013) Textile: The Journal of Cloth and Culture, 11(4), p. 242-261.

Merleau-Ponty, M. (1962) 'The Phenomenology of Perception', London: Routledge.

Simonson, C. (2008) Textile: The Journal of Cloth and Culture – 'Skin or Cloth', 6(3)

Townsend, K. (2013) 'Let Actions Speak Louder than Words, Review of the Power of Making: The importance of being skilled', Craft Research, Volume 4:1, pp.115-121, Intellect, UK.

Victimless Leather (2014) 'Victimless Leather - A Prototype of Stitchless Jacket grown in a Technoscientific "Body"'. [accessed 14 Feb 2015]

Maja Gunn, Annika Enqvist in collaboration with the group MYCKET Exclude me in – Redressing Space through a Carnavalesque Act

Sweden

The Swedish School of Textiles/The New Beauty Council

ABSTRACT

This paper discusses Exclude Me In – an artwork in which we turned the streets of Gothenburg city into a public queer¹ club – through the collective act of a performed carnival float on September 6th 2013. Critical fiction² and projections of possible futures were used to make it, as well as conceptual and norm challenging design. History, our own time, and the future met here in a re-enactment of real and imagined events where bodies used the healing power of disguises to alter and repair history. Saving the past by creating a new collective memory and letting our alternative history writing into the City Archives of Gothenburg³. Exclude Me In was made by Annika Enqvist/The New Beauty Council and fashion designer/researcher Maja Gunn in collaboration with the group MYCKET. It was part of Anarkrew: An anti archives curated by Claire Tancons for the Gothenburg International Art Biennial (2013).

THE PERFORMATIVE AND COLLECTIVE ACT

Our collaborations often involve queer bodies, restaging acts, and consider the built urban environment in relation to the city and its immaterial, social aspects. How the city – as a realm of temporary coulisses, costumes and performative designs – can be thought of as possibly being re-dressed to enable us to become what we want. For example, creating inclusive, pluralistic and yet non-coherent and non-patriarchal situations. By using the concept of Carnival, we make power relationships obvious. This allows the individual to try on another form of mental clothing, a kind of 'mental drag', which goes beyond his or her normal identity. In our practices we are using art as

an approach in which the artist, instead of creating an image of a phenomenon, participates and creates relationships and changes in immediate, actual situations (Allerholm, 2010). We consider Carnival to be a meeting place, a bodily act, an architectural structure, a public performance, a transformation.

Our theoretical position is situated at the intersection of feminism and queer in which performative aspects of identity together with attentions to bodies and sexual practices play a central role (i.e. performativity⁴ by Butler, 1990, intersectionality⁵ discussed by Lykke, 2005; Chavez and Griffin, 2012; sexual heritage and space discussed by Ahmed, 2006; Probyn, 1996, queer and feminist performances by Diamond, 1996, 1997, Rosenberg, 2000, 2012 and clothes as queer identity markers, Geczy and Karaminas, 2013, Steele, 2013). We elaborate with performative⁶ acts to explore a deconstruction of hierarchal and heteronormative structures. Fashion and dress connected to politics and societal structures (see i.e. Hoskins, 2014; González and Bovone, 2012; Marzel and Stiebel, 2015; Paulicelli, 2004; Tarlo, 2010) as well as architecture theory (Grosz, 1992 and Rendell, 2006) are present notions throughout our works. For Exclude Me In we were also extracting theories of Carnival by a queerly reading of Bakhtin. We use the collective act and the transformational qualities in costumes to investigate the relationship between bodies and spaces in increasingly politicised public realms. By including social behaviour/context our design research highlights some of the complexity connected to clothing and simultaneously visualize the interaction between space, clothes, body and gender identity.

Exclude Me In's starting point is Göteborgskarnevalen⁷. We found it surprising that there was no materials about the carnival in the city's archives even though it was the biggest cultural event at the time. The inner city carnival had connected people from suburbs with the underground music scene.

Queer clubs is an important part of the queer culture and history. It is a meeting point, where queer bodies can act freely, explore and communicate with each other. Pride festival parades, which are also carnivalesque acts, have since then grown to become an important statement to make the queer bodies accepted and visible in the city.

We discovered a pronounced longing after a mapping and history writing of the recent queer history when talking to the queer community. Queer presence had been excluded from the city's official story, in a similar manner as the archival memory of the carnival itself. Through interviews, testimonies and articles we mapped the queer history of the city as well as in the carnival to re-enact it and stage it in a hybrid way⁸. We used the power of fiction⁹ to let the relationship between activities and spaces span over different times. Working from a queer feminist perspective we created a lost queer float of the carnival. The performative bodies, both historical and present, were central. For us, moving in public was important, since queer bodies have been excluded in public spaces and they did not have an explicit presence in the carnival. The carnival as masquerade – where everyone dresses up in characters – allows for a transformation of how bodies appear, act and are being perceived. In gender studies Masquerade is also used as a notion of gender performances (Butler, 1990). It implies that gender is not connected to a fixed reality but rather performed while it also potentially can be transformed and parodied (for example through the practice of drag) (Butler, 1990).

In Exclude Me In the city became a stage and the masquerade became a strategy for being able to shift between various identities, positions. This approach is about changing our idea of a place by infusing it with

another experience, creating another memory. In our performance we discussed how one could change the interpretation of spaces, places and histories through staging events with our bodies. The acts including a performative view on architecture¹⁰ and clothes as a transformative tool worked as a communicative setting, a norm creative exploration and an act full of joy and desire.

We framed the outdoor act; providing clothes and accessories the participants could redress in. We assisted participants, however, if desired, everyone could act freely to create an appearance on their own. Hence, the design and creation of dressed bodies became a collective act.

The designs were made from ideas of the cliché or stereotype of how queer bodies dress combined with aesthetics from the 1980's and 1990's when Göteborgskarnevalen took place. The costumes represented bike dykes, sport dykes, queer activists, rave community, drag in varied expressions, the outrageous and sexual body, flesh, pussy art and much more. There were references to queer related fashion as for e.g. a Jean Paul Gaultier inspired corset. Additionally we used up-cycled materials and mixed our craft knowledge with DIY (do it yourself) aesthetics, as a greeting to the past and the mix of expertise and amateurs back then. When creating the lost float of the carnival we also made banners representing all queer clubs in Gothenburg since that time. By highlighting queer spaces and bodies, the queer stories became visible and included – instead of forgotten – in the history, and in the collective memory.

When working with fashion and costume design we do not separate the object (dress) from the body – nor do we separate the dressed body from the context and space it is placed in. The bodily acts – how the design shapes and is being shaped through its' spaces – is performed through a collective act – a community performance in our work. With such notions we join Beatriz Preciado (2004:20-27) in her statement that "Artistic work and performing politics have no place in the individual body; rather they are always

a transformation of the limits between private space and public space. The performance is always and in all cases a creation of a political space". We used participatory design as an approach, to actively involve concerned stakeholders (the queer community) in the process, to ensure the experience meets the cultural, emotional and spiritual needs. It was a way to create a more responsive environment/situation. With the political dimension of user empowerment and democratisation we aimed at redefining the relationship between social and artistic activities since the method is not a design style but a way of "placemaking" and a process of social transformation where the art and design have the power to generate social change and bridge gaps. We see it as an ongoing re-configuration of public space. Bodies performing the queer batteria, is collectively creating new memories; a new consciousness, leaving traces of ever-changing social life.

Fashion theorist Patrizia Calefato states that the "body is undoubtedly the main place where stylistic transformations take place; the body, that is, in the grotesque sense of 'clothed body', where covering is carnivalesque protuberance, parodic second skin, openness and not delimitation or boundary" (Calefato, 2004:30). In queer culture, dress codes, cross-dressing, or the use of costumes is a frequent, important act. The clothes become a communicative tool, indicating how we want to be perceived. Dress is a gender marker and simultaneously a possibility to play with gender roles and sexual heritage. As Adam Geczy and Vicki Karaminas states in *Queer Style* "If clothing is a form of non verbal and visual codes which communicate certain characteristics or facts about the wearer, then the dress choices of alternative genders within a culture demonstrate a desire to be seen as someone else" (Geczy and Karaminas, 2013:20).

Carnival opens up for an exploration of style and appearances that can cut across both the institutional and subcultural boundaries. Bakhtin (1965) writes about the grotesque body that can involve characteristics of exaggeration, boundlessness and multiple transformations. The grotesque, argues

Bakhtin, "discloses the potentiality of an entirely different world, of another order, another way of life." (Bakhtin, [1941, 1965] 1993:48). The potential of grotesque bodies were present in our batteria through costumes with exaggerated proportions in combination with the shift of the artist and designer roles where everyone present could appear in the costumes from the preferences they in the moment felt to explore.

By looking at how Carnival transforms the city we can detect and understand what otherwise is invisible and does not fit in. Carnival can also go beyond social norms. It is, in this sense potentially, an accepting environment. We used the idea of Carnival as a method to create a multi-definable state, opening up for changed perspectives also aesthetically. Using the notion of art and performative environments as experiences rather than style driven¹¹.

IMAGINING FUTURES, RE-ENACTING HISTORIES

We are inspired by how architectural theorist Elizabeth Grosz talks about the relationship between architecture, bodies and cities. She means that the body is shaped by its surrounding – by family, society and built spaces such as the city (Grosz, 1992). Rooms create frames for how we move our bodies; our muscles are built up in certain ways depending on how we use them. Just as Grosz, we see the city as a complicated network, which is linked together by different social activities and relationships – both real and imagined. Grosz (1992) defines the relationship between the city and the body as a complex interplay in which neither of the two is predetermined; rather, they produce and construct each other in a complex way.

Also the in-between, ambiguous, vague and indefinable, seems to be threatening to many whether it is bodies, gender, places or materials we consider. However, these very qualities can also be seen as what make them worth putting our hopes to. Elizabeth Grosz (2001:93) talks about this quality of the in-between in positive terms. Aesthetics has

such an obvious presence during carnival – no one questions the fact that the city is a stage that should be decorated and that the costumes should go with it. Traditionally aesthetics has associated concepts on beauty with ideas of the beautiful as being consequent, something that is connected to an entity. The relationships between ugliness and evil, physical deformity and moral decline have on the other hand often been blurred or mixed up. Mark Cousins (1994, 1995) argues that the ugly belongs to the realm of the temporary as a contrary to the necessary and essential and Mary Douglas (1993) claim that dirt is something relative – objects are never dirty in themselves, but only classified as dirty depending on where they are located. This coincided with Julia Kristeva's (1982) theories on abjection and the powers of horror.

However, over centuries this very quality of ugliness seems to have attracted a long line of rebels, anti-movements and alternative groups through history. To deliberately embrace distortion and using ugliness has been a way of violating norms. To push for something undefined but undoubtedly new – and to force the mainstream representatives of the ruling zeitgeist out of their comfort zones. An example of this is the punk movement, but it can also be seen in parts of the modernist movement, which proclaimed a cult of ugliness as part of their program. And the title of the Italian and Russian Futurist manifesto was *Let Us Be Courageously Ugly*. If one looks at it from this perspective maybe these theories can shed some light on why activities like graffiti, carnivals, decoration and other temporal, un-structured and spontaneous actions can be so provocative and powerful. During Carnival rules of social engagement are suspended. The clothing and the setting create a stage for a different social behaviour, although there are of course all kinds of new social distinctions and hierarchies within the carnival setting still (Da Matta, 1991).

“At carnival time, the unique sense of time and space causes individuals to feel they are a part of the collective, at which point they cease to be themselves. It is at this point that, through costume and mask, an individual exchanges

bodies and is renewed. At the same time there arises a heightened awareness of one's sensual, material, bodily unity and community” (Bakhtin, [1941, 1965] 1993:10).

The act of including and actively negotiating the past and present comes from an exploration of how the question of diversity could be addressed as political theoretician Chantal Mouffe puts it in her book *On the Political* (2005) where she says that “...there is no possibility of society without antagonism”. Indeed, without the forces that articulate a vision of society, it could not exist. This is a way of looking at democracy as a platform for constant negotiation, and not a system of consensual culture. The same could perhaps be said about the relationship between art and architecture at large, between public and common spaces, the in between spaces of the city itself. It also indicates that a focus on inclusion and consensus in fact could be seen as a kind of structural oppression where it is hard to make diverging opinions heard. Architectural theorist Jane Rendell (2006) proposes a related idea when she describes the challenges of having cities planned from the principle of the smallest common denominator. She claims that everything becomes impersonal and non-offensive to the extent that it doesn't fit anyone anymore.

In this queer exploration of *Exclude Me In* we investigate dressed bodies as architecture – creating a performance over time – meaning that we, with our own bodies, make the walls and floors, and create a movable space. Furthermore it is also an investigation of bodily transformations and the performative and political potential of dressed bodies. The challenge was to think actors, attire and architecture simultaneously in performative enactments, which create meaning. Clothes, make-up, accessories, facades, properties, rooms and buildings are read as different in scale rather than belonging to different categories. Together they provide and sustain the norms and normalcy of a particular situation, however, they can also act as disguises and curtains, which are pulled to set the play in motion.

Our performance – the present bodies as well as the knowledge of the queer bodies before us – and the collective experiences of movement, words and communicative acts among bodies, relates to Bakhtin's writings about the dialogical (transl.1988) and further the term intertextuality discussed by Julia Kristeva (1980). It includes an idea that words and text are connected to a historical meaning, including the notion that in our language is a collective experience embodied, and that we both are in dialogue with earlier text as well as the human history. If you transfer the dialogical connection to the text, as Bakhtin talk about, or the intertextuality term approached by Kristeva, to go beyond the words and also include other art forms, as i.e. fashion and performance – the carnival we created – is in an high extend connected to the historical context and so also a collective experience.

We used documentations from the Göteborgskarnevalen with fictional additions, such as a film from the archives where we added (pasted in) new materials from our outdoor carnival – a film sequence where the contemporary and historical agents meet. The film is named *History As We Know It*. It has also been added to the existing documents in the city archives.

Hence, *Exclude Me In* was an attempt to add a queer presence to the history of Göteborgskarnevalen. Our work was made as a proposal to fill in this historical void, which we experience in the revealed history of the carnival through its archive, by creating a new story, and let this re-written fictional history meet and effect the present.

However, perhaps the archive material that is unwritten, nor photographed or filmed, is the greatest challenge to highlight and explore. With *Exclude Me In* we wanted to make it possible to explore the queer carnival with your own bodies. Further, it potentially also made it become possible to explore yourself, your own body and transformation acts of redressing, cross-dressing and performing acts. *Exclude Me In* so created not only a restaging act of the past. It did not only reconstruct history through our material that was

placed in the city archives but it also created something in the present act. New memories, experiences and bodily acts present in the moment became archived in the participant's bodies. Hence the end of *Exclude Me In* is, potentially at least, a beginning of something new, a transgression we cannot control. As Chris Humphrey (2000:171) states in *Rethinking Carnival* in *Materializing Bakhtin* “Transgression, where it is found in contemporary popular culture and in the historical record, is a starting point, not a conclusion”.

References

- Ahmed, Sara, (2006) *Queer Phenomenology*, Durham and London: Duke University Press
- Allerholm, Milou, (2010) *Architecture in Drag in See the exhibition on a sunny day*, Jelena Rundqvist (ed), Stockholm:Konstfack
- Andrews, John, & Taylor, Jennifer, (1991) *Architecture. A performing art*, Oxford: Oxford University Press
- Bakhtin, Mikael. [1941, 1965] (1993) *Rabelais and His World*. Bloomington: Indiana University Press
- Bakhtin, Michail, (1988) *Det dialogiska ordet*, (transl. Johan Öberg), Gräbo: Bokförlaget Anthropos
- Bergsten, Johan, (2006), *År Göteborg en stad att leva, älska och verka i för alla? Samtal om HBT-personers livssituation i Göteborg*, Göteborg: Göteborg stad
- Butler, Judith, (1990) *Gender Trouble, Feminism and the subversion of Identity*, Routledge, New York and London
- Calefato, Patrizia, (2004) *The Clothed Body*, Oxford: Berg
- Carlson, Marvin, [1996] (2004) *Performance – a critical introduction*, New York and London: Routledge
- Chavez, Karma R., and Griffin, Cindy L, (2012) *Standing in the Intersection – Feminist voices, feminist practices in communication studies*, New York: State University of New York Press
- Cousins, Mark, AA Files, 28, Autumn 1994, p 61-64, AA Files, 29, Summer 1995, pp 3-6 and AA Files, 30, Autumn 1995, pp. 65-68, *The Ugly*, Architectural Association, School of Architecture, London.
- Da Matta, Roberto, (1991) *Carnivals, Rogues and Heroes: An Interpretation of the Brazilian Dilemma*, Paris: Notre Dame Press
- Dewey, John, [1934] (2005) *Art as Experience*: Perigee, Berkley Publishing Group
- Diamond, Elin, (ed.), (1996) *Performance and Cultural Politics*, London:

Routledge

Diamond, Elin, (1997) *Unmaking Mimesis: Essays on Feminism and Theater*

Douglas, Mary, (1993) *Purity and danger, An analysis of concepts of Pollution and Taboo*, 1966. London: Routledge

Dunne, Anthony, [1999] (2005) *Hertzian Tales – Electronic Products, Aesthetic Experience and Critical Design*, Cambridge and London: MIT Press

Geczy, Adam and Karaminas, Vicki, (2013) *Queer Style*, London: Bloomsbury

Gindt, Dirk, (2008) *Playing Activists and Dancing Anarchists: Men and Masculinities in Cultural Performances in Contemporary Sweden*, Stockholm: Stockholm University

González, Ana Marta and Bovone, Laura, (2012) *Identities Through Fashion*, Oxford: Berg

Grosz, Elizabeth *Bodies – Cities*, (1992) p 248, in *Sexuality and Space*, ed Beatriz Colomina, Princeton Architectural Press

Grosz, Elizabeth, (2001) *Architecture from the Outside – Essays on Virtual and Real Space*, The MIT Press Cambridge, Massachusetts London, England

Halperin, David, (1997) *Saint Foucault: Towards a Gay Hagiography*. Oxford: Oxford University Press

Haseman, Brad, (2006) *A Manifesto for Performative Research*, in *Media International Australia incorporating Culture and Policy*, theme issue Practice-led Research (no. 118):pp. 98-106

Hoskins, Tansy E., (2014) *Stitched Up: the Anti-Capitalist Book of Fashion*, London: Pluto Press

Humphrey, Chris, (2000) *Bakhtin and the Study of Popular Culture: Rethinking Carnival as a Historical and Analytical Concept*, in *Materializing Bakhtin* (eds Brandist, Craig and Tihanov, Galin), Oxford: St Anthony's College

Kristeva, Julia, (1980) *Desire in Language: A Semiotic Approach to Literature and Art*, New York: Columbia University Press

Kristeva, Julia, (1982) *Power of Horror, An Essay on Abjection*, Colombia University Press, New York

LaCapra, Dominick, (2003) *Bakhtin, Marxism, and the Carnavalesque*, in *Mikhail Bakhtin* (ed. Michael E Gardiner), London: Sage Publications

Lindholm, Margareta & Nilsson, Arne: (2002) *En annan stad - Kvinnligt och manligt homoliv 1950-1980*. Göteborg: Alfabetanamma

Lykke, Nina, (2005) *Nya perspektiv på intersektionalitet. Problem och möjligheter*, *Kvinnvetenskaplig tidskrift* 2-3

Marzel, Shoshana Rose, and Stiebel, Guy D., (2015) *Dress and Ideology*

– *Fashioning Identity from Antiquity to the Present*, London and New York: Bloomsbury

Mouffe, Chantal, (2005) *On the Political, Thinking in Action*, Routledge, New York

Paulicelli, Eugenia, (2004) *Fashion under Fascism – Beyond the Black Shirt*, Oxford: Berg

Preciado, Beatriz (2004) *Gender and Performance Art: Three Episodes from a Feminist Queer Trans Cybermanga*, No 54, *Arteluku*, San Sebastian, pp. 20-27

Probyn, Elspeth, (1996) *Outside Belongings*, New York: Routledge

Rendell, Jane, (2006) *In Art and Architecture – A Place Between*, London, New York

Rosenberg, Tiina, (2000) *Byxbegär*, Stockholm: Alfabetan

Rosenberg, Tiina, (2013) *Ilska, Hopp och Solidaritet*, Stockholm: Atlas

Saito, Yuriko, (2007) *Everyday Aesthetics*: Oxford University Press

Sauter, Willmar, (2000) *The theatrical event: Dynamics of performance and perception*, Iowa: University of Iowa Press

Schechner, Richard, ([1988] 2003) *Performance Theory*, London and New York: Routledge

Steele, Valerie (ed.), (2013) *A queer history of fashion: From the closet to the catwalk*, New York: Yale

Tarlo, Emma, (2010) *Visibly Muslim: Fashion, Politics, Faith*, Oxford: Berg

Notes

¹ In our work we relate to queer as a wide term that defines what is odd with the normal, normative and dominant (Halperin, 1997:62) and become so a challenge of heteronormativity. In *Exclude Me* In we specifically relate queer to Gothenburg's LGBTQ community that was not visible in the carnival in the 1980's and 1990's.

² Critical fiction is in our work used as a term related to critical design (see i.e. Dunne, 1999) where the design enlighten critical perspectives on objects and acts and simultaneously applies notions of ideology, social, cultural and sexual oriented affections. In *Exclude Me* In the creation of fiction – critical fiction – is made as a fuse between fiction and reality; the critical notions changes not only how we perceive the imagined past (the re-enactment) but also how we perceive the presence.

³ Regionarkivet takes care of information from the Västra Götaland Region and the City of Gothenburg. Documents which have been filed with the City of Gothenburg, and nearby areas Bohus County Council, Skaraborgs County Council and Älvsborgs County Council (now the Västra Götaland) are archived and stored in Regionarkivet.

⁴ Judith Butler (1990) talks about performativity in relation to gender; claiming that gender is a construction; performed. In *Exclude Me* In we played with gender roles; i.e. through the appearance of drag.

⁵ Even if this paper mainly discuss the notions of queer we relate to intersectionality as we consider sexuality, gender, class, culture and social structures to highly interact and affect each other.

⁶ The term performative is in our work applied in relation to theories within performance studies where a performance is not only present on stage but in everyday life through parties, rituals etc (see i.e. Diamond, 1996, 1997; Schechner, [1988] 2003; Carlson [1996] 2004, Sauter, 2000; Gindt; 2008). Performative does also in our work relate to performativity as discussed by Butler (1990), Brad Haseman's (2006) idea of the performative research as a third research paradigm (instead of the quantitative or qualitative research framework) that includes the working methods and practices of artists and designers defines our work not only as performative through the references of performance studies and performativity but through its artistic content.

⁷ Göteborgskarnivalen was a carnival in the 1980's and 1990's in the second largest city in Sweden, Göteborg/Gothenburg, located on the west coast.

⁸ We interviewed today's Gothenburg-based queer scene and also started to map the queer scene of Gothenburg from the middle of the 1990's until today. Local organizations include Fjollfront, Transmilitanta brigaden, Queerinstitutet, Pantrarna, Ingen människa är illegal, Fittcrew, Kvinnofolkhögskolan, Queerhotellet, West pride (and its opponents), Lesbisk festival, RFSL Cbg, HBT-Seniorema, Stolta föräldrar till hbtq, Regnbågen Transföreningen, FPES Vänner i väst – transpersoner RFSU Göteborg, Lucky Lips – kör, Hellmans Drengar – kör, Gays in Angered, GUTS Homan i Göteborg, HåbeteKu – hbtq-studenterna Göteborg, Utopia EKHO Elektra Göteborg, Amnestys HBTQ-grupp Göteborg, Club wish LM (Scandinavian Leather Men), Göteborg Intersex Scandinavia, Café Vulgo and clubs such as Feed the Horse and Bonanza. Articles which informed us was for e.g. from the two reports Bergsten, Johan: *Är*

Göteborg en stad att leva, älska och verka i för alla? Samtal om HBT-personers livssituation i Göteborg (2006), Göteborgs stad and Bergsten, Johan: *Är Göteborg en stad att leva, älska och verka i för alla? Del 2*. Ett samtal om transpersoners livssituation och djupintervjuer med sex stycken transpersoner Göteborg 2007, Göteborgs stad and from the book Lindholm, Margareta & Nilsson, Arne: "En annan stad - Kvinnligt och manligt homoliv 1950-1980". Alfabetanamma, 2002)

⁹ The power of fiction relates to our method to let the participants be part of an re-enactment. Through this restaging act – through the performance of bodies – fiction created something real.

¹⁰ We consider performative aspects of architecture as what the architect does rather than just being. See for e.g. Andrews, J. and Taylor, J., *Architecture. A performing art* (1991).

¹¹ For us, aesthetics are connected to how John Dewey talks about it in *Art as Experience* (1934). Dewey's "Hegelianism" is not separating the body from the soul (as in a modernist tradition) but seeing art as experiences, raising the question when is art? Rather than what is art? His ideas have later been developed by other philosophers with an understanding of art as physically embodied and also considering pragmatist aesthetics of the domestic domain in ways that have been neglected earlier. In feminist interpretations of aesthetics, such as the ones by Yuriko Saito (2007) bodily, commonplace and prosaic events, such as cooking are often considered. Saito emphasis the action-oriented nature of aesthetic judgment in everyday life and distinctions between fine and applied arts are not as strong. Saito's approach is inspired by environmental aesthetics concerning built or natural environments. However, her notion covers much more, for e.g. personal grooming, pet choice, and garden design.

Maja Gunn

On & Off – The Designer as a Writer

Sweden

The Swedish School of Textiles

Maybe. Maybe none of this is true.

Maybe it doesn't matter why; maybe all that matters is that.

That I try to understand but try not to feel too much.

That there is still something here that is you.

That I try to handle it, and this situation. That I do this through the things that are left.

One day for each thing. To put on and shrug off. Grab, take and talk.

I stand on a small wooden box.

I perform a monologue.

It is about a separation.

Me assuming things could have been different if I acted differently. If I just had done things differently it would be different.

Maybe.

I then start to read from my diary. Describing days when I dressed in your leftover clothes. Clothes that are the only things left of you here.

Clothes and memories. The bodily experience of you against my skin.

How you felt how I feel.



I stand on the small wooden box and I read:

Jeans day

I wear your jeans. They're stonewashed. I gave them to you as a gift.

Then they lay at the back of your closet.

Unwashed. I like that. I like that your body has touched the fabric and that it touches me now. It's almost as if our bodies are meeting again. This is as intimate as we get now.

There are two receipts in your pocket. You bought a sandwich from a café. You bought halloumi at the grocery store.

The receipts are dated December. In December, everything was different.

The jeans are soft. I can feel that you had them for a long time. I can feel that you didn't wash them. The waist is too big. I need a belt for them to stay up. I find one of yours in the closet. I tighten it hard.

I don't do anything in particular while wearing your clothes.

I act no different, but there is a satisfaction in it; not the kind one gets from touching someone or falling in love, but a satisfying calm. In your clothes, I am in balance.

It is as if being reminded of how things were then makes it easier now.

Basketball day

When we started seeing each other you always wore basketball shorts at home. You owned several

pairs. I think they reminded you of how fit you were during high school. I always thought you looked so young in them. Too young, but cute.

You wore them when you cleaned my apartment. Or maybe it had become our apartment by then. You cleaned it all the time, and my family was very impressed by that. They thought you were the best. I was inclined to agree with them.

You slept in your shorts, or put them on first thing in the morning. I do that too now. They are soft, but far too big. It's too cold to wear them during the winter. Sometimes I wear a second pair on top of the first, to stay warm. One pair is not washed. There are some unidentifiable stains on them. I sometimes fantasize about what caused them. I wear the unwashed shorts closest to my body. I sleep in them. They have gone from being yours to being mine.

The clothes embody the other (you). The text embodies the clothes.

I claim that language can also be clothes. When I write I do that in a role of a designer. My text is the design work. Fashion is words, images and objects. It is imagination and desire. Bodily oriented. Identity markers.

The relationship between appearance and identity (Kaiser, 1990; Davis, 1992; Craik, 1994; Holland 2004; Arvanitidou and Gasouka, 2011) makes clothes an important external appearance tool in the confrontation with others. Through clothes, we try to understand the other's internal self. Hence, if we feel insecure in ourselves, it is possible that this will affect our relationship with our dressed body. The appearance of dress – how we communicate through our dressed bodies – is not static, therefore not easy to read. As I am applying the idea of 'written clothes' – text as clothes and clothes as text – the vocabulary of dressed bodies is of importance. However, such a vocabulary is interpretable, and affected by mood and emotions (Dodd, Clarke, Baron and Houston, 2000).

As is discussed by Arvanitidou and Gasouka (2011), if dress is considered to be a material culture with a visual communication element (Crane and Bovone, 2006) – in my case as a text and a performative act – it also needs to be understood carefully, as it can be interpreted in multiple ways and so easily be misread. What we do with words (Austin, [1955] 2009; Fellman ([1980] 2003) relates in my work to what we do through clothes. I join Shoshana Fellman ([1980] 2003) and Judith Butler (2004) in following Lacan's idea that body and language are intertwined. The body – the text – involves both an individual and social body, where my experiences – archived in my body – when written and spoken become part of a collective history (Stoltzfus, 1996).

"We say something, and mean something with what we say, but we also do something with our speech, and what we do, how we act upon another with our language, is not the same as the meaning we consciously convey. It is in this sense that the significations of the body exceed the intentions of the subject" (Butler, 2004:199).

In On and Off, the text stages a scenario in which clothes are embodied. The text is written in a diary format, a description of an act developed over time. The story is not necessarily narratologically logical or linear. The text was performed as a monologue, with me as the performer, meaning that my role as designer became similar to that of the performance artist. Within performance art there is a tradition of the artist performing their own texts. Subject's role and the exploration of the relation between the female body and subjectivity are visible in feminist art through the language: both linguistic and visual (Phelan and Reckitt, [2001] 2012).

In fashion it is very rare that the designer displays their work with their own body, and instead models perform the work. When enacting such a shift, with me as both the designer and the performer, I not only extend the designer's role but embody the work. In this sense it can also potentially create an awareness and acceptance among bodies, where the performer

of the design does not belong to the criteria of size but to other criteria – in this case that of being the sender, the maker, and the performer of a speech act. This is made as an elaboration with the perceptions of text and the designer's role. Through the monologue, I narrate a performative act in which I embody the text and elaborate with language and power through the entering of new spaces.

The super-small turquoise shorts' day

Once, I gave you a pair of super-small turquoise shorts. I told you to wear them when running. I told you, you would look sexy in them. It was with reluctance that you put them on. You said they were cool and that you would wear them. I could tell that you were lying. I could see in your posture that you felt uncomfortable wearing them. You took them off and put them in a drawer. I never saw you wearing them again.

I've considered taking up running. I think it would do me good. I would like to learn to run fast and swift in the forest. I would like to run with tanned legs and the wind in my hair.

I try on the super-small turquoise shorts. They fit okay, but my legs are winter dry and pale. Something about the feeling is missing. It's not as I expected it to be.

Red sweatpants day

You used to wear them at home. Soft and red, with an elasticized waist. I wear them when I go shopping on Sunday mornings. No-one gives me odd looks then.

I buy almond milk and bread and bananas. The money, carelessly crumpled in my pockets, forms what looks like lumps on my thighs.

They are so innocent and harmless, those pants, as if the wearer is incapable of harm. There is no room for threats, in those pants. They will never hurt me. That's what I thought then. Perhaps unconsciously, but still.

Now I think that it was naive of me to think that way. Of course a pair of soft red pants can lie.

In On & Off, the powerful self was partially absent. The text indicates that the other has a fundamental role in the acts related and performed by the self. In this dependent situation, the other achieved their power through the absence of his or her body. The use of words, the text, became a means of making explicit the absent and highlighting the power relation between the self and the other. At the moment in which the text was being performed, the self took command of the story and the situation. The design – the text and the performative act – thus created a shift of power. In this shift, aspects of desire were embodied; the ambivalence of desire and the power of who desires who, in what context and under which conditions.

In On & Off, clothes were used to create intimacy and to understand and relate to an emotional situation. The clothes became a way of understanding a scenario, a tool with which to recognize emotions and to pass through emotional stages. They worked as reminders of the past and an awareness of the present. Thus, the clothes were a way to move forward.

The design carries the emotional. Feelings are explicit through the design. In On & Off, the design and the emotional are related to each other. What is said and how it is said is tightly connected. The text never makes clear the person's gender identity, even if the self was performed and written by me. The invention of a real or fictive character easily connects to the assumptions, stereotypes and norms we commonly relate to. For this work, I encourage the reader to think beyond such limitations. The other could be of any gender identity.

The body's understanding of its surroundings and the experiences it has perceived are the basis for memories and knowledge. On & Off is an attempt to try to verbalize the bodily experience. The use of self-reflection and the private has a tradition within feminist art (see Lindberg, 1995; Nyström, Andersson,

Jensner, Livion Ingvarsson, Werkmäster and Östlind, 2005; Phelan and Reckitt, [2001] 2012; Rosenberg, 2012). The personal is political – a commonly used concept. It departs from an aim to highlight women's experiences (Rosenberg, 2012) as these are not only individual, but collective. It also relates to the idea that you have to understand in what way you are alienated – and to understand this, you first have to understand yourself. Simultaneously, the ability to take space, position yourself and make yourself heard is a privilege (Ahmed, Kilby, Lury, McNeil and Skeggs 2000:17). I had the opportunity to take such space in On & Off.

"Women's performance art has particular disruptive potential because it poses an actual woman as a speaking subject, throwing that position into process, into doubt, opposing the traditional conception of the single, unified (male) subject. The female body as subject clashes in dissonance with its patriarchal text, challenging the very fabric of representation by refusing that text and posing new, multiple texts grounded in real women's experience and sexuality" (Forte, 1988).

Vest day

You got the vest from work. I remember the spring when you got it. I think the sun was shining. I think we still liked each other.

I remember trying it on. It fit as if it was my own. It was double-breasted, made of wool. Maybe you thought it looked better on me; you never wore it after that. It just hung there entirely forgotten.

Before you moved out, I hid it in my closet. Maybe we both felt that it looked better on me. I thought that maybe I should not ask, as you might say no, just because you felt that you had to. Argue that what was yours would stay yours, and what was mine would stay mine. That we should not share, and think, and like the same things any more.

I go to a dyke club and feel hot wearing it.

I wear tight black pants and heavy boots. I wear a black cap.

I don't look attractive the way you used to want me to, I think, and then I think that it doesn't matter.

I get compliments and make new acquaintances, and the vest is with me the whole time, and soon it will be spring again, and a year will have passed without you missing it.

I join writer and researcher Mara Lee in her explanation:

"[...] how the body is crucial in our production of meaning. That bodies create meaning. That our bodies not only are differentiation, but that they make a difference. Even within writing. And if the reader dares to admit such a difference, that becomes rewarded with a richer reading experience, even if this is not necessarily as comfortable.

In other words; in reading and writing, meaning becomes political in a different way than in everyday life, and the lenses that we usually apply when we meet Others become partly reformed. Or, expressed differently; if we write with our bodies, there is also an assymetric but comparable way of reading – to read with the body, with the effects, instincts and the things we don't want to feel related to. Doing this, our bodies start to talk. My body, the body of images, but also the reader's body.

[...]

It is the risk that consists of exposing oneself, but that can mean that I instead expose the Other to a risk; don't risk anything, and in the worst scenario: exploitation of Other's bodies.

I take that risk" (transl. from Lee, 2014:12-13).

Alike day

I used to think that we were alike.

I have a series of photographs on my computer, of us wearing near-identical clothes.

I used to think that we were such a good match.

That you were like me, only different.

You bought a jacket just like mine. You imitated me.

A bomber jacket; black, with an orange lining.

I wear yours now, instead of mine.

We're not so alike anymore. It makes no sense.

Sometimes, when I'm wearing your clothes, I think that I would understand you better if I became more like you.

Maybe if I become like you, I will understand.

You cannot change others, only yourself, the shrink says. I always wear your clothes when I see her. Anything else would be senseless.

Sports socks day

I try to avoid being too close to you. I limit your presence. Today, only sports socks. You often wore white ones. They were brown underneath, dirty from the insoles of your shoes. A little worn at the heel, and with a seam over the toe. The ones I wear are thick and black. You only have a few of them. The cuffs of the socks are slightly ribbed, and would reach to above the calf if I pulled them up; but I don't. They sag by my ankles. Before, I used to think that they were comfortable. Now, it feels as if they don't fit me any more. They are covered by my pants and heavy boots.

They're invisible. I cannot see you. You don't exist. I don't want you.

I'm starting to feel sick of you. Your attitude towards me. It makes me wonder about your ability. The way you treat other people. The way you lie about who you are. It makes me wish so many things undone.

I've stopped believing in you. That is what I tell myself. I will not protect you any more.

Applying linguistic ideas of clothes (Barthes, [2004]

2006) while simultaneously discussing language in relation to queer, I suggest that the fashion narrative – written and performed – can take varied shapes, go beyond our fixed ideas of identity and storytelling and so challenge ourselves and our languages. If design is all this – if fashion can embody such a variety – it should also have the potential to be the most unexpected.

When creating the acts and writing in this text, there has been a balance between literary and critical interpretation – the in-between spaces and the words that make us understand. It might be that when you ask me a question, you do not get a clear answer. This balance between communication and integrity means that I will not give you everything but I will give you something, and that something might be a lot and can perhaps grow even further into something new. Because design and language and identity are not static.

"Clarity is of no importance because nobody listens and nobody knows what you mean no matter what you mean, nor how clearly you mean what you mean. But if you have vitality enough of knowing enough of what you mean, somebody and sometime and sometimes a great many will have to realize that you know what you mean and so they will agree that you mean what you know, what you know you mean, which is as near as anybody can come to understanding anyone" (Stein 1947:127).

The designer is a writer but you can interpret the language in a varied way. Sometimes the design communication might be clear to you, sometimes not. Sometimes it will help you make you feel gorgeous and great and sometimes you will lie through your clothes or become the person you wanted, the person you missed, or the one you wished you were.

References

Ahmed, Sara, Kilby, Jane, Lury, Celia, McNeil, Maureen and Skeggs, Beverly (eds), (2000), Transformations: Thinking through Feminism,

London and New York: Routledge

Arvanitidou, Zoi and Gasouka, Maria, (2011), Fashion, Gender and Social Identity, London: First Fashion Colloquia

Austin, J.L, [1955] (2009), How to do things with words, Oxford: Oxford University Press

Barthes, Roland, [2004] (2006) The Language of Fashion, transl. Power Institute Foundation for Art & Visual Culture, Oxford: Berg

Butler, Judith, (2004) Undoing Gender, New York: Routledge

Craik, Jennifer, (1994) The Face of Fashion: Cultural Studies in Fashion, London: Routledge

Crane, Diane, and Bovone, Laura, (2006) Approaches to Material Culture: The Sociology of Fashion and Clothing, in Poetics, 34, 319-333

Davis, Fred, (1992) Fashion, Culture and Identity, Chicago: Chicago University Press

Dodd, Christopher., Clarke, Ian, Baron, Steve. & Houston, Vicky, (2000) Looking the Part: Identity, Meaning and Culture in Clothing Purchasing – Theoretical Considerations, in Journal of Fashion Marketing and Management, 4, 41-48

Fellman, Shoshana, [1980] (2003) The Scandal of the Speaking Body: Don Juan with J.L Austin, or Seduction in Two Languages, transl. Catherine Porter (orig. Le Scandale du corps parlant: Don Juan avec Austin, ou, la seduction en deaux langues) Stanford: Stanford University Press

Forte, Jeanie, (1988:40) Women's Performance Art: Feminism and Postmodernism, Theatre Journal, p. 220

Holland, Samantha, (2004) Alternative Feminities – Body, Age and Identity, Oxford : Berg

Kaiser, Susan B., (1990) The Social Psychology of Clothing and Personal Adornment, London: Macmillan

Lee, Mara, (2014) När Andra skriver: skrivande som motstånd, ansvar och tid, Gothenburg: Glänta produktion

Lindberg, Anna Lena, (ed), (1995) Konst, Kön och Blick, Stockholm: Norstedts Akademiska

Nyström, Anna and Andersson, Louise, Jensner, Magnus, Livion Ingvarsson, Anna, Werkmäster, Barbro and Östlind, Niclas, (2005) Konstfeminism, Dunkers/Riksställningar/Liljevalchs

Phelan, Peggy and Reckitt, Helena (eds), [2001] (2012) Survey in Art and Feminism, London: Phaidon

Rosenberg, Tiina, (2012) Ilska, Hopp och Solidaritet, Stockholm: Atlas Stein, Gertrud, (1947) Four in America, New Haven: Yale University Press

Stoltzfus, Ben, (1996) Lacan and Literature: Purloined Pretexts, New York: State University of New York Press

Shweta Joshi

The Drapes Unsung, the Ornaments Uncherished

India
NIFT

ABSTRACT

“One [has] to sense the trend of history and precede it.” – Elsa Schiaparelli

Dress, is an essential part of human experience. Perhaps because of its closeness to the body, dress has a richness of meaning that is an expression of the individual as well as groups, organizations, and the larger society in which the person lives. It is also reflective of social processes such as fashion systems, political conflicts, hegemony, technological changes, organizational evolutions, generational experiences as well as cultural change in general. Understanding dress history helps explain its origins, its present state and its cultural significance. (Damhorst, Miller and Michelman, 1999).

Throughout the ages, clothing was categorised as either “tailored” or “draped”. A tailored garment would be sewn together and worn closely to body, in contrast to a “draped” garment, such as toga that doesn't require sewing.

Draping is the process of transforming a cloth into a three dimensional form. The art of draping dates back to 3500 BCE, beginning with the Mesopotamians and Ancient Egyptians. Greek fashion followed with the invention of draped silhouettes like the chiton, peplos, chlamys and himations. The Etruscan and Ancient Romans invented the toga, a length of fabric that wraps and drapes around the body.

Many designers love the art of draping because their designs come to life as they manipulate the fabric on the dress form. Even though a designer may start out with a design sketch, during the draping process a

new and more interesting design usually takes shape (Sterlacchi, 2013).

In this research paper, the researcher is exploring and analysing the viability of an alternate future for fashion, by focussing on the need to develop newer techniques in draping which could create a sense of acceptability for women in terms of sizing and body image and at the same time create a link between mythology and a modern approach.

For this study, the methodology includes a theoretical approach of compiling the data from historical archives as well as a study carried out to understand body image. The rise of negative body image is alarming. To challenge this, the researcher has used present draped dresses like pareo, sarees and kilts to determine whether, for larger sized women, they could create a sense of equality amongst women and let them have a positive body image. This leads to an alternative future for a new set of garments through the exploration and revival of the craft of draping, which could cater to the sizing issue.

HISTORY AND OVERVIEW OF DRAPED DRESS

As mentioned earlier there were only two types of garments historically: tailored and draped. Tailored garments were first developed by the Northern European cultures: the Celts, Britons, Gaels and Normans. Tailored garments helped these ancient people survive the extremely cold weather conditions. These costumes were cut into shaped pieces and sewn together to fit the body more closely. On the other hand draped clothing is made from lengths of fabric that are wrapped around the body and require

little or no sewing and predominates in the warm climates. With few exceptions, ancient world garments were draped.

Whether in Rome, Greece, Egypt or Mesopotamia, draping was considered the most civilised way to dress. It was the art of the elite to gracefully arrange the folds of elegant togas and other draped garments. Chantal Boulanger's research into Indian draped clothes has revealed a fascinating insight into ethnic origins and perceptions of the body, and above all, a multidimensional craft which remains basically unexplored. Despite a rich history, the art of draping has been totally ignored or even disparaged (Tortora and Eubank, 1989).

It is believed that only six primary "hearths of civilization"-areas in which combinations of sophisticated technological innovations and social institutions flourished – have occurred relatively independently on our planet. Two of these were in the Ancient Near East - Mesopotamia and Egypt; two further to the east: Indus Valley and China; and two in America: Andes and Mesoamerica. For the subsequent cultures of the Western European world, the Ancient Near East represents a direct heritage, just as the descendants of the other civilization reflect aspects of their own earliest beginnings.

Throughout Ancient Egypt's long history, all women – as well as men and children – wore a triangular loin cloth secured to the body with cord ties. The variety of ways in which Egyptian female costumes could be draped was enormous. The garments remained simple, accentuating the squareness of the shoulders, the narrowness of the waist and hips, and elongation of the figure.

The Minoan Dress for men consisted of short, wrapped loincloths/kilts – often with decorated borders – secured at the waist by tight, cinched belts. The dress for the women was even more elaborate, consisting of bell shaped skirts.

The Greeks were cultural exporters, setting standards that included a manner of dressing where the

sleeveless, draped tunic was the basic attire.

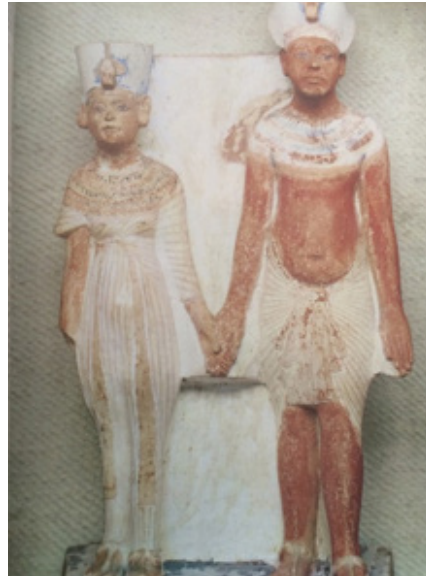


Fig. 1 Akhenaton and Nefretiti, painted relief. Eighteenth dynasty

All civilian Greek clothing reflected various ways of draping rectangles of linen or wool that, after wearing, could be smoothed, folded and efficiently stored flat. The simple linen chiton – usually worn belted – was the primary garment for Greek men and women of all periods. The women also wore a main outer attire – peplos, a rather heavy woollen rectangle folded vertically and then wrapped around the body with an over fold at the top that allowed for adjusting the length of the garment to fit the wearer. The beautifully draped clothing of Classical Greece emphasized the contours of the human body.



Fig. 2 Dancing girl from Herculaneum. Naples

From the Greeks the Etruscans adopted the use of flat cloth for clothing, as well as the way in which they wore these woven rectangles. Though the difference in their drapes was with the way they tend to express their respect for an individual by fully dressing the figure unlike the Greek's clothing philosophy of "less is more".



Fig. 3 Agrippina. Imperial Period. Rome

In case of the Roman dress, they made a distinction between garments that were "put on – indutus" and the garments that were "wrapped around – amictus". Men, women and children all dressed in the same basic garment, the tunic. These chitons were attached at the shoulder by brooches or by buttons and were mostly belted. They had various ways of wearing these tunics, peplos, palla. (Anawalt, 2007)

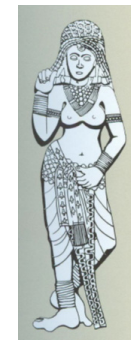


Fig. 4 Yakshi. Barhut, Mauryan Period

Among the varieties of Indian garments, scholars Moti Chandra and G. S. Ghurye have identified three separate pieces of draped clothing – the uttariya, the antariya, and the kayabandh – as components of ancient Indian feminine attire as seen in figure 4. Woven as independent garment units, each of the three components of the draped ensemble is evident in a myriad range of wearing styles and names corresponding to the provenance and period of historical analysis (BHOWC, 2006).

In an age of commercialised global monoculture, many people are working to preserve our vulnerable cultural heritage of ancient arts and crafts. Of these, the beautiful art of draped clothing is especially at risk. Draping is ephemeral. It is almost entirely unrecorded and the techniques exist in the hands and minds of skilled individuals. Draped clothes are not stitched or cut to fit, but wrapped around the body, using simple panels of cloth arranged according to the sensibilities and needs of the individual.

DRAPED DRESS: A VISUAL IMAGERY CREATING A SENSE OF EQUALITY

The draped dress as a fashion saw its own set of ups and downs. From being the most popular style in history since 3500 BCE, to reaching near obsolescence by the 19th century, to bringing it in focus by the likes of Madame Gres, Charles Worth and Madeleine Vionnet. These dresses create a sense of visual imagery which has inspired works of art over the centuries and created a whole mythology around the draping of the nude form. They have trained the viewer's eye to see the body as most harmonious when draped in cloth. Hollander says "the nude body and draped cloth became essential elements of idealised vision; they came to seem correct for conveying the most valid truths of life, entirely through the persuasive force of their appearance in works of art rather than through the original significance attached to them in real life" (Hollander, 1993). Art has taught us to appreciate the "natural" beauty of cloth and the natural beauty of bodies. It is this mythologizing of Greek dress as "natural" that plays an important part in inspiring Madeleine Vionnet and other designers, who like her

saw classical dress as the most appropriate form to adopt and adapt in the first half of the 20th century (Hollander, 1993). Issey Miyake wrote in the foreword of the book “Madeleine Vionnet”, that upon seeing her work for the first time, “the impression was similar to the wonder one feels at the sight of a woman emerging from bathing, draped only in a single piece of beautiful cloth.” (Kirke, 2012).



Fig 5 a (left): Works of Madame Gres displayed at Musee Bourdelle, Paris
 Fig 5 b (right): Madeleine Vionnet's draped Grecian Dress

The first half of 20th century saw the rise of neo-classicism. Classicism presents a façade of effortlessness. It demands a return to the essential elements of fashion design: body and textile. It is revered within western culture as an emblem of simple, natural truths – the beauty of geometric forms draped upon supple flesh – yet it takes considerable skill to create and wear. Vionnet's work can be considered as a cipher, linking mythologies of classicism and modernism within a specific historical context. Vionnet said in 1937: “My efforts have been directed towards freeing material from the restrictions imposed on it, in just the same way that I have sought to liberate the female form. I see both as injured victims; and have proved that there is nothing more graceful than the sight of material hanging freely from the body. I've created an element of balance in my material so that the lines of a dress are not marred by any movement but emphasised. “In Vionnet's eyes, fabric had been limited by traditional cutting techniques, which literally restricted the female form and were also symptomatic of woman's restricted role in western culture. By freeing the fabric she was also freeing the woman, enabling her body to be revealed and celebrated, unhampered by bourgeois notions of

modesty and decorum. In an interview to Marie Claire in 1937 she said, “...As such my aim has been to teach my clients to respect their bodies, to exercise and to have disciplined approach to their health, discarding any items which might constrict and deform them” (Arnold, 2001).

Because the body is so rarely seen without clothing, dress and body are closely connected; so there is a need to address the body in a discussion about dress. The 1997 body image survey result by D. M. Garner reports that 44% women are not satisfied with their body image. Also, most women are trying to achieve the impossible. Standards of female beauty have in fact become progressively more unrealistic during the 20th century. In 1917, the physically perfect woman was about 5ft 4in tall and weighed nearly 10 stone (Damhorst, Miller and Michelman, 1999). Even 25 years ago, top models and beauty queens weighed only 8% less than the average woman, now they weigh 23% less. The current media ideal for women is achievable by less than 5% of the female population – and that's just in terms of weight and size. If one wants the ideal shape, face etc., it's probably more like 1% (Fox, 1997). Joan Brumberg, author of *The Body Project*, notes that the female ideal, and the pressure to achieve it, have become unrelenting. Not only are women encouraged to be thin, they are presented with a physical ideal that is diametrically opposed to the softness and curves more natural to the female body. With the high percentage of dissatisfied women, the sizing of clothes adds to their interpretation of the ideal body image. If only a garment would not continuously remind her of her size, and we have garments which could fit most sizes, it would help create a sense of equality as it won't set a size 0 and size 14 apart. A same draped dress could help cater to a wider range of women, thus not making them judge themselves by the ideal size created by the media. Also the other issue which sizing sees is that standard sizing has never been very standard, ever since custom clothing gave way to ready-to-wear. “For the consumer to go out and navigate which one I match with, is a huge challenge, and causes frustration and returns,” said Tanya Shaw, an entrepreneur working on a fit system.

“So many women tie their self-esteem to the size on the tag.” As the population has grown more diverse, sizes have become even less reliable. Over the years, many brands have changed measurements so that a woman who previously wore a 12 can now wear a 10 or an 8, a practice known as “vanity sizing”. Take a woman with a 27-inch waist. In Marc Jacobs's high-end line, she is between an 8 and a 10; at Chico's, she is a triple 0. And that does not consider whether the garment fits in the hips and bust (Clifford, 2011). Thus, one can see immense disparity in perception of body image among women. The effects of this negative body image are profound.

The researcher has studied sizing of tailored garments and sizing segments involved in draped dresses. A comparative study between both has shown a remarkable difference between the sizing segments. For a tailored garment the sizes were seen to have a girth increment of 4cm-5cm between consecutive sizes. Table 1 shows the size conversion in women's clothing across standard sizes in various countries.

S-M-L	USA	UK/AUNZ	ITA	FRA	GER	JAP	RUS
S	2	6	38	34	32	7	40
SS	4	8	40	36	34	9	42
M	6	10	42	38	36	11	44
MM	8	12	44	40	38	13	46
L	10	14	46	42	40	15	48
LL	12	16	48	44	42	17	50
XL/1X	14	18	50	46	44	19	52
1X/2X	16	20	52	48	46	21	54
2X	18	22	54	50	48	23	56
3X	20	24	56	52	50	25	58
3X	22	26	58	54	52	27	60
4X	24	28	60	56	54	29	62

Table 1: International size conversion chart – dresses, jackets, coats and blouses for women's wear. Courtesy: www.sizeguide.net

Thus, a tailored dress could be seen in over 10-14 size segments. At the same time a draped dress like a saree caters to and fits impeccably on all sizes. A recent research carried out by Dr. Madhavi Indraganti also states that a saree is all-weather wear. A saree comes either as six yards or nine yards. The two sizes are to cater to different draping styles and they tend to fit every woman. This in itself implies that one saree fits all sizes as the need to develop it in different sizes has not arisen. Similarly a pareo which originally comes from Indonesia is mainly seen in two sizes; one for the regular size and one for the plus sizes. This

creates only two size segments unlike 10+ segments created by a tailored garment. So the women have a broader segment in which probability of getting accepted with the rest is higher. Also one size peplos/togas, etc. fitted all sizes. Such a garment which fits various sizes helps make one feel at par with the rest, as the model and the wearer would be wearing the same size. This could reduce the discontent women have with their body image, as one of the tools of measuring the difference between the model and wearer is the size they fit into.

CONCLUSION

Think about what are you are going to be wearing tomorrow. How about next week? What about even next year or the one after? It's virtually impossible to predict what we will be wearing in a month's time let alone a year. The influences that shape what we wear today will continually change and what dictates our choices today will be different from tomorrow. “Who knows what clothes will be? Maybe an aerosol used to spray the body; maybe women will be dressed in coloured gases adherent to their body; or in halos of light, changing colour with the movement of the sun or with their emotions...” Paco Rabanne (1969). The essence of fashion is expression and experimentation; new techniques have been embraced for creativity and innovation (Lee, 2005).

During her late teens Vionnet focussed on the process of wrapping lengths of fabrics onto the body in the style of the Greek chiton. Through these experiments she explored the advances made in fabric technology during World War-I that had produced yarns that could be made into more supple fabrics. She had extra wide lengths of material created for her, to allow even greater drape. Vionnet's approach explored women's modern lives and sought to express an adult, liberated femininity. She was interested in the integrity of the materials she used. Thus a draped dress not only created a fashion statement and visual imagery through the free flowing fabric, but was simultaneously ancient and modern (Arnold, 2001). It is a perfect example of the fashion forecast by WGSN called ReMasters. It is revisiting the old masters with

a sense of modern and futuristic touch. Similarly, in one of Issey Miyake's many experiments to challenge garment creation, he rethinks how a dress might be formed. He transformed a single flat panel of cloth into a soft draped dress by substituting sewing with the smooth metal fasteners which were both functional and decorative (Styletheorist, 2013).

This research aims to create an awareness of the use of the history of costumes as a source of inspiration, reviving aspects to suit present day fashion and create design solutions for the problem faced by women when perceiving their body image. Using technology to spread awareness through blogs and videos would help encourage present day designers to create a new course of fashion. There is a need to reinvent the drapes and make a range of garments which can fit various sizes without creating size prejudice that are also easy to store. Such a paradigm shift in the world of fashion will help create an alternate future where the women are free of negative body image and start being more appreciative of their own body instead of trying to adhere to unrealistic ideals wrongly set.

References:

Alkazi, R. (1985) Ancient Indian Costume, New Delhi: Art Heritage.

Anawalt, P.R. (2007) The Worldwide History of Dress, London: Thames & Hudson Ltd.

Arnold, D.R. (2001) 'Vionnet and Classicism', in Clark, J. Vionnet, Costume Gallery.

BHOWC (2006) Draped Garments - A brief History of World Costume, 31 March, [Online]

Boucher, F. (1987) 20,000 Years of Fashion, New York: Harry N. Abrams Inc.

Clifford, S. (2011) Am I a size 4?8?10? - Tackling a crazy quilt of sizing., 24 April, [Online]

Damhorst, M.L., Miller, K.A. and Michelman, S.O. (1999) The Meanings of Dress, New York: Fairchild Publications

Fox, K. (1997) Mirror Mirror - A summary of research findings on body image, [Online]

Hollander, A. (1993) Seeing through Clothes, Los Angeles: University of California Press.

Kumar, R. (1999) Costumes and Textiles of Royal India, London: Christie's Books Ltd.

Lee, S. (2005) Fashioning the Future – Tomorrow's Wardrobe, London: Thames & Hudson.

Ribeiro, A. and Cumming, V. (1989) The Visual History of Costume, London: B.T. Batsford Ltd.

Sahay, S. (1975) Indian Costume, Coiffure and Ornament, New Delhi: Munshiram Manoharlal Publishers Pvt. Ltd.

Sterlacci, F. (2013) What is Draping? An Overview and History, 25 July, [Online]

Styletheorist (2013) The Wardrobe of Tomorrow – Fashion of the Future, 26 August, [Online]

Tortora, P. and Eubank, K. (1989) A Survey of Historic Costume, New York: Fairchild Publications.

Urbanelli, E. (ed.) (2012) Sciaparelli and Prada: Impossible Conversations, New York: The Metropolitan Museum of Art.

Goutam Saha, Satya Shankar Banerjee, Darniya Roy

Design of Future: an Invitation to Creative and Argumentative Designers to Debate on Designing Future Society

India
NIFT

THE MOMENT

“It was the hour before the gods awake
Across the path of a divine event”
-Sri Aurobindo

History of civilization creates few divine moments for its resurrection like the phoenix. These moments yield magic by bringing the inevitable future at present time through the imagination and creativity of few mortal human beings. The conference city, the cradle of Renaissance, will witness another moment of thought leadership by providing humanity a road map of a beautiful and sustainable future.

THE DREAM: DESIGNING THE FUTURE Ashes of the present Civilization

“Where is the life, we have lost it in living”
- T.S. Eliot

We are witnessing a mindless destruction of natural resources at an astonishing speed. Our model, Affluent Societies' single-minded pursuit of wealth and massive consumerism, led to tremendous exploitation of energy and other resources and materials through the years. Hyper industrialized technology driven society could not bring happiness, health, beauty and equity, rather alienation and depression become a global disease. Capitalism converted into crony capitalism and socialism turned into hegemony of the ruling classes. Nobel laureate Solzhenitsyn documented in his works about the fallacies of both the systems. Our education is yielding 'Hollow Man'. A highly educated person from our present education

system does not know the meaning and purpose of his life. Ethics and metaphysics take a back seat in modern day education system. Our lack of interest in classical literature and music made a void in our psyche to find happiness in small things. To pamper our uneducated mind, we have followed mindless consumerism.

Our cities are all aiming for growth like the megalopolis. These megalopolises enhanced problems like crime, alienations, stress, social breakdown, etc. In poor but large countries, these megalopolises create issues like mass migration into cities, mass unemployment, shortage in agricultural lands and labors, threat of famine and food crises. A person, after missing his land, society and relatives, becomes rudderless and unhappy (Schumacher, 1973).

We have seen two world wars and a prolonged cold war between two super powers and now witnessing dominance of few powerful nations. In many parts of the world, politics got criminalized. An honest person aims to be aloof from politics to maintain his dignity. Jingoism, in the name of nationalism, empowered by atomic weapons, is threatening humanity. Dangerous levels of inequality caused by political and economic powerhouses have become a fertile land for global terrorism.

It is undoubtedly true, with present levels of population, transport, energy usage, consumption, wisdom, mortality, education and political acumen, we cannot survive and sustain long (Guha, 2003, Gailbraith 1958).

THE DREAM OF PHOENIX

From the ashes of present civilization, our dream like Phoenix takes birth.

I am stronger than death and greater than my fate.
 My love shall outlast the world, doom fall from me.
 Helpless against my immortality
 Fate's law may change, but not my spirit & will.
 - Sri Aurobindo.

We dream for a further evolution of human being. The new kind of human being will explore the unknown inner world and deeper mental spaces. Every individual will undergo a transformation of consciousness to superior humanity or divinity. Society's role will be of ensuring this transformation in every human being. Avarice and greed will not be the motivator of human soul rather; they will be inspired by grace, elegance, diversity and beauty. Self-dependent micro cities in terms of food, energy and other required resources will be the future. People will not have to move from their sweet homes to get decent jobs or careers. Terms like career, job will be obsolete for these divine citizens. They will contribute according to their interests. With the power of consciousness and wisdom, every citizen would be a divine designer to contribute something innovative and value adding to the society. A pictorial representation of such a future, smart, sustainable city has been given below which may further strengthen our argument.



Picture Courtesy: Ms. Darniya Roy

THE DESIGN OF THE FUTURE CITY

Brief description of the symbols used in Design of the micro city: each zone is designed in the shape of petal

to signify harmony, peace and aspiration for divine consciousness.

Om: The spiritual laboratory is designed in the shape of Om, which is the greatest of all Mantras. Om is the life and the soul of all Mantras. Om is the source of all religions and scriptures. This sacred monosyllable is the means of liberation from the bonds of matter. It elevates the mind. It is a spiritual food and tonic. It is full of divine potency. Live in Om. Meditate on Om, Inhale Om. Exhale Om.

Lotus Petals: Inspired from 'Yantra', which is the nucleus of all the visible and knowable, where energies are concentrated, hence it will aid the concentration required during meditation. The Lotus is a symbol of "spontaneous generation" and so it also represents the divine Birth, spiritual development and creation of itself (Rawson, 2010).

Swastika: Perennial river is denoted by Swastika, which stands for auspiciousness, peace and prosperity. The river will flow spreading auspiciousness, peace and prosperity.

Recycling symbol: Sustainability is presented with the recycling symbol to show that the cultivation is aided with perennial river through solar energy generation. Heat is produced for cooking.

Yellow Circle: The yellow circle denotes Amphitheatre, meant for entertainment.

Colours signify the following:

Orange	Signifies Rooms in the Petals	Meditation	White	Peace
1	Sincerity			
2	Perseverance		Purple	Oneness with the God
3	Goodness			
4	Courage		Light Blue	Residences
5	Aspiration			
6	Progress		Red	Healthcare
7	Equality			
8	Peace		Yellow	Entertainment
Orange	Signifies Gardens of Spirituality and Meditation			
A	Existence		Grey	Small Sector Industries
B	Bliss			
C	Consciousness		Black	Knowledge accumulation and new knowledge creation
D	Life			
E	Light		Light Green	Playground and plantation of Banyan Tree
F	Power			
G	Wealth		Dark Green	Cultivation
H	Youth			
I	Gratitude		Dark Blue	Perennial River
J	Receptivity			
K	Humility			
L	Generosity			
M	Utility			
N	Harmony			
O	Perfection			
P	Love			

Every city will have different color zones like green zone to cultivate its food and beverage, grey zone for small sector industries, white zone for meditation and spirituality, blue zone for residence, black zone for knowledge accumulation & new knowledge creation, red zone for healthcare and lastly yellow zone for entertainment. In this newly designed collage of the human society, every citizen will get his/her occupation to contribute significantly in these zones and these zones will mitigate everyone's needs: but not anyone's greed.

Each zone will have organizations that are necessarily small. These organizations will be primarily co-operatives where profit will be shared. Small-scale entrepreneurship will provide a platform for individual brilliance. However, entrepreneurs with altruism are willing to share most of the profit to the rest of the people, as they are ready to take according to their need.

Each micro city will be connected to its fellow cities through superior sustainable technology and hence information flow will not be a challenge. People will be self-governed as they have very high moral standards, however, the citizens of micro cities will follow participative democracy. There will be no need of powerful governments and powerful corporations as citizens will be self-dependent, self-employed and self-governed. High morality, spirituality, and consciousness will help them to solve the problems of the earth.

Morality and value-based education will be the cynosure of education system. Apart from logical thinking and scientific rationalism, metaphysics and spirituality will also be a subject for development. Music, art and literature will be very important for the students, as education system will not be just utility driven. Getting enlightenment and developing super consciousness will be the major focus of education.

METHODS IN THE MADNESS: REASONING THE DREAM

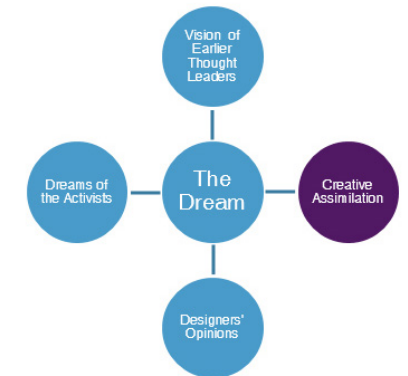
Our dreams have been formed through the inspirations of few thought leaders who have aimed to design the world in their creative ways. However, we

have selected thought leaders based on the following criteria.

1. These visionaries aimed to bridge a cultural gap between western and oriental civilization and tried to take the best from both the worlds for designing the future society of the human civilization.

2. These thought leaders were exposed to western education, but in their work, they significantly focused on Asia.

Our dream also has a resonance with a few other dream chasers of the present India. We identified these two activists as they are well exposed to the west through their education and job; however they decided to work in India to bring change in people's lives. Their exposure to west and their focus on India allowed them to think internationally. We have also chosen 50 professionally educated budding designers to know their views on the future of human society. These designers' pedagogy allows them to learn eastern and western design philosophies, heritage, culture, theories and practices. These future designers' dreams about the future society empower our vision.



Framework of the Dream

DREAM JOURNEY: VISION OF THE EARLIER THOUGHT LEADERS

Vision of Aurobindo

Rishi Aurobindo, educated in Cambridge, a revolutionary leader of Indian freedom struggle,

later converted in to a spiritual leader, envisioned for a human evolution. He believed that rising to the spiritual domain was our ultimate destiny. There would be “New Human Existence”. A divine life on earth would come surely as many individuals would be able to rise to the higher consciousness.

Sri Aurobindo asserted that present human civilization might not be the final point of the evolutionary scale. There would be new species or same humans. But they would be evolved to a new level. This newly evolved human being seems to be very different emotionally, mentally, spiritually and even physically. They will make a fantastic future of the world by solving societies’ problems with their newly found ‘super minds’ or ‘super consciousness’. Aurobindo’s spiritual partner, Mira Alfassa, developed “Auroville” as a future city of the world. Inhabitants coming from different parts of the world, made a new city form the barren land. They also experimented on personal growth and higher consciousness.

Auroville is a giant laboratory of experimenting Sri Aurobindo’s vision and newly found consciousness of human species. People are making residence, forests, agricultural lands, gardens, by their own effort in Auroville, where money is no longer required.

Auroville is a self-dependent city where people have aimed to solve their issues of health, education, food, shelter, clothing, medicine through excellent design, superior planning and execution with spiritual perspective. Auroville is not for any country rather it invites citizens from all over the world. At present Auroville have 2439 people from 50 nationalities (Posner, R 2014, <http://www.auroville.org>).

Vision of Gandhi

Gandhi dreamt of a world with self-dependent villages. Self-sufficient village would be the future where people will produce their food, clothing and their necessities through their body labour. He criticized capitalism, socialism, and powerful big nations. He envisioned a society where people will be empowered through their self-discipline and morality. According to Gandhi, the whole world will not be able to ruin these sort of self-sufficient villages because of their self-sufficiency and moral strengths (Friedman, 2008,

Gandhi 1927, 28).

Vision of Tagore

Tagore dreamt a world where cooperatives will play the central role of ethical production. Cooperatives will focus in ethical productions. In such a production system, producers themselves collectively own resources, such as land and capital. These would ensure that produce is collectively owned and all producers have a say in determining their shares of value in the product of their work. Tagore also has a spirit of internationalism. He dreamt of a place for future humanity where the world has not been broken up into fragments, narrow domestic walls (Mukherjee 2011, Dawson and Norberg-Hodge 2013).

Vision of Schumacher

Schumacher, in his book *Small is Beautiful* warned about big cities, big organizations, and big corporations as it yields dehumanization of people. To bring happiness in human lives, Schumacher dreamt a world of small firms. He envisioned, as a society, we would shift our focus from profit to health, happiness and beauty (Schumacher, 1973).

Vision of Helena Norber-Hodge

Helena Norber-Hodge, a linguist by training, was the first westerner in modern times to learn and master Ladakhi Language (Ladakh being a remote Himalayan city in India). In her book, *Ancient Future*, Hodge raised few important questions about our so-called progress of industrial society. In her book, she provided alternative solutions to human race on living a life embedded with nature. For the last seventeen years, she has been spending her half of the year in Ladakh, a place of few resources and extreme weather. Tradition of frugality, cooperation, coupled with location specific knowledge help the community to grow and prosper (Norber-Hodge, 1991, Shiva 1998).

Methods in the madness: Reasoning the dream

A few thought leaders who have aimed to design the world in their creative ways inspire us. However, we have selected thought leaders based on the following

criteria.

Leaders, who aimed to bridge cultural gap between western and oriental civilization and tried to take the best from both the systems for their design of the world.

All these thought leaders do not have any bias either towards socialism or capitalism.

We have also considered few activists who took education and a job in the west. However they decided to work in India to bring change in people’s lives. Their exposures in Europe and US and their focus on India allowed them to think internationally. We have chosen 50 budding design professionals who are learning fashion education in India. Their pedagogy allows them to learn oriental and western design philosophies, heritage, culture, theories and practices.

PRESENT DREAM CHASERS AND THEIR DREAMS

“I have seen the Eternal in a human face”

- Sri Aurobindo

Dr. Piyush Ranjan Rout, Facilitator, Innovation in city management of emerging economies

Dr. P.R. Rout did his Masters and Ph.D in Europe in the area of urban and city management. He has left his conventional career in Government and big organizations like United Nations and founded his not for profit organization titled Local Government Network to encourage innovation in city management and empower government leaders in enhancing their capacity to address the global challenge for bringing sustainable urbanization, low carbon lifecycle, peace and harmony. Dr. Rout is instrumental behind the changes in city wall painting, organizing street vendors, city level cycle tracks, public transport systems in different cities of emerging economies. Odisha Environment Congress conferred him Brand Environment Ambassador in 2014.

Vision of Dr. Piyush Ranjan Rout, Facilitator, Innovation in city management of emerging economies.

Dr. Rout envisions our future city where everything that individuals need would be available in the

neighborhood than depending much on imports. Secondly, the design of these cities will be friendly to children, women, youth and senior citizens. He believes future world will be more inclusive, and more cooperative. Governance and sustainability will replace the concept of career, profession, etc. People will compete more between the cities than nations.

Debal Majumder & Aparajita Sengupta, Co-Founder, Smell of the Earth

Debal Majumder, a software engineer by training and Aparajita Sengupta, an U.S. university PhD in Film Study, spent a good number of years in their respective professions in United States with their common passion in natural farming. They started their natural farm in a village nearby Shantiniketan, India, near Tagore’s birthplace. They are experimenting different natural ways of farming, promoting sustainable livelihood and mindful consumption through their lives.

Vision of Debal Majumder & Aparajita Sengupta, Co-Founder, Smell of the Earth

Debal & Aparajita envisioned a future one world with small self-dependent micro cities/villages abolishing the concept of nation or country. People will develop a new economic system with their own experiences, wisdom and transformed consciousness benefiting from both the capitalist and socialist systems.

Food, clothing and shelter will be produced and consumed locally in the absence of petroleum. Emphasis will be on local and indigenous diets and fibers, the majority of which would be derived from regenerated food forest ecosystems rather than agriculture. Healthcare would be free and widely available, and may include as many methods of cure as possible. Scientific plants/herbs based cures would be encouraged rather than big pharmaceuticals producing patented drugs. Transportation of goods would be minimal. Non-petroleum public transport systems would be encouraged. Entertainment would be open and creative but non-exploitative and non-discriminatory in terms of genders and class positions. Local and sustainable economies will ensure that terms like career and corporation cease to exist.

Professionalism might simply come to indicate responsibility, but in an environment where people work for their own good rather than to contribute to the pay cheque of the CEO, responsibility itself could be a more common phenomenon. Government might exist, but becomes much smaller and horizontal in structure rather than vertical/hierarchical. Similarly, politics might indicate one's position on a matter rather than struggle for power positions.

Bidesh Mondal, Founder of Uttaran (Development towards Humanity)

Bidesh Mondal has done masters in two disciplines i.e. Zoology and Management. However, even being empowered by westernized management and premier science education, Bidesh did not choose a career in multinational Pharmaceutical Corporation like many of his peers. Rather, he joined as a government servant to understand rural India. He runs a social organization for the betterment of human society. He also aims to develop future economic system theoretically and practically through another social enterprise and develop a forum for discussing and analyzing politico-economic matters for promoting rationalism and scientific logic in human society. His organization is in India, but is well networked with people of different countries.

Vision of Bidesh Mondal, Founder of Uttaran (Development towards Humanity)

Bidesh also envisions a world with small self-dependent micro cities, abolishing the concept of nations, country and private property. He dreams a world where people will contribute according to their abilities but take according to their need. Participatory democracy, philosophy of working class and democratic values are the major pillars of his ideal society. Real politics will play its role in the society, as religions, castes, colour, languages and associated power relationship will not divert people. Communes or people's cooperatives will play the major role in the society, not the state nor the government. Education will focus mainly on talent development and people will do their jobs for common interests.

CALCULUS OF DESTINY

We have chosen randomly 60 budding professionals randomly who are learning design education. Their pedagogy allows them to learn oriental and western design philosophies, heritages, cultures and practices. From the samples, collected randomly, our aim is to disprove the following null hypotheses.

Majority of the designers do not perceive future human civilization will not have any nation, country or very powerful government.

Majority of the designers do not perceive future economic system will be based on small firms and small independent businesses. There will be no big corporations or very powerful governments. People will earn accordingly to their need not accordingly to their greed.

Majority of the designers do not perceive, future workforce will work mainly from home or nearer to home.

Majority of the designers do not perceive reducing human greed and living life in a harmony with nature will deal emerging environmental crisis.

Majority of the designers do not perceive that health and education of the people would be taken care by government and small trust led by true philanthropists. We applied large sample Z test for testing the hypotheses.

Formula of large sample Z test

$$Z = (P-p) / \{p(1-p)/n\}^{1/2}$$

P= Proportion of the sample who perceive alternative hypothesis would be true

P = 0.5 (because we considered majority as our proportion criterion)

N = sample size = 60

Z = Z statistic

Z at 5% level of significance=1.96 (Malhotra 2010)

Hypotheses	Calculated Z value	Z at 95% level of confidence	Comparison of Calculated Z and Z at 95% level of confidence	Decision
Hypothesis 1	-1.056	1.96	Calculated Z<1.96	Null Hypothesis Accepted
Hypothesis 2	2.095	1.96	Calculated Z>1.96	Null Hypothesis Rejected
Hypothesis 3	3.379	1.96	Calculated Z>1.96	Null Hypothesis Rejected
Hypothesis 4	2.893	1.96	Calculated Z>1.96	Null Hypothesis Rejected
Hypothesis 6	3.274	1.96	Calculated Z>1.96	Null Hypothesis Rejected

Results of Hypotheses Testing

So, apart from 1, the entire four null hypotheses are rejected. So, we may conclude that the Majority of the designers perceive future economic system will be based on small firms and small independent business.

There will be no big corporation or very powerful government. People will earn accordingly to their need, not accordingly to their greed.

Majority of the designers perceive future workforce will work mainly from home or nearer to home

Majority of the designers perceive reducing human greed and living life in a harmony with nature will deal emerging environmental crisis.

Majority of the designers perceive that health and education of the people would be taken care by government and small trust led by true philanthropists. Though not majority, yet 40% of the designers perceive future human civilization will not have any nation, country or very powerful government.

INTRODUCTION TO A NEW ERA

Vision of Aurobindo, Tagore, Gandhi, Schumacher, Norber-Hodge, dreams of our selected modern day activists and budding designers converged to an eternal truth. We may sum up that spiritually uplifted people will solve all of their challenges through its newly found wisdom. In future, people will live in self-dependent micro cities where the citizens can satisfy their physical, psychological and spiritual needs without roaming the world. As Covey (2008) mentioned, after the information age, age of wisdom will emerge. Hindu mythology also predicted the emergence of the age of truth or 'Satya Yuga'.

Let us invite this age from the words of Tagore:

"Where the mind is without fear and the head is held high;
Where knowledge is free;
Where the world has not been broken up into fragments by narrow domestic wars;
Where words come out from the depth of truth;
Where tireless striving stretches its arms towards perfection;
Where the clear stream of reason has not lost its way into the dreary desert sand of dead habit;
Where the mind is led forward by thee into ever-

widening thought and action –
Into that heaven of freedom, my Father, let my country awake"
- Tagore (1904)

Let our world awake....

References

Covey, Stephen R (2004) The 8th Habit. Utah (USA): Franklin Covey Company.

Dawson, Jonathan Norberg-Hodge, Helena (2013) Cooperative Economics and Creating Community: Volume 13 (Best of Communities) Seattle: Create Space Publishing

Friedman, J.S. (2008) Mahatma Gandhi's Vision for the Future of India: The Role of Enlightened Hierarchy. Penn History Review, 16 (1)

Galbraith, John Kenneth (1958). How Much Should a Country Consume? in Jarret, Henry (ed.), Perspectives on Conservation, Baltimore: Johns Hopkins University Press, pp 91-92.

Gandhi, Mahatma (1927). Choice Before Us. Young India. 2nd June, published in Collected Works of Mahatma Gandhi, New Delhi: Publications Division, Vol 33, pp 417-418.

Gandhi, Mahatma (1928). Discussion with a Capitalist. Young India, 20th December, published in Collected Works of Mahatma Gandhi, New Delhi: Publications Division, Vol 38, p 243.

Guha, Ramchandra (2003), "How much should a person consume?", Vikalpa, Vol. 28, No.2, pp. 2-11.

Malhotra, N. (2010) Marketing Research: An Applied Orientation, New Delhi: Pearson Education, 6th Edition.

Mukherjee, Ananya (2011) Tagore and the Idea of Cooperation. The Hindu, July 2, 2011.

Norberg-Hodge, Helena (1991) Ancient Futures: Learning from Ladakh, Sierra Club Books.

Posner, Roy, Sri Aurobindo's Vision for future. [Accessed on 14.03.2015]

Rawson, Phillip (2010), The art of Tantra. 2nd Reprint Edition. London: Thames and Hudson, pp. 59-82

Schumacher, E.F. (1973). *Small is beautiful: Economics as if people mattered*. London: Blond & Briggs.

Shiva, Vandana (1988). *Staying Alive: Women, Ecology and Development*. London: Zed Press.

Shri Aurobindo (1939) *Life Divine*. Pondicherry, India: Sri Aurobindo Ashram

Shri Aurobindo (1971) *The Future Evolution of Man*. Twin Lakes, Wisconsin: Lotus Press

Sri Aurobindo (1993) *Savitri*, 4th Edition, Sri Aurobindo Ashram Publication Department

Tagore, R.N. (1912) *Gitanjali*, London: Penguin Publishers

Alice Payne

Writing Fashion's Future: the Gods And Monsters Of The Anthropocene

Australia
Queensland University of Technology

ABSTRACT

The world we live in is increasingly that of the human-made and human-designed, and the future of fashion will be shaped accordingly. This paper contrasts two notions of time: the geological epoch of the Anthropocene and the fleeting delight of the fashion moment to propose how fashion's future may be written. The Anthropocene is our present epoch, one in which humanity has been the prime shaper of the natural world. This god-like world-shaping prompts two narratives for the Anthropocene: in the first we are gods doomed to destroy ourselves; in the second we are gods who must and can 'get good' at being gods. Through discussion of future-looking fashion designers, brands, and activists, this paper explores how they may align along a spectrum to one of these two grand narratives of the future. The paper closes with a proposal of an ethic for designing and teaching fashion in the Anthropocene: how we write the stories of fashion's future.

WRITING THE ANTHROPOCENE

Humanity evolved in the Holocene, a geological era characterised by a relatively stable climate. In 2006, Paul Crutzen proposed the term 'Anthropocene' to describe the earth since the 1850s. Since industrialisation, humanity has moved the earth into a new geological epoch: the Anthropocene (Crutzen and Steffen 2003). The term reflects the way in which human activities have "grown to become significant geological forces, for instance through land use changes, deforestation and fossil fuel burning" (Crutzen 2006, 14). Indeed, the impact of climate change from fossil fuel emissions, the increase in nitrogen and phosphorus flows, ocean acidification, loss of biodiversity, chemical and air pollution,

and deforestation demonstrate the ways in which humans have radically altered the environment of the Holocene (Rockström et al. 2009). Our future in the Anthropocene has grave implications for human and animal life. Therefore how do we make sense of what it means to now be in the Anthropocene, and to be facing a world in which the conditions under which humans evolved are now deteriorating?

There are many ways to examine what living in the Anthropocene can mean, however two contrasting narratives can be isolated. Each narrative draws on mythic comparisons to gods and monsters to express humanity's dilemmas, albeit from different perspectives. The first is a Malthusian narrative of collapse and scarcity, brought about by the monstrous, unstoppable nature of human technology set loose on the natural world. In this vein, philosopher Slavoj Žižek (2010) draws on Biblical analogies, likening ecological crisis to one of the four horsemen of the apocalypse. To find a myth to suit the present times, novelist A.S. Byatt (2011) proposes Ragnarök, a Norse myth in which the gods destroy themselves.

In contrast, the second narrative is one of technological cornucopia. Stewart Brand (2009, 27), self-described 'eco-pragmatist' writes, 'we are as gods and we have to get good at it'. In his view, human technologies offer the only hope to mitigating the problems caused by human technology – Brand suggests harnessing nuclear power, bioengineering of crops and the geoengineering of the planet as the way forward. Similarly, the French philosopher Bruno Latour (2012, 274), exhorts us to "love our monsters", likening our technologies to Doctor Frankenstein's monster – set loose upon the world, and then reviled by his creator.

Latour writes, “We confuse the monster for its creator and blame our sins against Nature upon our creations. But our sin is not that we created technologies but that we failed to love and care for them” (2012, 274). For both Brand and Latour, human technology may be monstrous, but it can and must also be turned toward solutions.

Both positions align with the term post-environmentalism – an acknowledgement that attempts to ‘save the environment’ or ‘save the planet’ have failed, and we cannot return to the stable Holocene environment. In some circles of post-environmentalism, despair has given way to grief, and then to acceptance. An example is the Dark Mountain Project (2015), in which artists and writers respond creatively to the loss of the natural world.

In contrast, the post-environmentalism of Brand (2009) and Lynas (2011) argues that we must radically deploy technologies to garden, groom, and geo-engineer the world we have already changed. In this form of post-environmentalism, if we love our monsters and care for them, we can exercise our god-like ability to save ourselves. The book *The Sixth Wave* (Moody and Nogrady 2010) proposes we are on the cusp of a societal shift towards greener technologies, brought about by stiffer environmental regulations and changing norms in the face of crisis. The sixth wave will see an imperative towards reducing waste, increasing efficiency, and finding new ways to profit from these improvements (Moody and Nogrady 2010). Sixth wave innovations will be tools to monitor and map resources, clean technologies, and the development of services over resource intensive products.

Again drawing from the language of myth, the ethicist Clive Hamilton (2013) identifies two positions that relate to those above – the Prometheans and the Soterians. Named for the Titan who gave fire to humans, the Prometheans see technology as a force to enable mastery over nature. The Soterians approach is more cautious and humble, and recognises the hubris of technological determinism. Both positions will play

a part in writing fashion’s future.

FASHION, TIME AND WRITING THE FUTURE

It may seem strange to pair the grand century-long narratives of human society and technology with the fleeting fashion moment. However fashion has a long-standing relationship with the industrialisation that brought about the Anthropocene. Indeed, as Lipovetsky (1994) argues, the development of fashion is inextricably bound to the rise of capitalism and the city-state. The beginning of industrialisation is linked to innovations such as textile and spinning mills as well as the steam engine, and this past has shaped fashion today.

Fashion’s future was recently analysed in *Fashion Futures 2025* (Bennie, Gazibara and Murray 2010). The report examined fashion in 2025 against a backdrop of climate change, resource depletion and other factors, and proposed four scenarios for fashion in world that may be more connected / fragmented and faster / slower. The two more hopeful scenarios, *Techno-Chic* and *Slow is Beautiful*, saw a more ‘connected’ world, in which governments had sought to reduce carbon emissions and enforce more stringent environmental regulations to curb pollution and deforestation. However these two scenarios diverged in their approach to technological change and speed. In the *Techno-Chic* scenario, the future held opportunities for smarter technologies deployed to enable faster, cleaner production. The *Slow is Beautiful* scenario instead proposed a contracting economy in which hand-made and artisanal approaches to fashion production came to the fore. As the authors of the report acknowledge, these scenarios are not future projections, but rather ways to think about how the characteristics of the macro systems of culture, economy, and politics and how these may impact fashion’s future (Bennie, Gazibara and Murray 2010). However I argue that these two scenarios of the future represent the Promethean and the Soterian perspective: *Techno-Chic* as Promethean, and *Slow is Beautiful* as Soterian. These two contrasting narratives of the Anthropocene can also

be seen as shifting undercurrents through the work of contemporary designers, brands, activists and writers on sustainable fashion.

THE PROMETHEANS AND THE TECHNO-ENABLED FASHION FUTURE

In a techno-enabled cornucopian future of the kind discussed in *The Sixth Wave*, the fashion industry can embrace wearable technology, speed and efficiency, with all waste captured for reuse. Technologies such as waterless dyeing (see Yeh Group, Fig.1), 3D printing and self-cleaning garments have the potential to shift fashion into a new era of cleaner production. The fashion documentary *The Next Black* (Dworsky and Kohler 2014), sponsored by AEG, examines a spectrum of these technologies and their future for a sustainable fashion system.

Other recent innovations from fashion retailers such as Nike and G-Star Raw also point to the hopeful world of *The Sixth Wave*, in which waste becomes food for the next generation of products. G-Star Raw, in partnership with Bionic yarns, developed a denim line that used harvested ocean plastic as the feedstock for recycled polyester (Bionic 2014). Many other retailers have utilised both pre- and post-consumer recycled yarns in small collections. Technological improvement in recycling processes has seen open-loop recycled polyester grow in popularity in fashion garments. Nike has a goal to develop closed-loop systems (Fig.2) in order to efficiently recycle all its products, and sees a commitment to reducing waste as part of the trend towards a more sustainable economy in which commitment to social and environmental issues is “crucial to Nike’s growth” (Vogel 2012, 114).

In a more speculative bent, the work of Suzanne Lee (Hemmings 2008), Helen Storey and Tony Ryan (Dennis 2008) propose new paradigms for fashion materials, again with reduction or elimination of waste and pollution as a key goal. Lee has created garments that grow from kombucha, a symbiotic culture of yeast and bacteria (SCOBY), but takes this idea further to propose a future in which whole garments may grow or be repaired by harnessing the properties of the

SCOBY through biotechnology (Lee 2014).



Fig. 1 Waterless dyeing from the Yeh Group, featured in *The Next Black* (The Next Black 2014)



Fig. 2 Conceptualisation of recycling at Nike (Nike 2015)

These approaches to technology in fashion do hold hopeful approaches for a fashion future in the Anthropocene, one in which our technologies are mobilised to mitigate the problems our technologies caused in the first place.

THE SOTERIANS AND THE FUTURE OF THE USER / MAKER

Meanwhile, in the narrative of scarcity, a more cautious approach sees fashion return to a new localism and valuing of the hand-made in a time of shrinking resources.

Projects such as *Keep and Share* by Amy Twigger Holroyd (Fig.3), reinvest value in the old and worn through stitch hacking, and look to amateur fashion production as another paradigm for fashion distinct from the dominant model of mass fashion production and consumption (Holroyd 2015).

Relatedly, Otto von Busch’s in his work as a fashion activist aims to empower users to make their own garments (Fig.4) (von Busch 2012b).



Fig. 3 14GB, stitch hacked vest, Amy Twigger-Holroyd (Keep and Share 2014)



Fig. 4 Otto von Busch, Knit re-form fashion hack (von Busch 2012a)

In the high fashion context, Vivienne Westwood has taken an activist stance in calling for clothing to be valued once more and empowering users to 'do it

yourself' (Brown 2010). Westwood is quoted as saying, "Don't spend money, just take what you can find, take your old things, keep on wearing them" (quoted in Brown 2010, 192). This position aligns to some degree with the notion of 'slow fashion'. The British label Boudicca also aims to move beyond fashion's rapid change, and instead designs garments that are to be 'collected' rather than 'consumed' (quoted in Black 2012). Similarly the work of avant-garde design team Bless creates clothing designs that may not in fact be fashion, but simply clothing that exists outside of fashion cycles (Black 2012). These artisanal, slow and hand-made practices point to a Soterian caution in an approach to fashion's future. In this view, fashion's future in the Anthropocene cannot rely solely on the emergence of new and better technology, but rather requires a paradigm shift to transform conventional fashion production and consumption to new cultures of using, making and remaking. The work of Kate Fletcher (2010, 2011), Lynda Grose (2015) and Mathilda Tham (2015) on post-growth fashion has been instrumental in proposing these ideas in fashion scholarship.

HOW DO THESE MYTHS SHAPE OUR VIEWS AROUND THE FASHION OF TODAY AND THE FASHION OF TOMORROW?

Both the Promethean techno-optimism and the cautious approach of the Soterian narratives may unconsciously shape the perspective of both producers and users around the fashion of today and the fashion of tomorrow. Both pose stories written for fashion's future in the Anthropocene. In writing these stories, there is scope to present the narratives of the Anthropocene as ways to understand our predicament as a society and ways to live accordingly. The dominant model is arguably one of technological determinism, in which technology can be unproblematically proposed as a way of finding a way to live and produce in the Anthropocene. Yet technology must also be approached with Soterian caution.

The stories we tell about fashion today and the fashion of tomorrow are shaped by the unspoken ontological perceptions of what it means to be human. The work

of design philosopher Tony Fry (2009, 2011) has much to contribute in this regard. For Fry, human ontology is powerfully manifested in the entwined relationship of creation and destruction. For everything that is made, something is destroyed: this is the 'dialectic of sustainment' (Fry 2009, 7). Sustainment, then, is the act of continually 'making time' through redirecting all design practice towards this aim. Rather than an either / or position on technology as either saving us or destroying us, we need to acknowledge that both creation and destruction is part of our being and that sustaining ourselves will be an ongoing process of recasting our designed objects, environments and cultures. In fashion's future, we will create, just as we will destroy.

PROCLAIMING TOMORROW: TOWARDS AN ETHIC FOR DESIGNING AND TEACHING FASHION IN THE ANTHROPOCENE

I wish to close with a perspective we can take on the Anthropocene as designers and teachers. We are facing a world unravelling, and we have moved from the safe epoch of the Holocene to a radically uncertain one. Humanity has already fundamentally reshaped the world, disrupted weather patterns, ecosystems and species. So what is an ethic of making and teaching fashion in this epoch? Deploying new cleaner technologies, investigating efficient use of resources, returning to local artisanal production and valuing garments may all be part of future fashion practice, and each is important. But more important again is the reasons why we deploy these approaches.

Our god-like ability to shape the world brought us to this point, and our monstrous technology has created unprecedented wealth and well-being but also unprecedented destruction. While we can 'love our monsters' and direct our technologies towards renewal and rebirth, they may escape us and as in the myth of Ragnarök, we will destroy ourselves. As designers and teachers, we can consider these myths in our discussion of fashion's relationship with what was once the 'natural' world, but is now the Anthropocene. Our instincts may lie towards the Promethean or the Soterian, but more useful is a

synthesis of the two, in which we deploy technology with caution, and understand what Tony Fry calls the 'dialectic of sustainment': that for everything created, something is destroyed.

The actions of the designers, brands and activists discussed earlier are often framed as a desire to limit fashion's impact on the environment. However circumstances have moved us beyond sustainability – we cannot return to the Holocene. When we look at the macro sweep of human history that has brought us to this present point, the natural feelings are ones of despair and grief (Foster 2014). Action in the face of despair therefore becomes both an ethical and a pragmatic response. Pragmatically, living in the Anthropocene means seasonal disruptions of crops such as cotton, the necessity of finding other fibres and materials to work with, and potential limitations on fossil fuel use and increased environmental regulation. Designers and brands who can anticipate and have the flexibility to explore new materials, processes and approaches in these times may continue to thrive.

Paradoxically, while as a species we have exercised god-like power, as individuals we often feel pinioned and powerless by the scale of what human society has achieved and destroyed, and keeps destroying. So how do we individually live and design ethically, without succumbing to despair or apathy?

Selection of materials that will reduce harm, mindful choices in what we wear and what we design, how we can reduce or eliminate waste are all vital elements in both an ethical and pragmatic fashion practice. Crucially, we can do these things as part of a mindful practice, not because they will 'save' our environment. At a large scale, these actions may be forced upon companies or designers due to resource constraints, or changes in environmental regulations. At an individual level, these actions become an ethic to act and design without giving into despair or apathy.

CONCLUSION

Fashion is only one of the cultural, industrial and individual forms of human expression that is in the slow process of disruption due to the reality of living

in the 'new normal' of the Anthropocene. Fashion, like all industries, will be impacted by climate change, declining biodiversity, and water, energy and food security. In this context, fashion practitioners, wearers, and academics have an opportunity not to talk about fashion and sustainability as something that is achievable through changed practices or new technology, but instead to face our larger reality of an altered environment with realism and courage. Both the Promethean view of technology and the more techno-cautious Soterian view have influence in fashion practice today, and each can play a role in writing fashion's future in the Anthropocene.

References

Bennie, Fiona, Ivana Gazibara and Vicky Murray. 2010. Fashion Futures 2025: global scenarios for a sustainable fashion industry: Forum for the Future and Levi Strauss. Accessed March 6, 2010.

Bionic. 2014. "Material Science: Manufacturing Process." Accessed 12 July 2014.

Black, Sandy. 2012. The sustainable fashion handbook. London: Thames & Hudson.

Brand, Stewart. 2009. Whole earth discipline : an ecopragmatist manifesto. New York: Viking.

Brown, Sass. 2010. Eco Fashion. London: Laurence King.
Byatt, A.S. 2011. "Ragnarök: the doom of the gods." The Guardian (Friday 5 August 2011).

Cutzen, Paul J. and Will Steffen. 2003. "How Long Have We Been in the Anthropocene Era?" Climatic Change 61 (3): 251-257.

Dark Mountain Project. 2015. "The Dark Mountain Project." Accessed 12 January 2015.

Dennis, Sarah. 2008. "Materials Report Wonderland: the disappearing dress." Accessed 31 January 2014.

Dworsky, David and Victor Kohler. 2014. The Next Black. Accessed 12 October 2014.

Fletcher, Kate. 2010. "Slow Fashion: An Invitation for Systems Change." Fashion Practice: The Journal of Design & Creative Process 2 (2): 259-266.

Fletcher, Kate. 2011. "Post-Growth Fashion and the Craft of Users." In Shaping Sustainable Fashion: Changing the way we make and use clothes, edited by Alison Gwilt and T. Rissanen, 165 - 175. London: Earthscan.

Foster, John. 2014. After Sustainability. Abingdon, Oxon. and New York: Routledge.

Fry, Tony. 2009. Design futuring : sustainability, ethics and new practice. Australian ed. Sydney: University of New South Wales Press.

Fry, Tony. 2011. Design as politics. English ed. New York: Berg.

Grose, Lynda. 2015. "Fashion as material." In The Handbook of Sustainability and Fashion, edited by Kate Fletcher and Mathilda Tham, 223-233. Abingdon, Oxon. and New York: Routledge.

Hamilton, Clive. 2013. Earthmasters: Playing God with the Climate. Sydney: Allen and Unwin.

Hemmings, Jessica. 2008. "Grown fashion: animal, vegetable or plastic?" Textile 6 (3): 262-273.

Holroyd, Amy Twigger. 2015. "Openness." In The Handbook of Sustainability and Fashion, edited by Kate Fletcher and Mathilda Tham, 253-261. Abingdon, Oxon. and New York: Routledge.

Keep and Share. 2014. "14GB." Accessed 20 February 2015.

Lee, Suzanne. 2014. "Biocouture - What we do." Accessed 12 January 2014.

Lipovetsky, Gilles. 1994. The empire of fashion : dressing modern democracy. Kindle ed, New French thought. Princeton, N.J.: Princeton University Press.

Lynas, Mark. 2011. The god species: Saving the planet in the age of humans. Washington, D.C.: National Geographic Society.

Moody, James Bradfield and Bianca Nogrady. 2010. The sixth wave : how to succeed in a resource-limited world. Sydney: Vintage.

Nike. 2015. "Nike: A Better World " Accessed 18 January 2015.

Rockström, Johan, Will Steffen, Kevin Noone, Åsa Persson, F. Stuart III Chapin, Eric Lambin, Timothy M. Lenton, et al. 2009. "Planetary Boundaries: Exploring the Safe Operating Space for Humanity." Ecology and Society 14 (2).

Tham, Mathilda. 2015. "Futures of future studies in fashion." In Routledge Handbook of Sustainability and Fashion, edited by Kate Fletcher and Mathilda Tham, 283-292. Abingdon, Oxon UK and New York: Routledge.

The Next Black. 2014. "Waterless dyeing from the Yeh Group." Accessed 18 September 2014.

Vogel, Lorrie. 2012. "'Considered' is all about creating performance products for our athletes, but with a smaller environmental footprint." In The Sustainable Fashion Handbook, edited by Sandy Black. London: Thames and Hudson.

von Busch, O. 2012a. "Image of Knit re-hack." Accessed 18 September 2014.

von Busch, Otto. 2012b. "The Current State of Fashion." Accessed 12

February 2012. <http://www.kulturservern.se/wronsov/selfpassage/CSF/index.htm>.

ek, Slavoj. 2010. Living in the End Times. London: Verso.

IN COLLABORATION WITH



SPECIAL PARTNERS



UNDER THE PATRONAGE OF



SPONSORS



TECHNICAL SPONSOR



SUPPORTING THE OCCASION OF



PROJECT MANAGEMENT & PARTNERSHIP

CAPITALECREATIVO

FIRENZE • BERLIN

PRODUCTION TEAM

ARCHIVIO PERSONALE

MEDIA PARTNERS



PRESS OFFICE



POLIMODA

IFFTI CONFERENCE 2015

MOMENTING THE MEMENTO

Conference proceedings



EDIZIONI POLISTAMPA

Over the course of five days during Momenting the Memento, fashion was researched, explored and discussed by over 500 international delegates and guests, as the 2015 edition of the IFFTI Conference. Over 100 paper submissions were received and assessed through the themes and sub-themes of the conference, and 19 extraordinary works were accepted to be presented during the Conference, and to be published here.

IFFTI is the International Foundation of Fashion Technology Institutes, which includes 54 educational bodies from all over the world. This official publication of papers from the 2015 IFFTI Conference also marks the beginning of Polimoda's Research Hub, based in Florence, Italy; the first of its kind for the Institute with a focus on research and curatorial practice for fashion education and the industry.