The Superfluous and the Ephemeral:
Consumerism, globalisation and future fashion systems

Miranda Smitheram

Table of Contents

TABLE OF IMAGES 4
ATTESTATION OF AUTHORSHIP 6
ACKNOWLEDGEMENTS 7
INTELLECTUAL PROPERTY RIGHTS 8
DEDICATION 9
ABSTRACT 10
CHAPTER 1. INTRODUCTION 11
1.1 POSITIONING THE RESEARCHER 11
1.1.1 FAMILY 11
1.1.2 CAREER 11
1.1.3 POST GRADUATE STUDIES 12
1.2 INTRODUCTION OF THESIS 13
CHAPTER 2: CONTEXTUAL REVIEW 16
2.1. DISEMBODIMENT 16
2.1.1 CLOTHING AS DISCOURSE 16
2.1.2 FASHION AS EPHEMERAL 17
2.1.3 CONSUMER AS IDENTITY 18
2.1.4 DISENCHANTMENT OF THE CONSUMER 19
2.2 EMBODIMENT 20
2.2.1 CLOTHING AS IT RELATES OUT FROM THE BODY- MATERIAL CULTURE 20
2.2.2 CLOTHING AS IT RELATES TOWARDS THE BODY- BLOOD SWEAT AND TEARS 20
2.3 POST-EMBODIMENT: CLOTHING AS IT EXISTS AFTER THE BODY 21
2.3.1 SUSTAINABILITY AS PARADIGMATIC CONTEXT 21
2.3.2 INCLUSIVE AND OPEN-SOURCE DESIGN 22
CHAPTER 3. INFORMING METHODOLOGY 24
3.1 CRITICAL FRAMEWORK 25
3.2 DIGITAL AS A CONCEPTUAL FRAMING- THE DISEMBODIMENT OF PIXELS 25
3.2.1 MATTER INTO METAPHOR 26
3.2.2 DIGITAL MORPHING 27
3.3 DIGITAL PRINT AS EMBODIMENT OF METHOD 28
3.3.1 IS PATTERN SUPERFLUOUS? 28
3.3.2 DIGITAL CRAFT 29
3.3.3 PRIMITIVE PIXELS 31
3.4 DIGITAL MEDIA AS POST-EMBODIMENT 33
3.4.1 SUSTAINABILITY OF DIGITAL TEXTILE PRINTING 33
CHAPTER 4. PROCESSES OF MAKING 36
4.1 ESTABLISHING IMAGERY 36
4.2 DEFINING THEMES 38
4.3 CONNECTING THEMES TO IMAGERY 39
4.3.1 MATRIX BUILDING 40
4.3.2 'WORD STORMS' AND 'WORD SPARKS' 41
4.4 COLLATION 43
4.5 ADOBE PHOTOSHOP METHODS 45
4.6 DIGITAL PRINT 47
4.7 STRUCTURING ARTEFACTS 48
4.7.1 SUPERFLUOUS LABEL PROTOTYPES 48
4.7.2 PYRAMID PROTOTYPES 49
4.8 EVALUATION 50
CHAPTER 5. PROJECT OUTCOMES AND COMMENTARY 52
5.1 DISEMBODIMENT 52
5.2 EMBODIMENT 55
5.3 POST-EMBODIMENT 56
5.4 INTERBODIMENT 60

CHAPTER 6. THREE-DIMENSIONAL ARTWORKS AND EXHIBITION 62
6.1 LIGHT-BOXES #1 AND #2 62
6.2 LIGHT-BOXES #3 AND #4 64
6.3 WALL HANGING AND LIGHT-BOX#5 65
6.4 PYRAMID FORMS 66
6.5 ANIMATION FILM AND INSTALLATION 67
CHAPTER 7. CONCLUSIONS 72
APPENDIX 1 MATRIX DIAGRAM 73
APPENDIX 2 SUMMARY OF METHODS 77
APPENDIX 3 CD ROM OF ANIMATION INSTALLATION 79
REFERENCES 80

Table of Images

FIGURE 1 EXAMPLE OF EXPERIMENT WITH 'UNDOING FORM' THROUGH SHREDDING MATERIAL 26
FIGURE 2 MORPHING EXAMPLE; MOMENTUM THROUGH LAYERS AND TRANSPARENCIES. 27
FIGURE 3 MORPHING EXAMPLE; SHAPES SHIFT INTO NEW FORMS. 27
FIGURE 4 MORPHING EXAMPLE; AN ANIMATE OBJECT BECOMES SOMETHING OTHER. 27
FIGURE 5 REPEAT PATTERN EXPERIMENT, M SMITHERAM 2012 27
FIGURE 6 EXAMPLE OF 'MAKER'S MARK' 29
FIGURE 7 EXAMPLE OF A 'MAKER'S MARK' 30
FIGURE 8 "TAPESTRY PYLON #6' ADOBE PHOTOSHOP FILE BY M SMITHERAM 2013 31
FIGURE 9 DETAILS FROM "TAPESTRY PYLON #6" 32
FIGURE 10 INITIAL GATHERING OF IMAGES 36
FIGURE 11 EARLY MOOD BOARD WALL 36
FIGURE 12 MOOD BOARD EVOLVING 37
FIGURE 13 LAYERING OF IMAGES AND PRINTS 37
FIGURE 14 FIRST ITERATION OF 'WORD STORM' 38
FIGURE 15 REPOSITIONABLE NOTES USED TO LINK THEORY TO IMAGES 39
FIGURE 16 QUOTES FROM TEXTS SHOWING RELATIONSHIP TO PRINT 39
FIGURE 17 PATHWAY MATRIX 41
FIGURE 18 'WORD STORM' AND NEW ITERATION 42
FIGURE 19 WALL SHOWING INTERCONNECTED 'WORD STORMS' AND 'WORD SPARKS' 42
FIGURE 20 DETAIL FROM 'WORD STORM' 42
FIGURE 21 ADOBE PHOTOSHOP FOLDER SYSTEM 43
FIGURE 22 ZOTERO LIBRARY AND FOLDER ORGANISATION 44
FIGURE 23 SCREEN GRAB OF MY PINTEREST PAGE 45
FIGURE 24 "TEXTILEDUMP#11" DIGITAL PRINT ON SILK CHARMEUSE, M SMITHERAM 2012 45
FIGURE 25 DETAIL OF TEXTILEDUMP#11, SHOWING HIGH-RISE SLUMS AND TEXTILE DUMPS 46
FIGURE 26 TEXTILE & DESIGN LAB DIGITAL PRINTER WITH PROTOTYPE PRINTING 47
FIGURE 27 COMPUTER SCREEN OF DIGITAL PRINTER SHOWING PRINT LAYOUT 47
FIGURE 28 *SUPERFLUOUS* GARMENT LABELS 48
FIGURE 29 MODEL WEARING *SUPERFLUOUS* DRESS 48
FIGURE 30 MODEL WEARING *SUPERFLUOUS* TOP AT 'SERGEANT PRETTY' SUMMER SHOWING, 2012 48
FIGURE 31 PYRAMID PROTOTYPE 49
FIGURE 32 PYRAMID PROTOTYPE 49
FIGURE 33 "MANUFRACTUREDREPEAT#2" ADOBE PHOTOSHOP FILE BY M SMITHERAM 2012 52
FIGURE 34 "SMOKESTACKSWIRL#23" DIGITAL PRINT ON SILK GEORGETTE, M SMITHERAM 2012 53
FIGURE 35 "SMOKESTACKSWIRL#1 DIGITAL PRINT ON SILK GEORGETTE, M SMITHERAM 2012 54
FIGURE 36 "SMOKESTACKSWIRL#14" ADOBE PHOTOSHOP, M SMITHERAM, 2012 54
FIGURE 37 "TEXTILE Y" ADOBE PHOTOSHOP FILE BY M SMITHERAM, 2012 55
FIGURE 38 "TEXTILEX" ADOBE PHOTOSHOP FILE, M SMITHERAM 2012 55

FIGURE 39 "COMPOSITE#3" ADOBE PHOTOSHOP FILE BY M SMITHERAM 2012 56
FIGURE 40 "TAPCOL#4" ADOBE PHOTOSHOP FILE BY M SMITHERAM 2013 57
FIGURE 41 "CITYSCAPE" ADOBE PHOTOSHOP FILE BY M SMITHERAM, 2013 57
FIGURE 42 "MORPHING BEAUTY#2" DIGITAL PRINT ON SILK CHARMEUSE, M SMITHERAM 2013 58
FIGURE 43 "RAISED" DIGITAL PRINTS, M SMITHERAM 2013 58
FIGURE 44 "BELLY OF THE WHALE" DIGITAL TEXTILE PRINT ON SILK CHARMEUSE, M SMITHERAM 2012 59
FIGURE 45 "SPACEJUNK#2" DIGITAL TEXTILE PRINT ON SILK CHARMEUSE, M SMITHERAM 2012 59
FIGURE 46 "DRAGONWARPED#1" DIGITAL TEXTILE PRINT ON SILK CHARMEUSE BY M SMITHERAM 2012 60
FIGURE 47 "GLOBALIDEATION#3" DIGITAL TEXTILE PRINT ON SILK CHARMEUSE BY M SMITHERAM 2012 60
FIGURE 48 LIGHT-BOX #1 AND #2, M SMITHERAM 2013 62
FIGURE 49 PANORAMA VIEW OF INSTALLATION, M SMITHERAM, TESTSPACE, 2013 63
FIGURE 50 LIGHT-BOX #3 WITH EXTENDED FABRIC EDGE, M SMITHERAM 2013 64
FIGURE 51 LIGHT-BOX #3 M SMITHERAM 2013 64
FIGURE 52 BACK WALL OF GALLERY SHOWING LIGHT-BOX #5 AND WALL HANGING, M SMITHERAM, 2013 65
FIGURE 53 WALL HANGING, M SMITHERAM 2013 65
FIGURE 54 DETAIL OF PYRAMID FORMS, M SMITHERAM 2013 66
FIGURE 55 PYRAMID FORMS, M SMITHERAM 2013 66
FIGURE 56 PROJECTION INSTALLATION WORK, SHOWING TRANSITION FROM ONE PRINT TO NEXT. 67
FIGURE 57 INSTALLATION PIECE, M SMITHERAM 2013 68
FIGURE 58 INSTALLION PIECE, M SMITHERAM 2013 68
FIGURE 59 INSTALLATION, M SMITHERAM 2013 69

Attestation of authorship

‘I hereby declare that this submission is my own work and that, to the best of my knowledge and belief, it contains no material previously published or written by another person nor material which to a substantial extent has been accepted for the award of any other degree or diploma of a university or other institution of higher learning, except where due acknowledgement is made in the acknowledgements’.

..... .
Signed

.....
Date

Acknowledgements

I would like to gratefully acknowledge the assistance in developing this thesis from receiving the AUT University student stipend for Master of Philosophy, 2012 and from the Textile and Design Laboratory Student Project Award, 2012 and 2013.

I would like to give my most heartfelt thanks to my primary supervisor, Dr Frances Joseph, for her fantastic advice and patience over long hours editing, her intellectual inspiration and amazing articulation.

I also appreciate the assistance of the following people: Angie Finn, my secondary supervisor who contributed a fashion perspective to this thesis. Angela Fraser for generously sharing Photoshop tips and tricks. Dr Kate Fletcher, for her kindness in taking the time to meet me on a windy Wellington morning to talk about sustainability and fashion systems. Lisa Waldner, my friend and colleague for her wonderful listening ear, endless cups of tea, and support in creating this document layout and design.

Lastly I would like to thank my gorgeous family and friends. My daughter Iemaja and my partner Ford, who have always supported me on this journey from working in fashion to thinking about fashion. I am blessed to have family who support my ideology and vision for a different future.

Intellectual property rights

The designer/director asserts the intellectual and moral copyright of the creative work *The Superfluous and the Ephemeral* contained in this thesis. All rights of the owner of the work are reserved. The publication contained in all its formats is protected by copyright. Any manner of exhibition and any diffusion, copying, resetting, or editing, constitutes an infringement of copyright unless previously written consent of the copyright owner thereto has been obtained.

Dedication

This thesis is dedicated to my grandparents,
Barney and Joy Duffy, Rodger and Lenore Smitheram,
who inspired a love of storytelling, sewing, and social justice.

"My mind is intent on singing of shapes changed into new bodies." (Ovid, Book 1, *Metamorphoses*, trans. 2000)

Abstract

This practice–led research project engages theories and precedents contextualising the consumption of contemporary clothing, interpreted through a lens of material culture. Themes such as globalisation, hybridity, consumption and sustainability are identified and considered in terms of the ways they have contributed to our relationship to clothing. Theories are further explored through the development of original methods of visual mapping and the creation of symbolic artefacts that offer a response and interpretation of conceptual perspectives on this changing situation.

Designerly processes and fashion industry methods are employed in order to explore how artefacts created through practice-led design research can communicate and contribute to a new and sustainable fashion future.

Chapter 1. Introduction

1.1 Positioning the researcher

1.1.1 Family

I come from a family of seamstresses, storytellers, socialists, sailors, and psychics. Growing up, stories were passed down from my grandparents and interwoven with mythology. Stories would often start with a random button from my nana's button jar, which would unfold as the button from the jacket of a long-gone great-uncle, and his adventures as a soldier in World War Two. Although I had never met this Great Uncle, his button still contained an echo of him that a photo could not convey.

As a child, I perceived the act of hand sewing as an act of magical spell casting where you sang as you sewed or you told stories, but you always held in your mind the person for whom you were stitching. Sewing a spell, wishing for them hope or happiness. My grandmother worked for *Tamahine*, a NZ knitwear manufacturer, and spent long hours at a knitting machine. Yet when she knitted a stripy jumper especially for me, in my favourite colours, I knew she had thought of me in each stitch.

> *A sewn cloth anticipates, acknowledges, constitutes, recalls and memorializes relationships; just as genealogy traces the threads of connection* (Küchler & Miller, 2005, p.15).

There is something significant about pre-worn cloth; subtly it comes to represent the discarded shell, with an indelible imprint of memory and association imbued in the textile.

1.1.2 Career

During my early twenties my connection to cloth formalised through completing a Diploma of Fashion and Textiles at Nelson Marlborough Institute of Technology. After graduating I worked in various aspects of the industry: as a pattern maker, costume maker, workroom supervisor, industrial machinist, textile printer, and retail assistant.

I went on to establish my own woman's wear label *Miranda Wellings* that was accepted into *Fashion HQ*, a Business Incubator supported by Positively Wellington Business and New Zealand Trade and Enterprise. This enabled me to set up industry contacts with *Mercedes-Benz Fashion Week Australia* and national stockists and media, and ultimately secure export orders for my fledgling business.

Later I worked on a series of mid market commercial women's wear labels for long established NZ apparel companies. I began designing commercial ranges at a time of great flux within the global and local apparel industries. Traditional apparel companies in New Zealand struggled to compete with the deluge of cheaply produced, offshore garments from international competitors. The changes heralded by a globalised market significantly impacted upon the design of garments, resulting in a reductive design process.

I travelled overseas seasonally, sourcing garments, trend researching, and pursuing design inspiration for the labels. The prescriptiveness and limitations of global sourcing soon became apparent, as the fashion styles I saw were universally repeated from the United States to Europe to Australia within weeks.

Various survival strategies tried by these traditional apparel companies included slashing profit margins, adding new labels, importing brands and manufacturing off-shore, but they were largely unsuccessful at adapting to

the changing market with resultant redundancies and company closures across the New Zealand apparel sector.

Mid-market seemingly disappeared overnight- superseded by a new dichotomous market of high street chain stores, and local high-end designer labels. Lack of diversity has altered the spectrum of consumer choices into a binary one. The choice between cheap, derivative, disposable garments that are designed for obsolescence, or exclusive, expensive, and highly designed garments polarise the market, and with both options the consumer is encouraged to buy faster than they can wear.

1.1.3 Post Graduate studies

A sense of frustration at the diminished design ethos and ethics of my industry led me to return to study in a Master of Design programme at AUT in 2011. My design project explored and developed the idea of designing a personal framework for re-use of post-consumer textile waste. I looked at methods of reframing planned obsolescence of fashion clothing and whether sustainability could be harnessed to enact systemic change in consumers rather than incremental “added on” measures. This research inquiry developed my understanding of the philosophical context of sustainability as an emergent paradigm that future fashion could sit within. My desire to connect with textiles in a more resonant and sustainable way has continued to spark exploration and my on-going research.

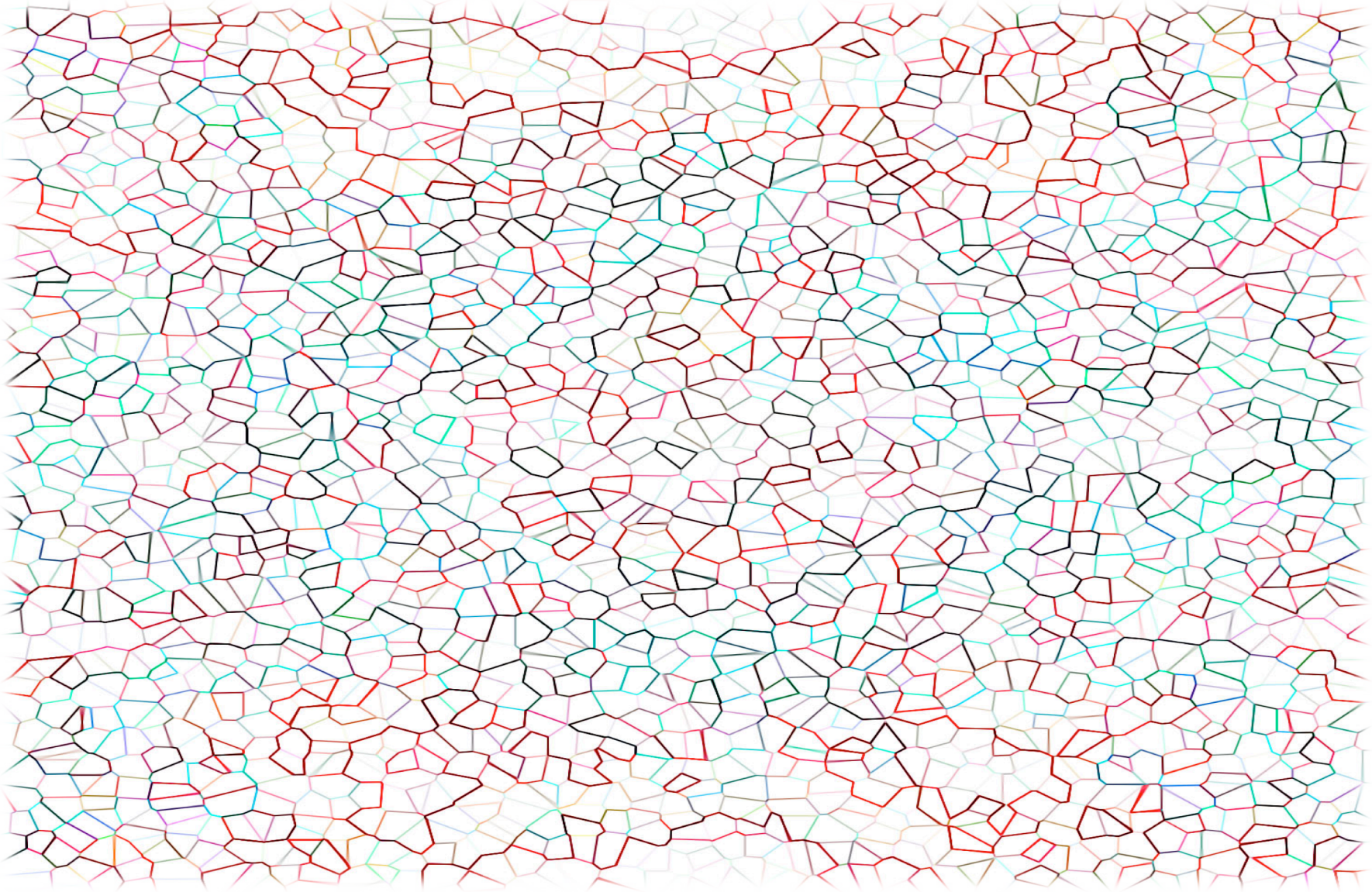
1.2 Introduction of Thesis

The overarching focus of this Master of Philosophy project has been the design and creation of symbolic artefacts that offer a visual interpretation of conceptual relationships between globalization and cloth. The primary technology and method of creative exploration has been digital textile printing. Through this medium the project engages a wider discourse about digital media, industrial processes and consumption.

This is a practice-based research project that explores how process and making can be both adaptable and purposeful. The rationale behind this approach is to develop insights through a creative investigation that enhances and extends the conceptual research. An interchange of ideas is traced in a recursive path through the modalities of practical, inquiry-based, experimentation and theoretical inquiry.

The physical outcomes of this inquiry are not fashion garments. There would have been a contradiction in producing garments in order to comment on the problematic nature of the proliferation of clothing. The body is always referred to through the artefacts produced through this research, yet it remains invisible. The textile forms can't be worn. Removing the wearability of the cloth changes its functionality. It stands as object rather than consumable. This is a symbolic shift of focus from consuming to reflection upon consumption.

The choice of digitally printed textile to create these artefacts allows for exploration of themes within the pattern and narrative of cloth, whilst embracing the materiality of fabric as a raw, unformed component. Instead, theories explored through the literature review form visual patterns and dimension on the surface of the cloth, inscribing the journey from fashion commodity to rubbish heap.



Chapter Two

Chapter 2: Contextual Review

This chapter provides a review of contextual knowledge that has informed the creative textile artwork that I have titled *The Superfluous and The Ephemeral.* This highlights the research that influenced the conceptualization of the artwork. I have grouped the contextual inquiry into three areas. These trace the connection of cloth to body from the outer layers of conceptual and social discourse (disembodiment); to the corporeality of cloth, its artefactual relevance and the body as consumer (embodiment); through to the discarded cloth and its potential within the emergent transformative paradigm of sustainability (post-embodiment).

2.1. Disembodiment

This first section discusses the philosophical and contextual framings of fashion. The outer most layer of the connection of cloth to skin. This section is concerned with clothing without a body. This review centres on fashion perceived as commodity and its industry positioning as part of a set of interlinked structural components. Discussion centres on the mechanics of fashion as discourse and establishes fashion as being a design discipline worthy of rigorous academic inquiry. This is essential to frame the inquiry as a whole as it addresses the design thinking that facilitates potential change within the industry.

2.1.1 Clothing as discourse

Academic fashion and textile discussions are a relatively recent development particularly within New Zealand, with the transition of fashion taught within Polytechnics as a technical skill- based diploma to a design degree sitting with schools of art and design. This educational evolution reflects a changing industry. Likewise a division is suggested through the emergence of fashion theory. White and Griffiths (2000) contended that the practical realities of the fashion business are little known to few other than those who work within it including, it appears, to many authors of academic discourse on the subject. White & Griffiths (2000) also argue that very few of those who practice within the fashion industry are even vaguely cognizant of the body of academic research which has grown up around its theory and history. Given the growing numbers of fashion degree graduates moving out into industry over the past decade, it is likely that this context is changing. However, White & Griffiths (2000) make the critical point that fashion as theory is largely divorced from its practice.

One influencing factor could be the uneasy tension of where fashion sits as discipline. With its basis in temporal, spatial, and socially discursive dimensions, the process of defining the parameters of fashion theory has been difficult. Granata (2012) discusses the evolution of fashion studies from a multi-disciplinary field into a self- standing discipline. Granata, along with Jackson (2005), compares fashion studies to performance and theatre studies noting a parallel between these more ephemeral aspects of visual culture. Critical to this research is the argument that fashion studies was from its inception enmeshed in the cultural and the contextual. This idea exposes the liminality of fashion within academic discourse, which while uneasy, opens up a myriad of possible research dimensions.

Consideration of fashion theory within the disciplinary constructs of *Art and Design* has expedited a recursive and crucial nexus uniting the *thinking* and the *making*. Fashion theory endeavours "to interlace scientific methods and creative design processes in a productive way, in order to establish a self-reflective form of cultural practice" (Loschek, 2009, p.7). Critically this shift facilitates an opportunity to pose questions more freely than in older established disciplines. Researchers such as Koskinen (2009) and Niedderer and Townsend (2004, 2012, 2013) all suggest that the freedom of considering fashion and craft through a lens of art allows for the exploration of issues in ways established fields of research cannot.

Fashion thinking as a nomenclature has a relationship to *design thinking* (Cross, 2007) and likewise has attributes that make *fashion thinking* a tool for analysis or development. *Fashion thinking* is introduced by Nixon and Blakley as sitting within a “colliding paradigm of critical thought and creative agency” (2012, p.153) and the challenge is as with other design disciplines, the need to break down the elements of practice. Practice can be understood as experimental work based in conceptual theory (Nimkulrat, N. & O’Riley, T. editors, 2009) but also needs to be examined and articulated in order to evaluate or re-emulate successes (Koskinen, 2009). Adapting this idea into my work has allowed for identification and exploitation of tacit practices. The influence of *fashion thinking* and tacit experiential knowledge is further considered in Chapter 3.

The critical thinking of fashion is deeply rooted in a series of systemic structures that are linked to other systems including economics, media, politics, trade, music, art, sports, innovation, and culture. Fashion as a visual exponent of these subsystems operates as a zeitgeist. Notwithstanding it’s perceived, self-referential nature, the dynamics of fashion can be considered in the light of its interchange with the environment and yet remain intact as a “system of operative closure” (Loschek, 2009, p.23).

Despite increasing exploration and research into frameworks of fashion theory, the public perception of fashion as whimsical and unworthy of intellectual discussion continues. Daniel Miller writes in his introduction to the book *Clothing as Material Culture "*since it is used as a covering or as a surface, clothing is easily characterized as intrinsically superficial" (Küchler & Miller, 2005, p.3).

Fashion media itself perpetuates prevailing undercurrents of anti-intellectualism. Prominent fashion critic and fashion editor of the International Herald Tribune, Suzy Menkes asserts in a recent interview that fashion doesn’t need to be intellectual;

> *I think there's too much mixing fashion and intellect. Fashion ultimately is designed to cover the human body, to give you joy, to make you feel better. I don't think it has to have a great intellectual meaning... to intellectualise fashion too much, to me, is just going the wrong way* (Grau, 2012).

The pervasiveness of fashion anti-intellectualism has led feminist cultural theorist Angela McRobbie to observe that fashion sometimes "lets itself down and colludes in its own trivialization” (McRobbie, 2002, p.55). Yet fashion’s role as one of the most accessible, universal and systemically linked manifestations of creativity and industry raises the question of deeper inquiry and consideration into its processes, practices and outcomes.

2.1.2 Fashion as ephemeral

The viewpoint of fashion as ephemeral is contrasted by the weighted reality of an overwhelmingly saturated consumer market, which has resulted in an ever-increasing rate of disposal. The impetus to address this becomes clear in acknowledging that textile waste is prolific, with recent United States estimates claiming that 85% of over 13 million tons of textiles discarded annually ends up in landfill (Wallander, 2012). United Kingdom reports state 2012 rates of disposal as 1.4 million tonnes (PennWell Corporation, 2013). After reviewing the literature I believe that fashion as an industry charged with these systemic failures has an imperative and ethical duty to research and activate more viable fashion futures.

Colloredo-Mansfeld (2003) takes a new viewpoint on consumption by embracing the inherent ephemerality of material goods. This reframing and extrapolation of the concept of ephemerality argues that consumption is not simply the loss of materiality, but rather an opportunity to move beyond objectification.

> *Consuming, vanishing, sacrificing, and fashioning all work as techniques of interacting, processes that enhance communities not by committing them to fixed cultural property but by linking people as agents or channels of shared substances. Ephemeral practice, however, is not the negative of objectification, but rather a related set of actions that have special significance for intersubjective experience, negotiating relationships, and the pacing of human interaction* (Colloredo-Mansfeld, 2003, p.9).

This research is influenced by Jean Baudrillard's definition of fashion's integral ambiguity and the ephemeral nature of clothes that obscure the body, continually adjusting to reality, but always remaining an enigma (Baudrillard, 1990). Issues of authenticity and simulacra, expounded by Baudrillard are explored aesthetically through the creative work in the parallels of 'body/clothing' and 'embodiment/ disembodiment'.

Tony Fry advocates for design-based futuring, as a re-directive practice (2011). Along with other design researchers like Ezio Manzini (2009), a shift in focus within the creative work has been influenced away from simply producing 'more of the same' to rethinking design practice. John Thackara (2009) in particular charges design education and the design industry it feeds with the responsibility of searching for alternatives to product proliferation. The reconceptualising of design proposed by Fry in his ground-breaking book *Design Futuring* (2008) is a call to arms to designers of all disciplines to enact change. He charges that at present, the future is taken away by design and that what is made, how it is designed, sold, used, and disposed of, all have to change. Fry's concept of re-directive practice looks beyond incremental changes to a deeper level of systemic paradigmatic shift.

It is my hope that *fashion thinking* has the capacity to address industry's own problematic and consequential results of manufacture and consumption through a redirected, sustainable fashion future.

2.1.3 Consumer as identity

In recent decades the rise of a consumer-orientated middle class, extravagant lifestyles and disposable income coupled with a first world version of success represented by 'stuff' has precipitated an over-abundance of choice as a consumer. The advancements of a globalised market have shifted demarcations of identity, with disparate consequences such as homogeneity and hybridity reflected in sartorial choices. Globalisation has become in some sense, a process in which the local and global interact. The singular and dominant mechanism through which these processes interrelate "is consumption, conceived not only as markets and economic actors but as cultural processes that construct identity" (Hansen, 2004, p.273).

In today's global marketplace high street retailers and chain stores in both hemispheres are presenting versions of the same styles simultaneously. Maynard defines this consumption of dress "as a form of creolisation, where nothing is dominant and nothing is entirely traditional, resulting in hybrid dress forms" (Maynard, 2004, p.8). In this light hybridity can be seen as a causal effect of consumerism. This hybridity is pivotal in today's fashion industry, with authenticity key to many brand identities whilst copying profligates. Through the development of this research, this hybridity came to represent something else. Perhaps hybridity can be perceived as a new style arbitrator in itself. This sense of defining hybridity through fluctuations between the binaries of tradition and modernity, local

and global has played a key role in my artworks, influenced by the discussion in *Hybrid Bodyscapes* by Santos-Granero (2009), and the dilution of identity described by Acheraiou (Miller, 2012). Removed from its constraints of commerciality and replication, hybridity is introduced as a new authenticity.

The subtle directives of advertising are ubiquitous and rites of consumption are deeply embedded within our cultural psyches. Within busy modern families, shopping has superseded time as a tangible expression of affection and attachment. Anthropologist Daniel Miller (2012), identifies shopping used as a technology for the expression and establishment of love within households. There is an immediacy of fulfilling desires through shopping as a temporary device for satiation.

2.1.4 Disenchantment of the consumer

A growing dissatisfaction and cynicism in consumers is acknowledged in studies (Clark, 2008; Reiley & DeLong, 2011; Fletcher, 2010) as 'shopper's guilt' of over-consumption and consequential excessive disposal. It has been suggested that the era of conspicuous consumerism is coming to an end as consumers embrace a more conscientious and abstemious lifestyle (Mackay, 2008). Conceptually, perhaps *disenchantment* stands as a *parergon* to the philosophical and contextual framings of fashion as consumption.

A *parergon* can be defined as something that is an accessory to a main work or subject, an embellishment. In his book *Putting a face on things-Studies in Imaginary Materials*, Michael Carter discusses Jacques Derrida's and Kant's interpretation of artefact as divided into two registers; the *ergon,* that is the work in its essence, and the *parergon*, that is the supplemental additions to the work that act as frame and ornamentation (Carter, 1997). In this sense, disenchantment acts as a second register or framing to fashion consumption. As a causal backlash to excessive consuming and the superfluous nature of materiality, *disenchantment* of the consumer acts as an oppositional mechanism.

The act of naming this disillusioned consumption stage as *disenchantment* suggests a preceding stage of enchantment, and implies the potential for a future state of re-enchantment. George Ritzer's description of "cathedrals of consumption" (Ritzer, 2010, p.189) takes a distinct Baudrillardian undertone through a comparative analyses of shopping malls and American High Schools, and a discussion of the hyper-reality of theme parks. His discussion of the simulations present in contemporary life whilst not pioneering does contribute to the conversation about the illusions present in the cycles of consumption that have become pivotal themes in my artworks.

Of particular note was the subtle influence of both Ritzer (2010) and Baudrillard's (1994,1998) evocative depictions of a visceral multi-dimensional reality, that became a dominant thematic exploration within my creative and practical work. These texts were useful because of their visual descriptions of a complexity of concepts, which helped me to understand and further develop my own ideas. My own method of work of correlating concepts with visual narratives employs a sense of active visual mapping, and Baudrillard's expressiveness in evoking a world helped to embody this sense of multi-dimensionality.

2.2 Embodiment

The next level of inquiry into the contextual framing of fashion moves beyond the external to the corporeality of cloth, its artefactual relevance, and its relationship to the body. This is important to the research in order to establish levels of depth to the inquiry.

2.2.1 Clothing as it relates out from the body-Material culture

From reviewing recent literature around the context of fashion, it was interesting to note that some of the most compelling research reflected upon clothing as an aspect of material culture. Stemming from an anthropological perspective, this research discusses clothing as artefact, but moves on from the traditional anthropological stance of clothing as codified cultural identity. Popular fashion theory (Barthes, 2006; Svendsen, 2006) takes a perspective of viewing fashion as semiotics, a visual metaphoric language. This idea of dress as being a system of social communication has attained such prominence over time that Carter, (2012) asserts that alternative ways of comprehending clothing have been completely absent. One notable exception being McCracken (1990), who in his chapter entitled *Clothing as Language- an Object lesson in the study of the expressive properties of Material Culture* makes a strong case for moving beyond the popular view of interpreting clothing as a kind of language. The argument raises the perspective that whilst clothing is heavily codified, it doesn't have a sequential linear combinational ability that allows it to be 'read' as coherent syntagmatic language. McCracken's viewpoint takes a semiotic and structural perspective of analysing fashion as cultural discourse.

In some sense, this discussion of clothing as language is about the outward, external communication of clothing, or how the viewer interprets it. The research project focuses however on the internalised, quiet conversations of cloth to skin- of how the wearer interprets and 'names' the connection. The anthropologist Daniel Miller (1998, 2005, 2009) exemplifies this sense of looking inward when he explores the personal and individualised connection between cloth and person, as a conduit for externalising memories and expression of representational qualities. Miller's theory offers a potential vantage point of reframing homogenised fashion through identifying and optimising embedded signifiers within clothing.

Recent books such as *Clothing as Material Culture* (Küchler & Miller, 2005) and *Material Memories* (Kwint, Breward, & Aynsley, 1999) discuss the role of cloth as a living part of culture and as artefacts speaking to us through the memories we associate with them. These texts acknowledge the dialogue between things, their makers, and their consumers. This perception of cloth as an animate part of material culture stands as a counterpoint to disposable fashion and investigation into qualifying the resonance of cloth. Kate Fletcher agrees with Hinte (1997) by identifying that by cultivating an emotional and experiential connection between person and object, we can disrupt our dependency on consumption of new goods to construct meaning and our sense of self (Fletcher, 2012). For as fashion evokes meaning through experiential means, "*fashion thinking*, through its spatial and temporal dimensions" (Nixon and Blakley 2012, p.154) can be a vehicle to channel meaning.

2.2.2 Clothing as it relates towards the body-Blood sweat and tears

It is no longer the norm that clothes are cherished or mended, handed down, saved as 'best', or re-appropriated. Yet clothing as an artefact has an intimate relationship to the body, being what Turner (1980) coined as our 'social skin'. Clothing is always altered by the body: it stains, tears, wears, softens, rips, fades, and develops both an impression and a patina that reflects its use. In changing, it can take on something of the corporeality of its wearer, as "it has features that are gentle and

encouraging of this gentle assimilation of one person to another" (Miller, 2009, p.43). In the book, *The Comfort of Things* Miller discusses the relationship of jewellery to the body noting that diamonds and gold don't change or fade, that they resist humanity (Miller, 2009). Implicit in this is the comparison of cloth that while also worn next to the skin, is in essence mutable and yields to humanity.

Loschek (2009) goes further into delineating the liminality of clothes as a third space between the self and the environment. Comparing clothing as a second skin to the character of encasing space with architecture, Loschek raises the philosophical position that:

> *If the human body is seen as spatial form, the skin represents the demarcation line between the inside and the outside. Clothing then becomes an extension of this corporal space boundary and the interface between a person's corporal space boundary and the external space of the environment* (Loschek, 2009, p.17).

In closing this journey between the body, the covering (clothing), and the external world, this literature review identifies consumption as a connective transactional and transformative event. Connecting this back to the way the body relates to consumption in forming the self, Pasi Falk theorised by positing "the consuming body" as the link between body, self, and culture (Attfield, 2000).

2.3 Post-embodiment: Clothing as it exists after the body

Post consumer, fashion generally becomes textile waste. Its life after use is problematic, so sustainability is recognised as a paradigmatic context to this thesis. Within this research the focus has been on systemic change and corresponding philosophical framings that may facilitate a cultural and ontological shift to a new fashion future. Selectively the precedent and literature research identified and examined emergent movements that seek to enact change within worldviews rather than projects that focus on incremental adjustments of manufacture, use and reuse.

Issues of environmental sustainability form massive economic and cultural challenges across the globe. These factors are forcing wider changes in thinking and behaviour, highlighting the urgent need to develop new methods, practices, ideological rationales and ultimately new socio-economic paradigms. The sustainability agenda is entwined with the ideological, in that both inform a wider agenda of social justice and social innovation.

2.3.1 Sustainability as paradigmatic context

The lifecycle of current fashion is a rapid and one way trip from design, manufacture, to being worn, being washed, and discarded to landfill. The extraordinary growth of fast-fashion retailers has been attributed by Birtwhistle (2007) to high impulse buying, an increase in sourcing from low-cost countries and a change in consumer attitudes, with the removal of stigma attached to buying from value retailers. This planned obsolescence has spiralled into a faster cycle, with chain stores pushing consumers desire for newness. The consequence of excessive consumption has been increased disposal, prompting this investigation of sustainable perspectives that could contribute to a more equitable and ethical future.

The seminal Brundtland Report (World Commission on Environment and Development, 1987) argued that chronic poverty in the developing world is a primary cause of ecological decay and that the only sure way to eliminate poverty and repair the environment is through economic growth. Rees (2002) critiqued this report as equating sustainability with expansion. He charged that it ignored the obvious fact of finite resources and significantly, that this expansionistic view saw no fundamental conflict

between economic growth and ecological degradation. Ehrenfeld, (2009) takes the argument further arguing that it fails to address one of the root causes of unsustainability- our addiction to consumption. A point agreed upon is that *sustainable development* focuses on incremental changes, which have fundamentally failed to bring about any significant difference.

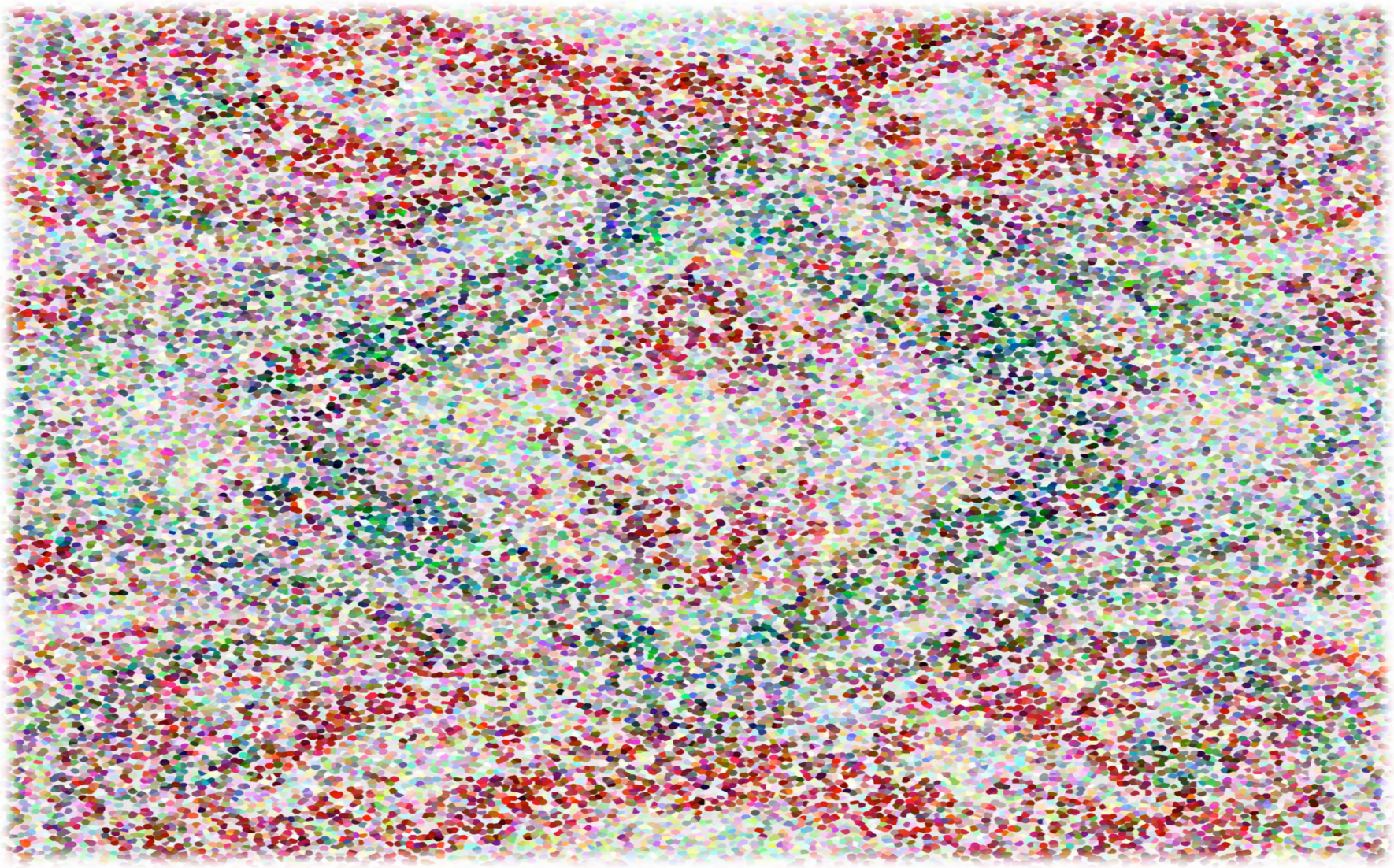
In recent years, the parameters of sustainability have shifted. The very definition has become contentious, even charged as an obsolete term "rendered vacuous use by its pluralistic appropriations within the status quo" (Fry, 2011, p.435). The early tenets of *sustainable development* can be summarised as 'more of the same, but more efficient'. Moving to redefine sustainability, an emergent bio-centric and transformative paradigmatic view sees sustainability as necessitating 'something different' that involves fundamental personal, social and institutional change (Fletcher, 2008). Ezio Manzini also contends that the transition towards sustainability requires a systemic change. It is not a question of doing what we already do better. It is a question of doing different things in completely different ways (Manzini & Jégou, 2003).

2.3.2 Inclusive and open-source design

A resonating theme highlighted by Otto von Busch (2007) is the relationship and interfaces between designer, producer and consumer, and how these positions can be renegotiated within the fashion industry. This is particularly applicable to the changing dynamics within new fashion systems that operate online. Removed from a traditional format of makers sitting and working together to create handcrafts, there remains an inherent connectivity within the making of textiles. The very "virtualness" of digital print itself takes advantage of its encoded status, with makers and consumers interacting in global communities online. This happens across both the methods of making, and actions of selling. Web 3.0 becomes a tool to reframe relationships between maker and user.

An example internationally is pioneering design enterprise platform "The People's Print" (http://www.thepeoplesprint.com/) who interact with textile designers both online and through workshops looking at design theory in parallel with a participatory and practical approach to create textile design using traditional and digital techniques. The agenda of the co-directors Melanie Bowles and Dr Emma Neuberg is to reference historic movements, culture, heritage, and current practices with new technologies and localised industry that foster sustainability.

Another example of community in action driving demand and defining choice of digital resource is the website Front Row Society (http://www.frontrowsociety.com/) which invites consumers into on – demand collaboration. Their manifesto is simple, "We work with an open collective of designers who submit artworks to our design challenges; winning designs are curated into seasonal collections that allow our consumers to stand beyond the trends and express their individuality". This challenges the whole notion of commoditized fast fashion through exemplifying the spatial dimension of *fashion thinking*, as fashion is "especially suitable to the complex economy of social media, where crowds share their preferences and commercial interests attempt to provide supply for the demand" (Nixon, Natalie W; Blakley, Johanna, 2012, p.19). This democratizing of digital technologies has created new possibilities of connection between maker and user.



Chapter Three

Chapter 3. Informing Methodology

This exegesis contextualises the making of the artwork *The Superfluous and the Ephemeral* and Chapter 3 addresses the theoretical and technological issues that informed the methodology and design of the research project. The methodological approach involved a process of reflective practice (Schön, 1992), which was deconstructed to identify and qualify the process of making to help make this design research "ultimately observable and reportable" (Koskinen, 2009 p.13). This approach engaged recorded knowledge and processes through an internal reflection that is materialised through a series of prototypes and artworks. This heuristic methodology employs a dichotic interchange between formalised designerly techniques and serendipitous discovery through design experimentation. The relationship between critical theory and making has been central to this process of reflection.

This research takes the approach of research through textile designing and making. It has been an inquiry through which the creation of artefacts embodies the results of the research. Experimental approaches into the processes of making are engaged to generate new design outcomes. Developed reflectively in tandem with a literature review, extensive technical and creative experimentation has been undertaken in parallel with an interpretive visual response to the theories explored. Developments and relationships between concepts and artworks were mapped out on an ever-changing wall sized mood board, which was documented photographically and via a blog. The creative work emerged responsively and symbiotically, as remediated and collaged digital textile prints. The main method of designing used in this research is a type of visual/ material thinking- my own term for this is '*thinking out loud with my hands'*.

In their project, *Capitalism and Schizophrenia* (1972–1980) Deleuze and Guattari introduced the concept of the *Rhizome*. This concept is what Deleuze calls an "image of thought", based on the botanical rhizome, which apprehends multiplicities. The mapping process used in this research process for understanding and connecting theory was non-hierarchical, drawing recursively from a multiplicity of sources and linkages. This process took place as drawing and word assemblies on a series of wall maps. The forms of this mapping process, of '*thinking out loud with my fingers*' will be discussed as a process. This schematic, rhizomatic mapping was prominent in both the note taking and connection-making processes used in this project, it also influenced the look of the creative works that took on progressive, non-linear/ non-repeat forms.

It is critical to acknowledge tacit and professional experience resulting from a lifetime of making and a career of designing in this process. Despite my on-going participation in the fashion industry, there are crucial deviations from commercial design criteria within this research project. This has involved the removal of industry constraints of prescriptiveness such as colour palette, season, market position, silhouette and even the form of artefact itself. Initially, it was hard to define the boundaries of a 'successful' outcome without usual commercial benchmarks. The process of establishing criteria for evaluating my work came through recognition of the distinction between designing for industry and a critical artistic research inquiry into the design processes and outcomes of the fashion industry. Guided by the direction of the research, the considerations identified as significant to this inquiry were visually explorative of theory; embodied conceptual development through correlation and extension of digital design method; and development of original aesthetic and compositional criteria. These considerations were taken into account in evaluating prototype and exemplars, reported in Chapter 4, where project stages and process are discussed.

3.1 Critical Framework

Multiple methods were used in the design and creation of these artefacts. What became evident, as the project progressed, was that these methods had a direct relationship to the concepts and ideas being explored – as an almost literal evocation of the inquiry, for example where the threads of the textile rubbish are extrapolated into pattern.

This chapter discusses methods of designing textiles with digital media, with a particular focus on incorporating historical and traditional textile elements. The outcome of this process has been a redefined contemporary textile craft practice that utilizes new digital technologies and pedagogy. Digital textile design and printing are areas of rapid expansion in the fashion and textiles sector. This is having an impact on the look of textile design and as a result, a new aesthetic is emerging. One of the primary areas of potential is the ability to incorporate an authentic and otherwise un-replicable textile into modern textile prints. Techniques such as scanning and digital photography can be exploited to introduce “one-off” textiles into new customised prints designed in Adobe Photoshop or Adobe Illustrator software.

This research has centred on creating large-scale digital textile prints, many of which incorporate scanned and photographed images of vintage, handmade embroideries and tapestries into a digital landscape. These suggest that tapestry, with its multitude of tiny hand stitches, may be perceived as an early form of primitive pixilation. As the artworks developed, a pervasive, quasi-naive and authentic approach developed. This seemed to reference an innocence of the past, when traditionally every maker left a ‘mark’. This craft approach is contrasted with the use of contemporary digital formats such as “cut ‘n’ pasting” to achieve artworks that sit within an emergent genre of “digital-craft”.

Digital media evolved from being just a technical production method in this research to becoming an overarching format that provided both an aesthetic and conceptual framing of the project. Digital print can be seen as an embodiment of the ideology of a future fashion framework - not only is it a more sustainable practice than traditional industrial screen-printing (Bowles & Isaac, 2009) but it can exist as open-source, print on demand, customisable, and due to this reproducibility, essentially without borders. The inherent codified imaging of work created digitally is reflective of the artistic intention of embedding theory within the warp and weft of cloth. Adapting digital textile print as a primary method of making has had a multi -dimensional effect on the project outcomes. These can be articulated through connecting the relationship of digital textile print to the established levels of this inquiry of *disembodiment, embodiment, and post-embodiment.*

3.2 Digital as a conceptual framing- the disembodiment of pixels

The use of a digital medium to experiment with visually communicating ideas frames the work conceptually, as it is ‘virtual’ and represents the very liminality of occupying an ambiguous space. This liminality is the state of being on the threshold between one thing and another. Until a design is selected to be printed (and thus embodied), the works stand as a collection of pixels, suspended in the interspace of an Adobe Photoshop file on a computer. The main concepts applied to the contextualisation of this work were notions of ‘*undoing form’*, and the morphing influence of digital media on the outcomes.

3.2.1 Matter into metaphor

In examining the relationships between clothing, consumption and self, it has been productive to look at Jean Baudrillard's theories about media and technology as influencers of simulation against systems of identity and the subject-object juxtaposition (Bishop, 2009). Baudrillard argued that the entire apparatus of the object- subject relationship is challenged and altered by technology and modernity (Baudrillard, 2005). Within this thesis, these ideas influenced an approach to the exchange of values - the subject becomes the object, and the object is subjective. The artefacts stand as exemplars of thought made visual, successful aesthetically or not, they each embody a process of responding to and developing theory. The artefacts evolved into simulacrum, prismatic versions of reality and hyperreal narratives.

Through matter re-materialised, theories and ideas identified through the literature review morph into a tactile theory. These artworks refer to the processes and outcomes of consumption, buying and discarding; the object consumed, and used up. Commodity, however is reduced to the bones of itself, codified and without transactional value once removed from its normal function.

The anthropologist Rudi Colloredo-Mansfeld argues that "rather than seeking always to objectify things, people *undo form* to achieve their social effect through working amid an unbounded flow of materiality" (Colloredo-Mansfeld, 2003, p.245). Early attempts at engaging with these ideas in relation to the creative work weren't successful. Inspiration was gained from the idea that "shredding old cloth creates the basis for new materials, but also releases their symbolic and social significance, so that fragility and reconstitution are made available again as warp and weft" (Küchler & Miller, 2005, p.9). I knew that I wanted to undo the form of the cloth, and somehow disrupt the previous symbolism, transmuting its original purpose.



Figure 1 Example of experiment with 'undoing form' through shredding material

In early prototypes, I created reconstituted cloth through sewing shredded strips of fabric selvedge and off-cuts to a base cloth (figure 1). The idea was to digitally print onto the reconstituted cloth, however I felt the result took on new and displeasing aesthetic connotations rather than being freed of reference. To me, the shredded cloth with its ruffled texture was reminiscent of wedding dresses. The technique was abandoned, but not the idea of disruption and 'undoing form'. In later prototypes however, the idea of 'undoing form' influenced techniques in Adobe Photoshop that 'exposed warp and weft' and introduced fibres within the print imagery itself. This was a less literal embodiment and a more successful visual strategy.

3.2.2 Digital morphing

At the conceptual level of disembodied pixels, the morphing influence of digital media can be seen the in the outcomes. The illusionary hyperreality of digital media introduced a layered abstraction to the creative works. I have embraced Sobchack's definition of morphing, as "effortless shape-shifting, its confusions of the animate and inanimate, its queerly hermetic liquidity, its homogenizing consumption of others and otherness" (Sobchack, 2000, p.xi). I sought a quality of transformation within this work, as the subject matter of consumption, decay and waste (from images of factories, textile rubbish dumps, etc.) was remediated into visual forms that I could not help but try to transform into more pleasing imagery. By generating new ways of storytelling, digital design "becomes an exercise in mythology" (Bolter & Gromala, 2005, p. 48). Morphing becomes an allegory and vehicle for the hyperreal.

Morphing exemplifies the myth and magic of digital technologies, and the shape-shifting alchemy of altering the substance of craft into digital outcomes. In this project, handcrafted textiles are scanned or photographed and transformed into pixels with the potential of mutable futures. Through the process of 'undoing form' theoretically through the research inquiry, and creatively via the manipulation of imagery within the digitally printed artefacts themselves, a metamorphosis occurred. This appeared to reflect and embody some of the complexities around the fashion consumption system. Within this possibility of remediating forms new ways of designing emerged.



Figure 2 Morphing example; momentum through layers and transparencies.



Figure 3 Morphing example; shapes shift into new forms.

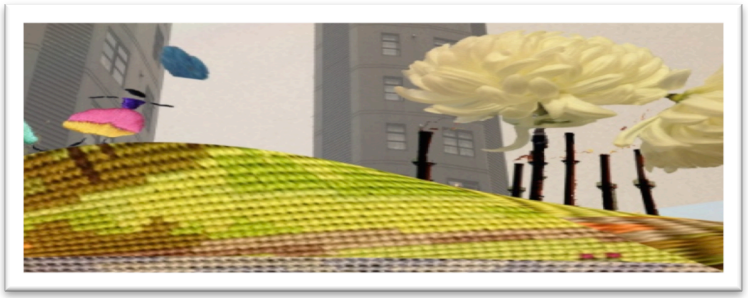


Figure 4 Morphing example; an animate object becomes something other.

3.3 Digital print as embodiment of method

As a tangible outcome, digital textile printing represents an embodied method within this research. The artefactual and historic relevance of cloth and the corporeality of fabric, as it relates to the generating of artefact and the handcraft of making cloth, rather than the relationship (as garment) to the body, were central to this inquiry. This section discusses digital textile print as surface design and the relationship between pattern and decoration to the ways I have incorporated existing textiles within a digital print in order to integrate handcraft techniques within digital design.

Digital print design methodology is an emerging field and therefore lacks formal precedents; there is no format restriction instead

> *In textiles, a digital print requires not one item or artefact, but a series of processes, technologies, materials and nonmaterial components in order to realise reproduction; and each component, whether process or technology, imparts its own individual aesthetic on the final digitally printed textile, resulting in a collection of aesthetics which when joined together, produce a complex aesthetic that is characteristic of digitally printed textiles* (Carden, 2011,p.1).

The printed textiles produced for this thesis engage aspects of digital making with analogue methods within a resultant and emergent genre that can be posited as 'digital craft'. This has influenced both the process of making and the aesthetic of the artefacts produced.

3.3.1 Is pattern superfluous?

Within the outcomes of this research, pattern has been exploited as a visual system and metaphor for reframing the aesthetics of industrialisation and craft. Traditionally, industrialised methods of screen-printing used a repeat format, as this optimised fabric usage and production methods (Ujiie, 2006). Digital printing doesn't require screens and this allows for two significant developments in textile design. There is the capacity for one-off production, and secondly the potential for engineered, non-repeat designs (Bowles & Isaac, 2009). Initially I tried to contort some of my abstract designs into tiled repeats.

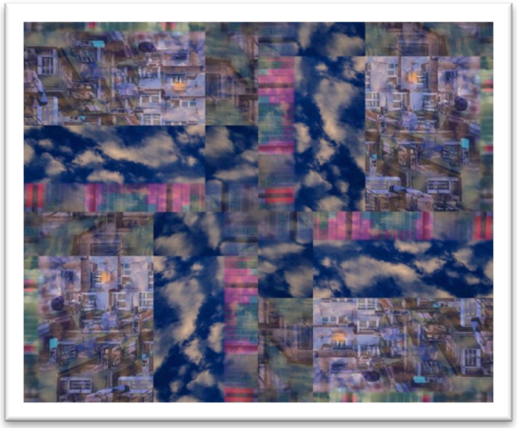


Figure 5 Repeat pattern experiment, M Smitheram 2012

Unhappy with the structured outcomes of initial experiments with repeat pattern, I developed a method of engineered print, with an abstract or non-repeat format. This established the initial design approach. Engineered or abstract prints are aesthetically liberated from industrialised aesthetic norms, freeing the creative process. As I worked through the literature review and associated theories, this approach came to both reflect and crucially enable a narrative quality that was not possible within a traditional repeat pattern. There emerged a sense of a horizon line seen across many of the prints. As a device, this serves to direct the gaze. This pathway is particular to abstract; non-repeat forms and leads the eye in a temporal progression, implying a pictorial, storytelling process.

3.3.2 Digital craft

Discoveries made during the development of this body of work highlighted the variety of techniques available to the contemporary designer and craftsperson.

There was a sense of un-ease in the deliberate choice to employ a primary method within my field of understanding (print design) but using a set of technical skills outside of my training. My initial lack of skill with Adobe Photoshop for textile design facilitated an instinctive, intuitive and experimental approach. As a hands-on craftsperson I found possibilities of *remediation*, defined as “making new media forms out of older ones” (Bolter & Gromala, 2005, p.83) through combining multiple Adobe Photoshop techniques.

One issue I had experienced in my career as an artisan designer and a commercial designer was replication. As an independent designer, it was difficult to reproduce high quality, labour intensive handcraft techniques such as hand embroidery, hand marbling, dip dyeing, and hand beading on a large scale. Financially it wasn’t viable, as the time spent on handcraft was undervalued. Conversely, in commercial fashion design it was hard to convey any sense of handcraft or high production values within the parameters of mass manufacture.

Within Adobe Photoshop however I found a new medium through which I could incorporate high value, previously un-replicated textiles from my archive by scanning and photography into a new digital textile prints. With recent human-centred and analogue methods informing digital creation, a “softening of prevalent signature aesthetic evidenced in the use of computer fabrication processes” (Harris, 2012, p.91) has been recognised. The incorporation of handcrafted textiles into the digital print introduced a humanistic quality, a reformatted sense of the markers mark revealed within the warp and weft of the scanned fabric.

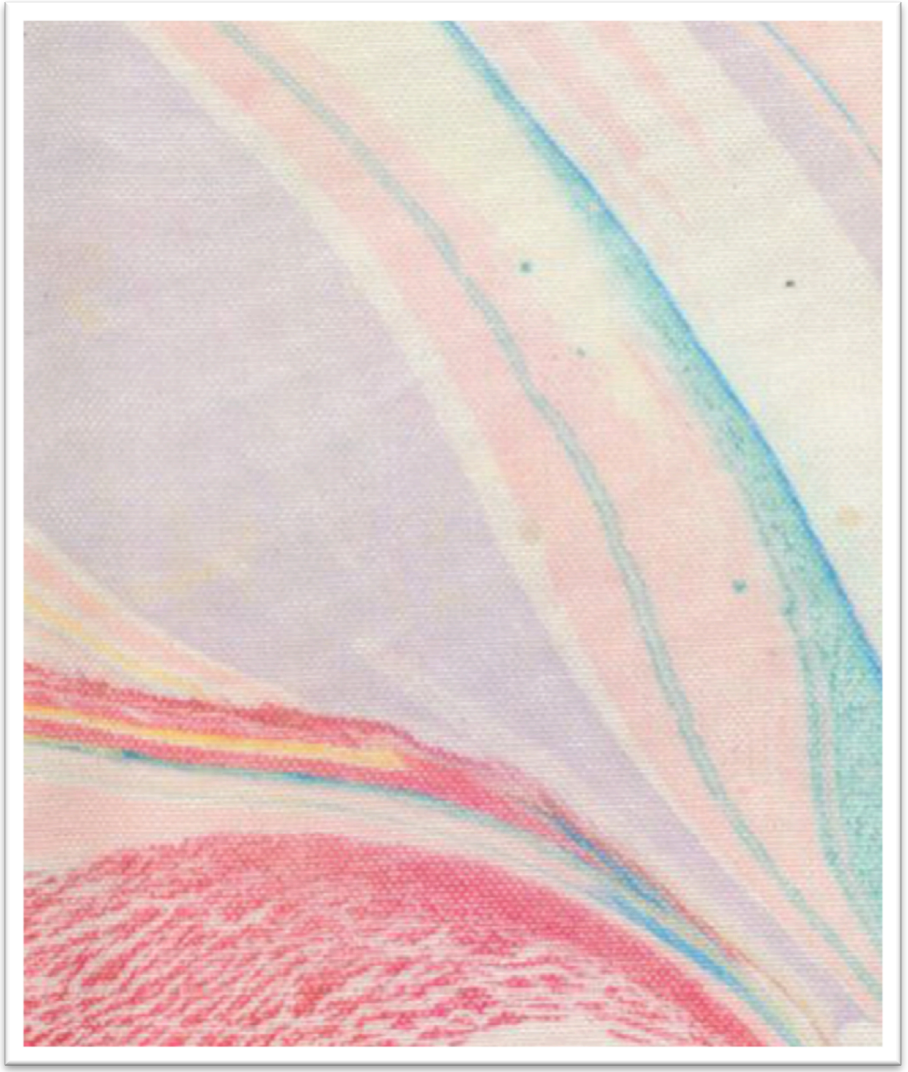


Figure 6 Example of ‘maker’s mark’



Figure 7 Example of a 'maker's mark'

Figure 6 shows a detail of a hand-marbled silk fabric that I created, then scanned into Adobe Photoshop and used as an image. Both the grain of the fabric, replicated digitally, and a few spots of dye where the marbling dye has splattered can be seen. Figure 7 shows a section from a hand-embroidered canvas, which is photographed on an iPhone, then ‘detached’ from its canvas through clear cutting in Adobe Photoshop. The imperfections of the stitches are rendered in the new textile.

3.3.3 Primitive pixels

Another craft technique that informed the work was vintage tapestry and petit point. Throughout history, tapestries have been used to mediate messages and record historical events, defining a moment through a temporal depiction. Over time, I had amassed a small collection of tapestries, petit point and cross-stitch but as each one was unique and painstakingly constructed, I was at a loss as to what to do with them. I could not cut into the pattern to reform or construct a shape, so I began to photograph the details in order to preserve and reinvent without altering the original textile.

Through my research tapestry, with its historic reference to the labour intensiveness of the past, is customised into a future form. As a hallmark of skilled craftsmanship, tapestry added textural depth and dimension to the digital prints. The 'relief' quality of the raised stitches added an illusion of tactility to the flat surface of the print. There's a conceptual congruence with tapestry's simulation of landscape becoming a hyperreal digital landscape. Beyond its nostalgia, tapestry with its multitude of tiny stitches represents a primitive pixilation, and as a visual motif in my work that embodies the dichotomy of analogue/digital making.

Within the digital print, the tapestries unfurl, sometimes appearing to reveal the wrong side of the weave. Patch-worked into fields, 1920's vintage petit points stiches form undulating hills crowned with a diadem of pylons.



Figure 8 "Tapestry Pylon #6' Adobe Photoshop file by M Smitheram 2013



Figure 9 Details from “Tapestry Pylon #6”

3.4 Digital media as post-embodiment

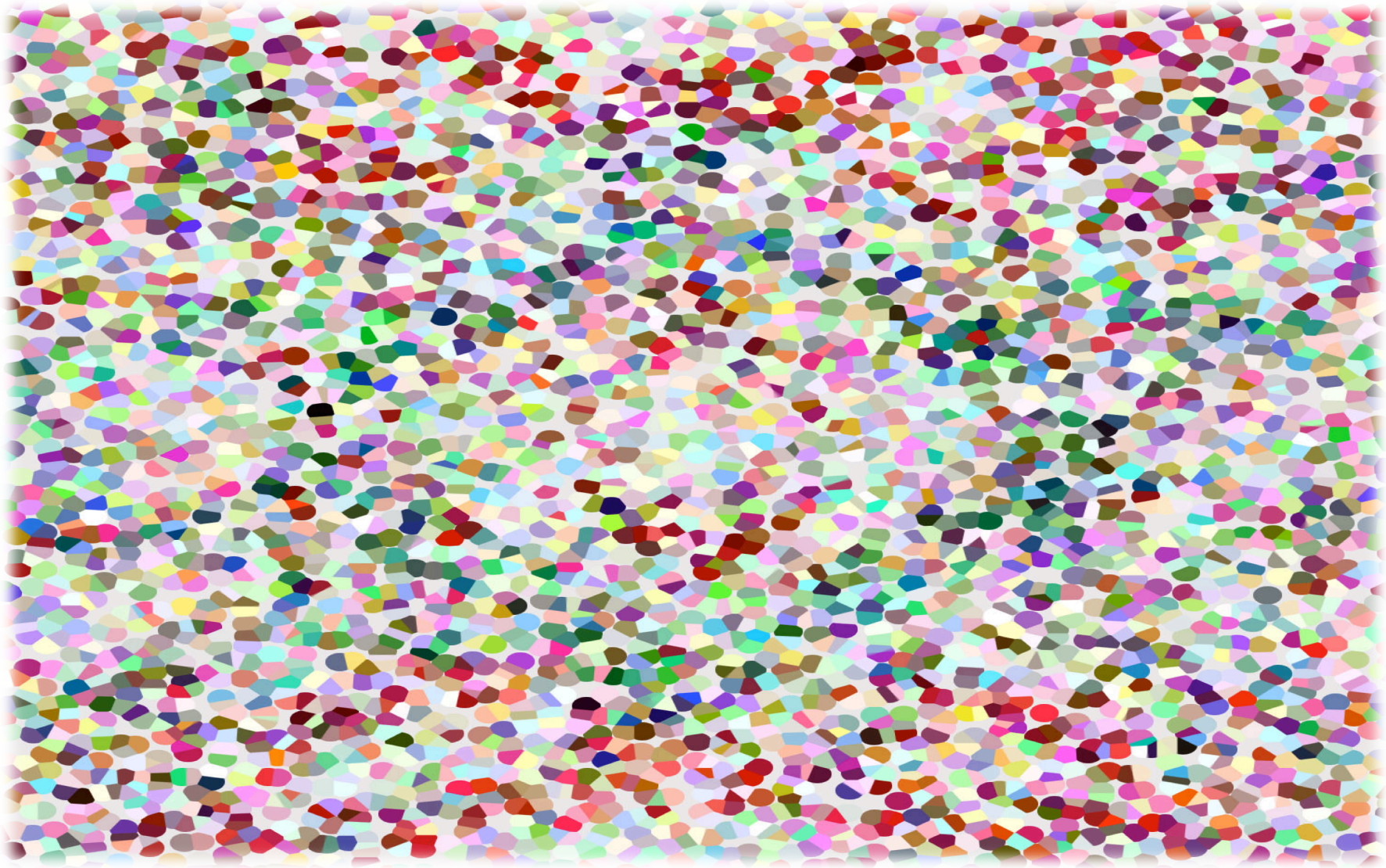
The use of a digital medium for constructing these artworks and of digital media as a conceptual paradigm contributes on a number of levels to the future physical life of this work. Digital media engage with a dialogue about the sustainability of process and a repositioning through fashion thinking of consumption on a logistical level. The use of digital printing addresses consumption in a very specific way - the artefact as an on-demand printable resource, defies the traditional mass-supply chains that feed consumption. The works exist virtually, as a computer file. This raises the question of when it becomes animated into becoming a commodity. There is minimal by-product or waste, as each print can be engineered to fit an exact pattern requirement. The suspended state of the digital print can be indefinite until or if there is consumer demand. These co-factors create a sustainability of process, which was important to the creative work and a defining reason for choosing digital design and digital print as a medium through which to explore theory.

3.4.1 Sustainability of digital textile printing

Sustainably, digital print has many advantages. Digital inkjet textile printers consume 50% less energy than traditional rotary screen-printing machines (Bowles & Isaac, 2009), there is also less wastage of materials as less dye or pigment is used in applying the image than in traditional industrial methods, and water is saved as there are no screens to wash.

Industrialised methods of screen-printing use a repeat format, as this optimised fabric usage and production methods. Digital print requires no screens and this allows for two significant developments in textiles. There is the capacity for customisable, one-off prints, and also the potential for abstract, engineered designs. The experimental freedom enabled by this technological development facilitates a different approach, which has been described by Joseph et al. as an approach where "longstanding binary distinctions - between artisanal practice and industry, designer and manufacturer, producer and consumer, are being eroded" (Joseph, Fraser, & Cie, 2010)

Consequently, within the outcomes of this research, surface design and pattern was exploited as a visual system and metaphor for reframing the aesthetics of industrialisation and of craft.



Chapter Four

Chapter 4. Processes of Making

This section addresses the progression from theory to idea to artefact. The methodological intent was to generate an oscillation between context, theory, and the making of textiles and artefacts. The inception of this thesis established visual mapping as a primary and directive technique within my process. The key methods of making particular to my research are identified as '*thinking out loud with my fingers*', *'word storms'*, '*word sparks'*, and collectively, '*matrix building'*. A summary of methods can be seen in Appendix 2. The approaches developed to support the making of this project can also be regarded as outcomes, original methods leading to production and insight. In this chapter I will define the processes and stages of the project, with reference to these original methods.

4.1 Establishing imagery

The first stage was the creation of a mood board on a wall of my workspace that serendipitously collated images and ideas. These images included; inspirational images of paintings by Olaf Hajek (http://www.olafhajek.com/), embroideries by Takashi Iwasaki (http://www.takashiiwasaki.info/), intricate mass-produced Chinese paper cuts from a local Two Dollar Shop, photographs of textile slums by Michael Wolf (http://photomichaelwolf.com/) and iPhone photographs I took in my neighbourhood of a stencil of a 'Hand of Hamsa' on an old warehouse wall.

Reflectively, these images fulfilled three critical purposes. As imagery, they represented the binary of local and global within my personal consumption process; they defined a colour palette; and they established a process of cut 'n' pasting or collage as a uniting aesthetic device.



Figure 10 Initial gathering of images



Figure 11 Early mood board wall

As the ideation stages progressed more found objects and ephemera found their way onto my mood board. I constantly rearranged and reordered this wall, as ideas developed. The wall developed into a layered palimpsest of imagery. During this process, I was reading journal articles and literature around my subject area. Exploring theory and research around consumption and future fashion systems influenced the image refinement process.

Taking photographs on an iPhone became an expedient method of incorporating my local environment into the project. The iPhone became important as a tool for both documenting my process, and as a way of incorporating local visual elements into my work. It allowed for rapid communication between my eye and the computer. I scanned or uploaded high-resolution iPhone images of hand-marbled silk fabrics that I had created, pom-poms, hand embroideries, vintage tapestries and petit point.



Figure 12 Mood board evolving



Figure 13 Layering of images and prints

4.2 Defining themes

Simultaneously while collating imagery, I began the literature review, reading the critical texts that informed the project. As an initial sorting process, I adapted a strategy of compiling a *'word storm'*. This method is adapted from mind mapping, a commonly used tool that seeks to connect ideas, words and concepts to a centrally located word.

However, my adapted method of *'word storming'* was non-linear, noting key theories and ideas from the literature review in a non-hierarchical way. The intention was to map all the concepts and reflect on which were most important to my research. These key ideas and theories were mapped out on an opposing wall in my studio, on large sheets of pattern-cutting paper.

This type of rhizomic mapping enabled me to identify complexities of key areas and reflect on them. Whilst some relationships between ideas were recognised, the method was recursive and it helped to identify the gaps in the literature, and refine the focus of inquiry.

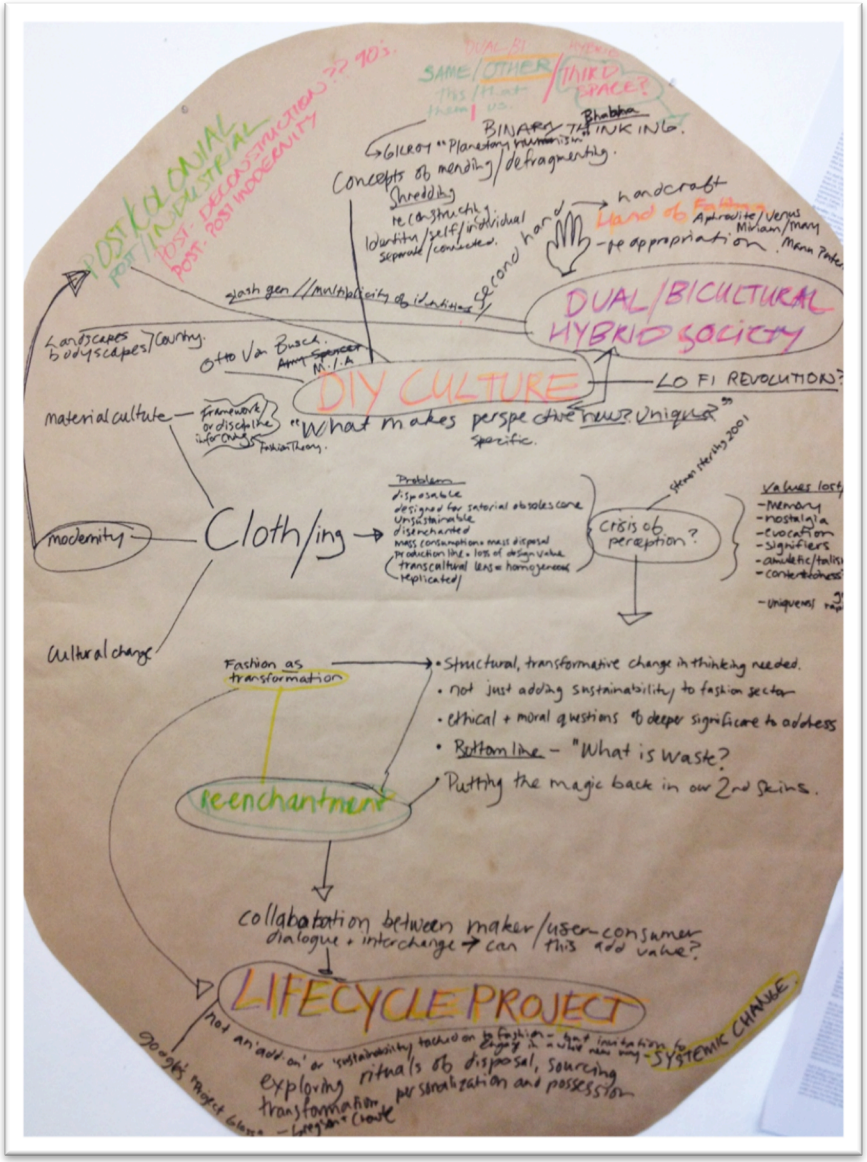


Figure 14 First iteration of 'word storm'

4.3 Connecting themes to imagery

Repositionable post-it notes were introduced as themes and subsystems began to surface. These served as a nexus between one wall and the next. The notes identified direct engagement between themes and imagery, particularly as the images progressed into digital textile print developments. Significant terms began to migrate from the '*word storms'* to the mood board reflecting a reciprocal approach and signalling an integration of theory into the visual mapping process. As these themes were refined, they became a grouping system for the print development.



Figure 15 Repositionable notes used to link theory to images

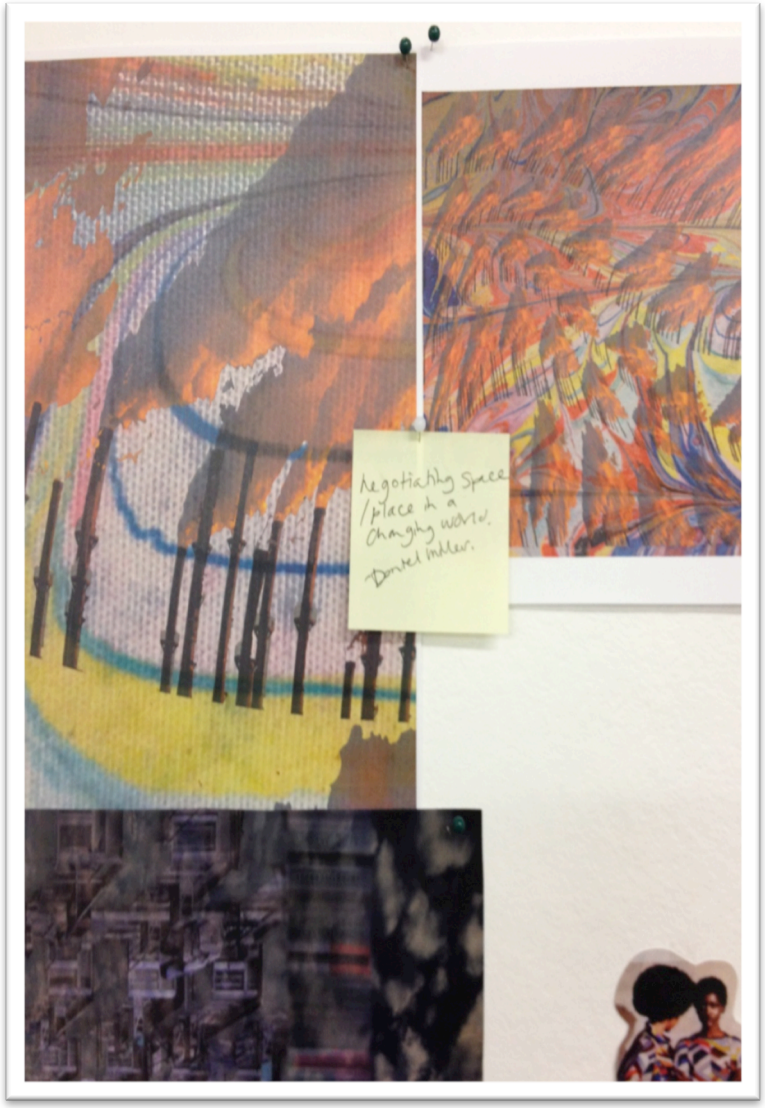


Figure 16 Quotes from texts showing relationship to print

4.3.1 Matrix building

This became a type of pathway matrix, where the print designs evolved from ideas and theories. This was manifest in a radial structure, linked by repositionable notes. Figure 17 illustrates one of the final development stages of my mood board wall. In the centre are a remaining inspiration images and photographs, radiating out from them in a recursive and overlapping progression are some of the prints developed and prototypes.

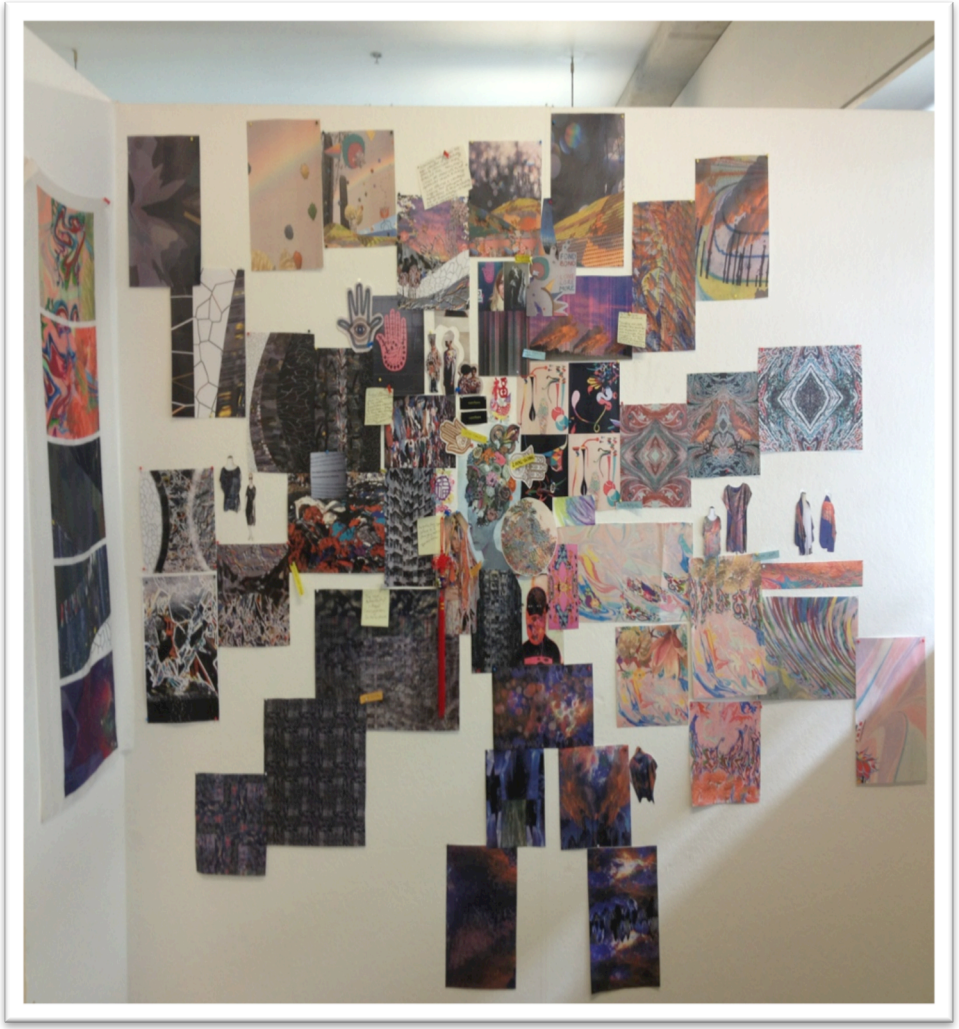


Figure 17 Pathway matrix

4.3.2 'Word storms' and 'word sparks'

The *'word storm'* wall also underwent several iterations. Figure 18 illustrates how the initial '*word storm*' is photocopied and repositioned at the left of the wall, replaced by a new refined '*word storm'* that charts the identified areas of focus. This is refined in the second image, where other ideas and areas of interest are highlighted for future research and separated into an interconnected *'word storm'.*

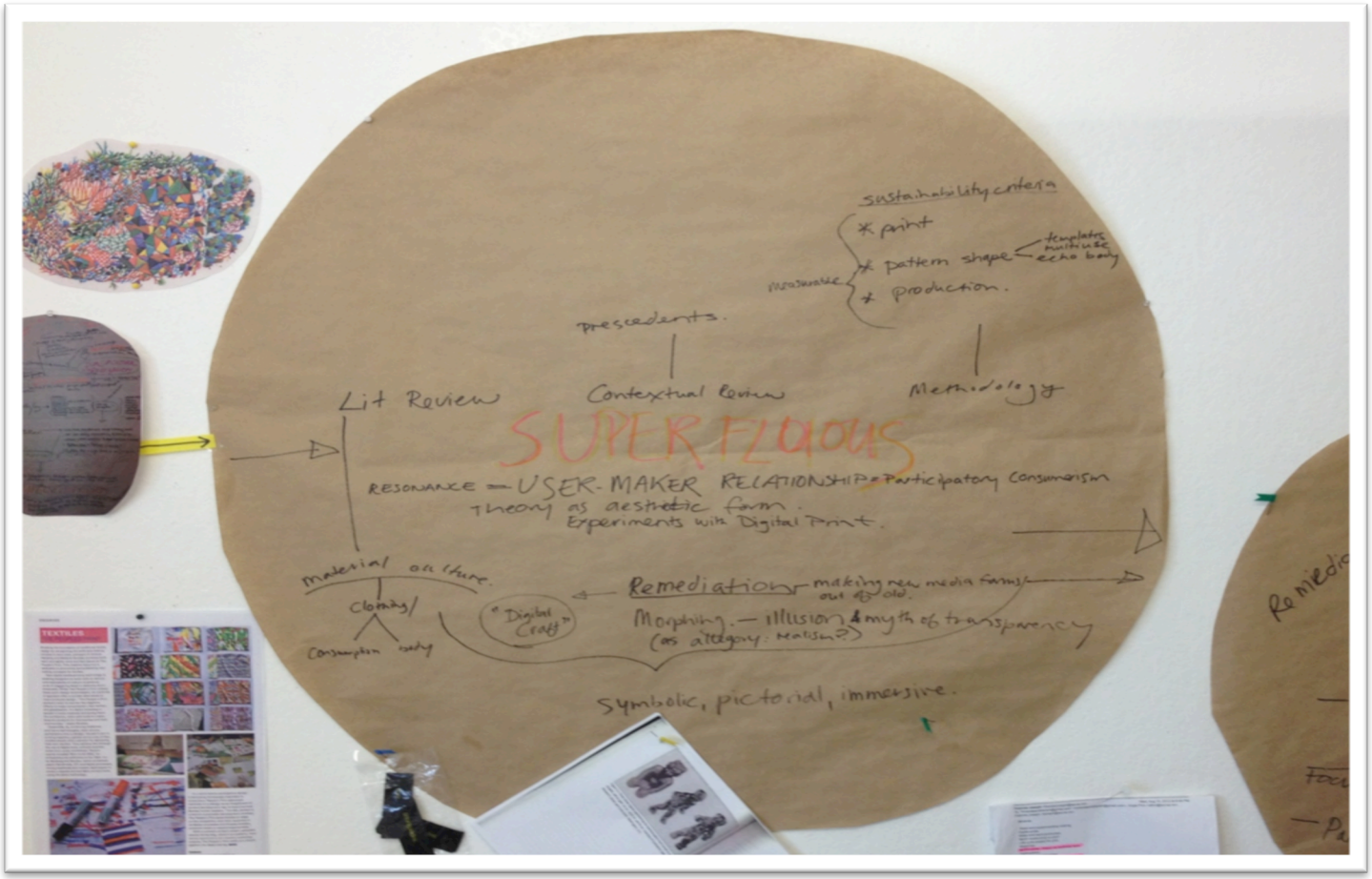


Figure 18 'Word storm' and new iteration

Another mapping process (seen in figure 19) I called *'word sparks'.* These *''word sparks'* were drawn in a sketchbook, and differed from *'word storms*' in that they were procedural, establishing connections, and used to visually map out the actual process of designing the research. As the project progressed, I used these to chart a pathway to visually communicate my direction to my supervisors and structure, to some degree, the oscillation between the two walls. These *'word sparks'* functioned as a communicable and procedural device, a navigational tool that also evolved also with feedback from my supervisors.

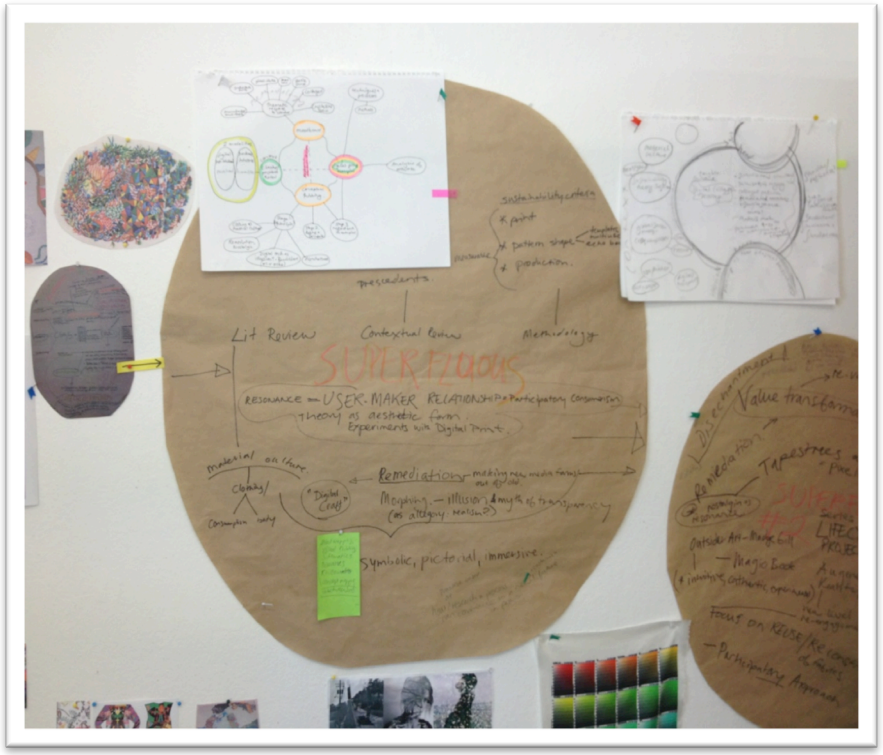


Figure 19 Wall showing interconnected 'word storms' and 'word sparks'

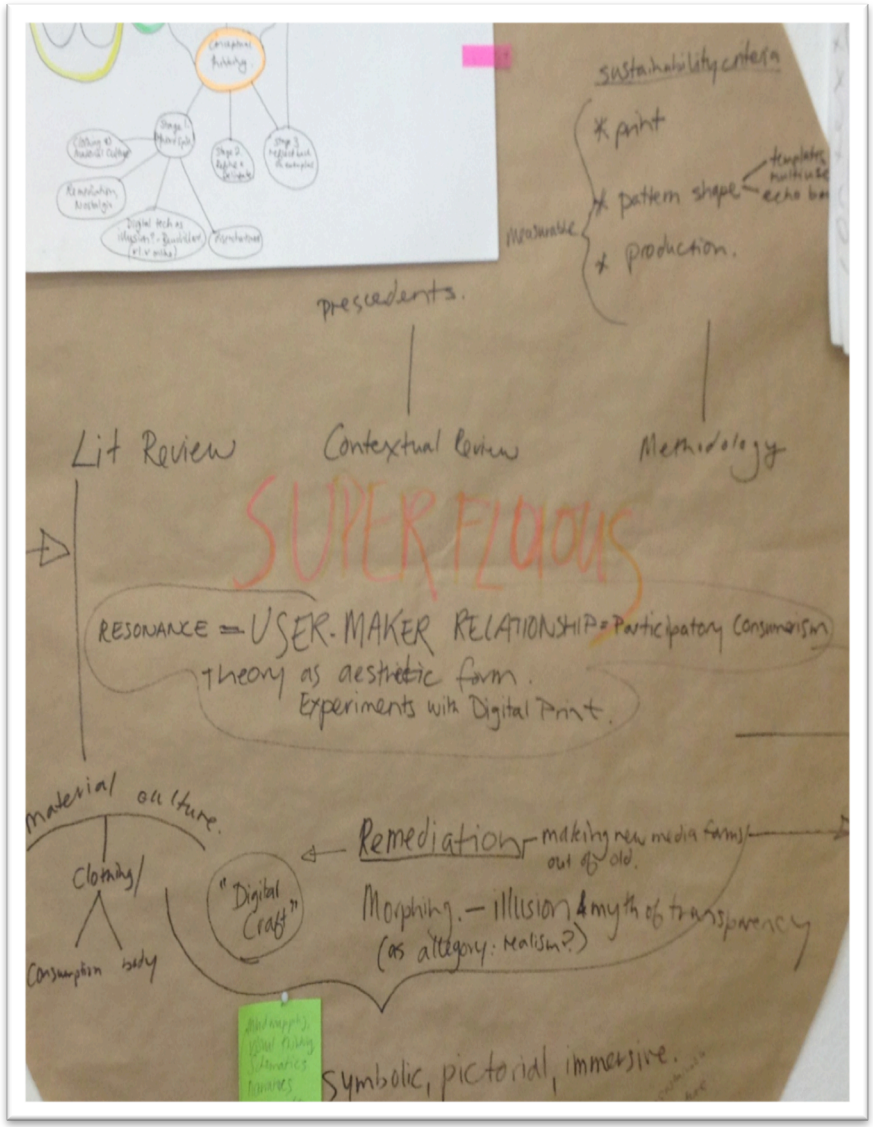


Figure 20 Detail from 'word storm'

4.4 Collation

With a series of subsystems of ideas from the literature review, I began to design digital textile prints. This method I have described as '*thinking out loud with my fingers'*. This term acknowledges that within the act of responsive making there is a sense of assimilation or reconfiguration of the idea explored. The idea or theory is considered from different angles whilst making with the hands. A different, dimensional quality is explored by '*thinking out loud with my fingers'*. In organising this literature and theory that frames the research I adopted two primary approaches.

For the digital textile designs, I created folders in Adobe Photoshop organised around the subsystems/themes. This can be seen in figure 22. The corresponding literature and precedents I reviewed within these subsystems were collected in *Zotero* - an online hosted referencing software, which allowed me to store articles, references and quotes. These were filed to correlate to themes. This software allowed me to tag keywords to these quotes, journal articles and books, and create connections between the literature.

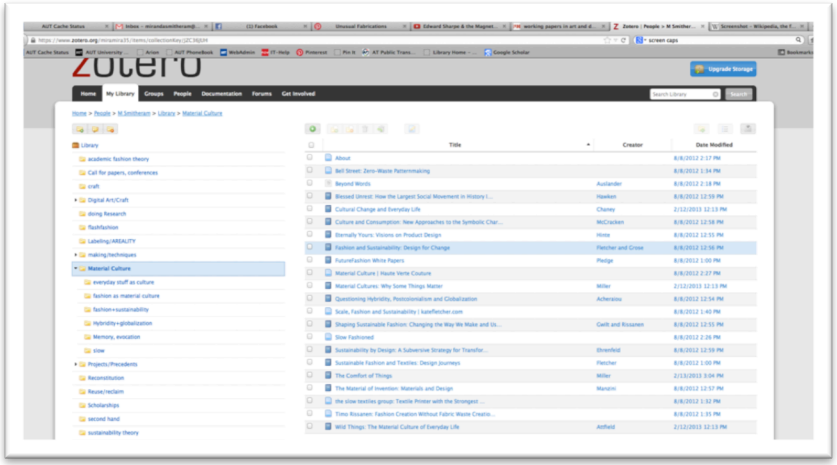


Figure 22 Zotero Library and folder organisation

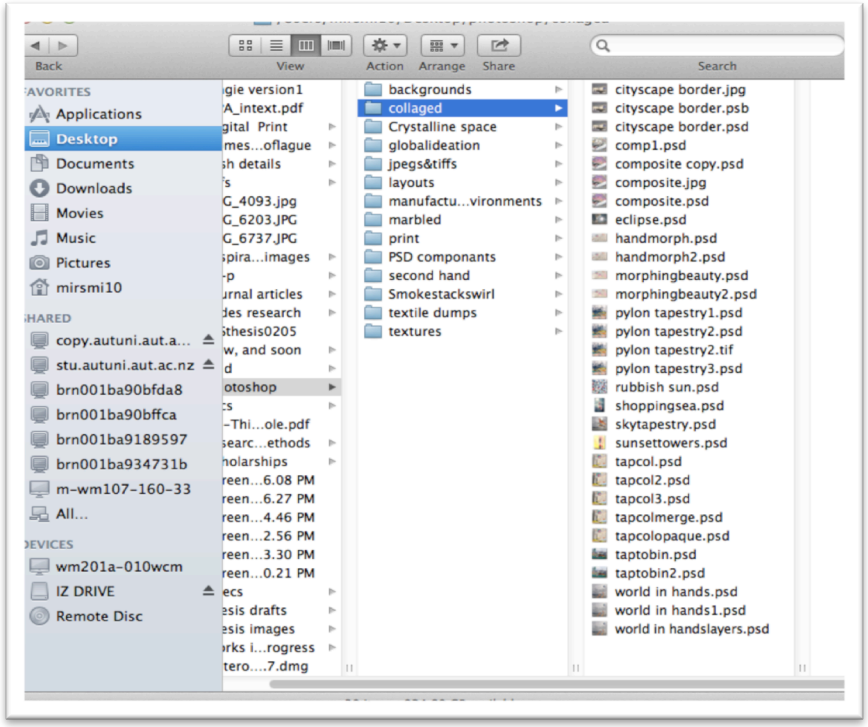


Figure 21 Adobe Photoshop folder system

I also created hand drawn diagrams that document each print theme, using a *matrix building* method. These diagrams record and break down the various aesthetic components, keywords, techniques, related texts and precedents, and ideas explored within each subsystem and print theme. This document can be seen in Appendix 1. This method of *matrix building* whilst collating information served to assist further reflection and identify connections within the research process. Echoing how the process evolved of visually devising a pathway matrix with my mood board, there is on reflection a resonance of method within the development of this textual pathway matrix.

In the creating an artefact through the digital textile printing phase of designing I utilized another form of mood board. Pinterest is a website-based content sharing service that allows members to "pin" images, videos and other objects to their pinboard (www.pinterest.com). It also incorporates standard social networking features, which as a method of mood board research, allowed collation and curating of ideas with community engagement. I used Pinterest (figure 23) as a tool to group concepts for my final exhibition artefacts, by publishing images of my own prototypes and curating ideas into groups, with images 'shared' by other users.

I also employed a blog http://ephemeralandsuperfluous.blogspot.com to record and order my thought process. The act of posting allowed for a curation of ideas in process and whilst informal, encouraged some refinements within communicating and documenting the process. There was however a lack of dialogue between the audience and myself. To facilitate this better I could have linked to more sites, and encouraged dialogue in various ways. Despite this, I did have an awareness of my work in progress being open to the public, and this resulted in a heightened editing process. It also allowed a way to visually communicate my project in a simplified way to my peers and other people in my field. Both the blog and my Pinterest page extended the method of '*thinking out loud with my hands'* by allowing for a space in-between the two walls *(interbodiment*) where I could talk about the theory and visual responses in a basic way.

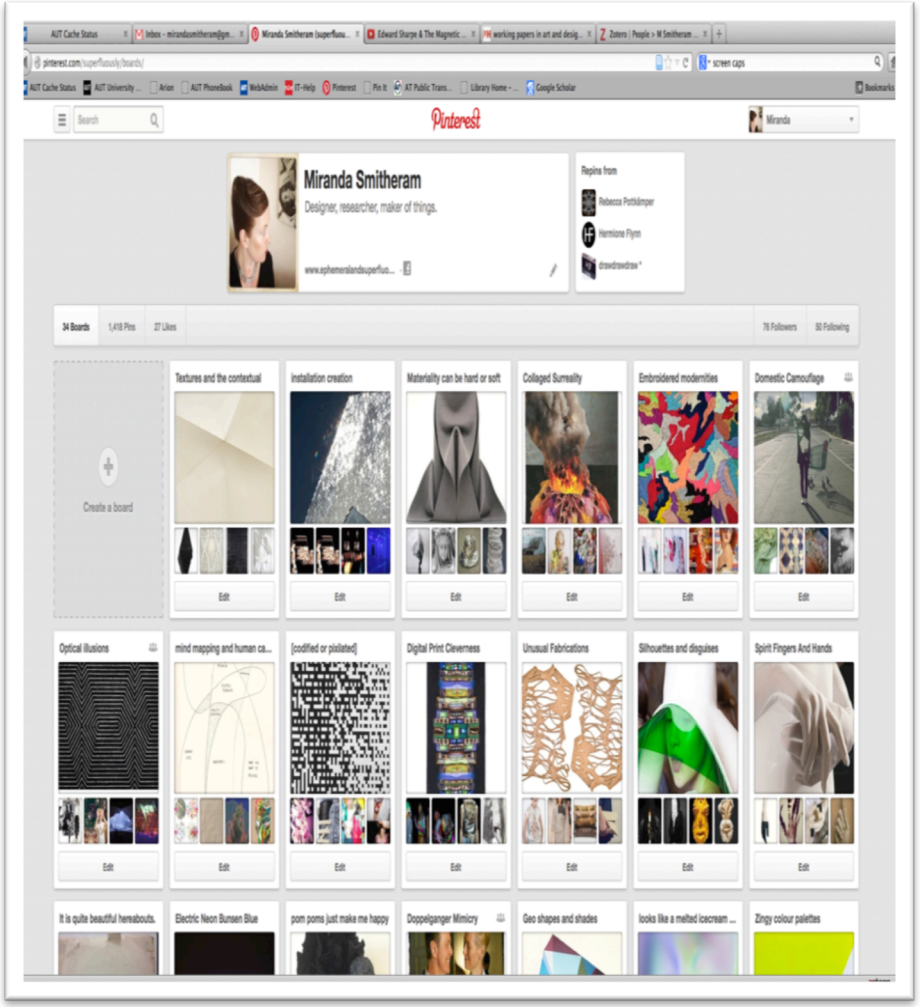


Figure 23 Screen grab of my Pinterest page

4.5 Adobe Photoshop methods

Within the act of designing digital textile prints in Adobe Photoshop and Adobe Illustrator, methods surfaced that became important to my process. I am mostly self-taught in these programs, with some training from attending a workshop taught by master textile designer Hitoshi Ujiie in 2012. I also looked up tutorials on the Internet as required. A significant discovery of my own process was the instinctive use of fashion and textile design strategies, despite working within a computer design software program. Methods I developed that became significant to the work exemplified a textural harmony in integrating the conceptual and the aesthetic. In a sense, treating the Adobe Photoshop file as a fabric.

These methods include 'extrapolating threads' which involved a number of different techniques of breaking down a photographic image to its core components of light, line, and colour. This process essentially reduced an image to its warp and weft, by unpicking the seams. This method encapsulated theory of 'undoing form' by exposing the 'threads' of images such as textile rubbish dumps and discarded clothing (see figure 22). Another employment of tacit fashion and textile design strategies involved layering the image in Adobe Photoshop by 'appliqueing' details and embellishment. My observation of this method led to the identification of other incorporated fashion techniques in this the design process. Adobe Photoshop tools are used to appliqué, patchwork, and embroider into the artworks, critically incorporating *fashion thinking* into the making.

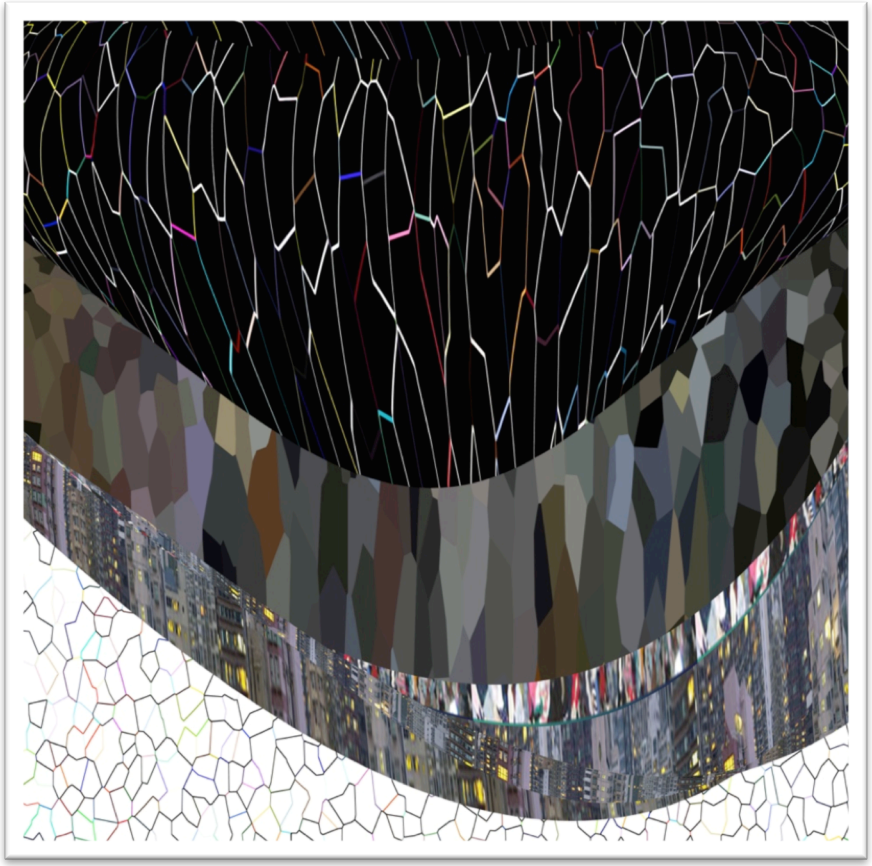


Figure 24 "TextileDump#11" Digital print on silk charmeuse, M Smitheram 2012

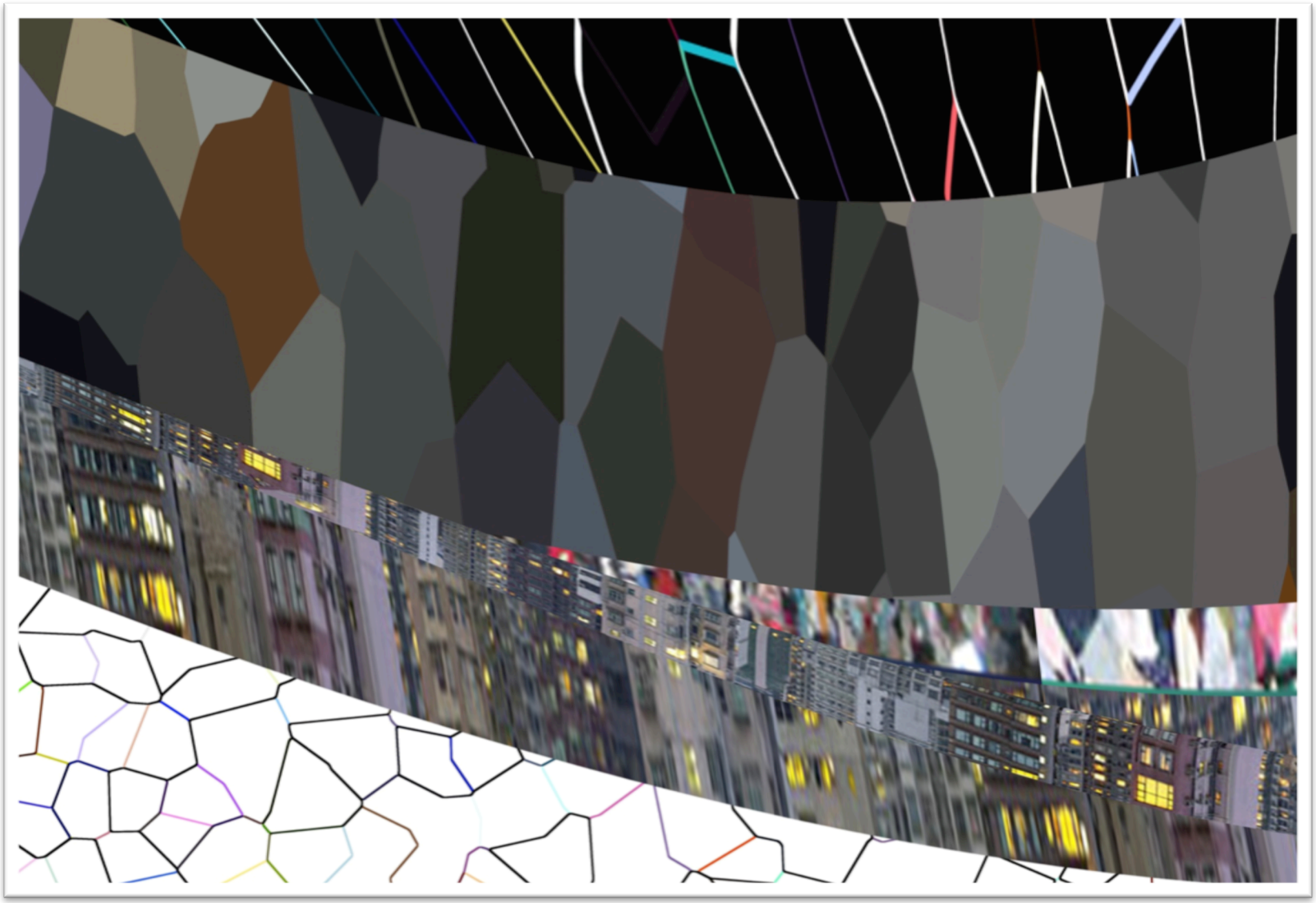


Figure 25 Detail of TextileDump#11, showing high-rise slums and textile dumps

4.6 Digital print

The designing of the digital textile prints was done with sensitivity to the outcome. Many experimental prints were never actually printed, but I still needed to design them as if they were going to be. This required setting the scale of the Adobe Photoshop file to the desired fabric dimensions, and adjusting the dpi (pixels per inch) to 150 as the optimal setting for the digital inkjet printer. As a quick method of testing a print, I would first print two copies out on a colour photocopier. One print would be scaled to the paper size, and the second not scaled, to get a sense of the perspective and rendering on full scale.

When I had a group of images together that I wanted to test on fabric, I would select a 30cm by 30cm square of each image, and create a textile print with these grouped in a row, then print on the digital textile printer. This enabled me to see the print and colour resolution. These I could then adjust for a final print. There were some differences noted initially with colour results, due to the format differences between the computer screen, the colour photocopier, and digital textile printer. I had a colour profile chart printed at the AUT Textile and Design Lab onto my base cloth, which was helpful in selecting corresponding colours in Adobe Photoshop.



Figure 26 Textile & Design Lab digital printer with prototype printing



Figure 27 Computer screen of digital printer showing print layout

4.7 Structuring artefacts

4.7.1 Superfluous label prototypes

An early print run of digitally printed silk fabric was developed into a small group of prototype garments for commercial sale. I labelled these garments *Superfluous.* This was a experimental way of playing with shape and form, but labelling them *Superfluous* and selling these morphed prints of textile dumps to mostly unsuspecting customers was more subversive. These tops and dresses were very simple pattern shapes, designed with minimal cutting of the fabric in mind. They all featured French seams as a construction detail that contributes to their future durability.

Developing these prints into garments had both advantages and drawbacks. As a positive aspect, the garments allowed me to consider the form and materiality of the cloth, as it related to the body. Practically, I was also able to finance my prototype experiments through selling some of the garments.

While these early prototypes were experimental, they ultimately conflicted with my project ethos. Although making and thinking about them helped qualify and determine the later project focus to use digitally printed textiles to create artefacts as artworks rather than garments. The artworks represent the exploration of themes within the pattern and narrative of cloth, whilst embracing the materiality of cloth as a raw, unformed component.



Figure 28 *Superfluous* garment labels



Figure 29 Model wearing *Superfluous* dress



Figure 30 Model wearing *Superfluous* top at 'Sergeant Pretty' Summer showing, 2012

4.7.2 Pyramid Prototypes

A stage in developing structural forms was trialling pyramid prototypes. The intention was to experiment with both form and light. Working with these digital prints on an Apple Mac computer, I was accustomed to viewing them illuminated by the screen. This idea of carrying through the illumination to the artefact had both conceptual and practical basis. Creating some sort of light-box would refer to the digital relationship to the computer screen; it would also further expose the warp/weft of both the scanned in and printed fabrics.



Figure 31 Pyramid prototype



Figure 32 Pyramid prototype

I decided to take the light- box idea further and trial various shapes. This was to release the textile from being pictorially representative in a traditional two-dimensional painting format. Early prototype experiments of structuring these artefacts involved small-scale mock-ups made from chops sticks, and various LED lights (Figures 31 & 32). This was a quick method of trying out an idea, and enabled some experimentation with different types of LED lights, and different base fabrics.

4.8 Evaluation

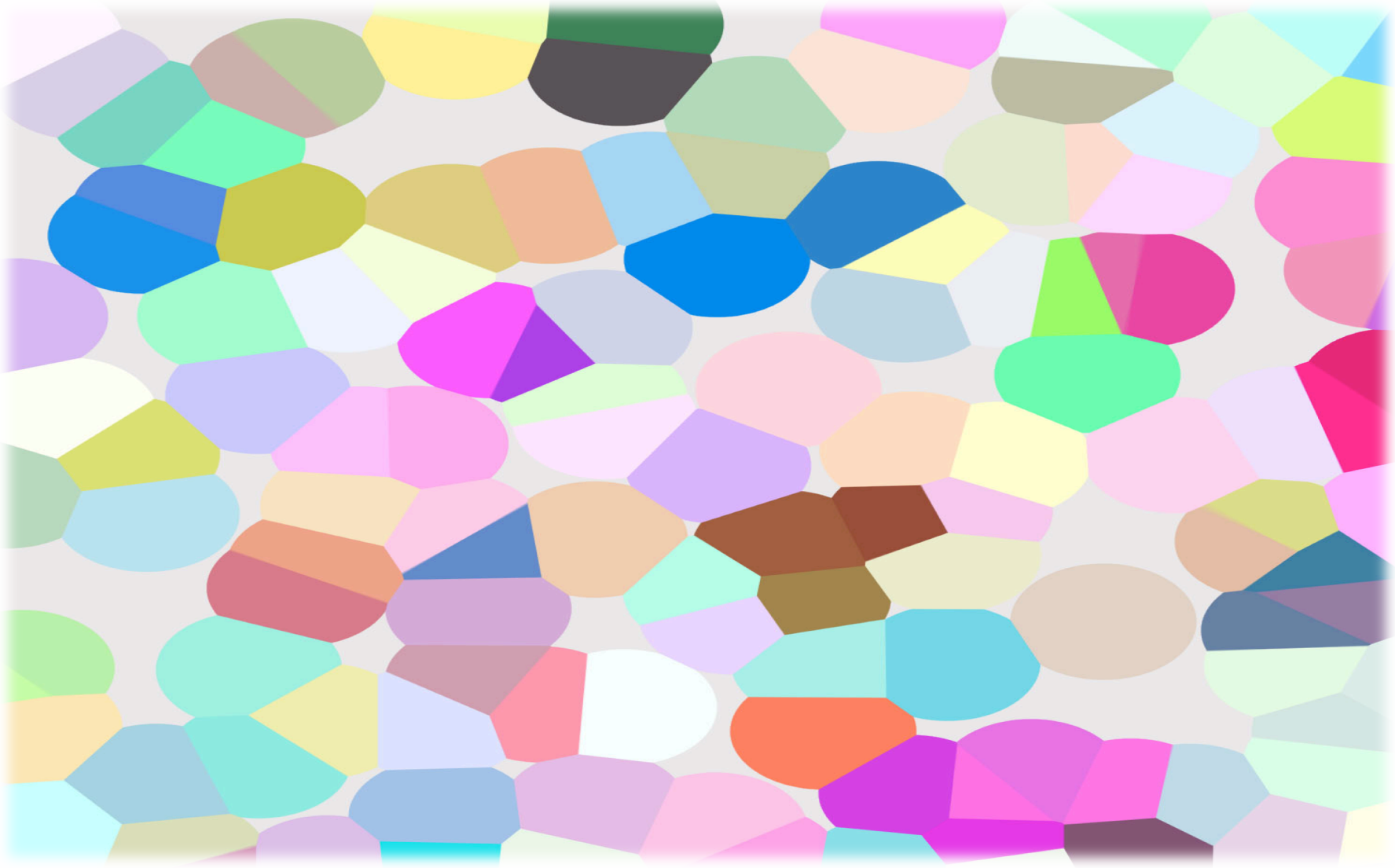
The criteria important to this inquiry engaged theoretical, conceptual, and aesthetic domains. In considering the work in progress and evaluating the methods, identification of an overarching register of '*interbodiment'* was significant. This level of engagement with the project identified the intersections between the theoretical framings of *disembodiment*, *embodiment*, and *post-embodiment* with the methods of making. *'Interbodiment*' acts as a bridge between the theory and the making, and is the articulated synthesis of '*thinking out loud with my hands'.*

The importance of visual exploration related to theoretical inquiry was defined at this project's inception and subsequently informed the design of the research. The use of visual communication is perceptible across the methods of visual mapping and *thinking out loud with my fingers*. This process also led to establishing groupings/themes, using *'word storms'* to define key theories, and *'word sparks'* to determine procedural and structural direction of the research.

These strategies of process and method helped facilitate new feedback loops- where internal dialogue became communicable. It was important to me as a new researcher to develop these techniques for largely solitary working, as I was used to a design process in fashion that involved constant consultation and team dialogue.

The embodiment of conceptual development came through correlation and extension of digital method. A key stage in this was the hypothesising of the form of the artefacts themselves. Early prototypes discussed earlier such as the small range of silk dresses and tops I developed under the *Superfluous* label were abandoned, as they did not fit well with the ethos of the project.

The design theorist Stephen Scrivener argues that depth and knowledge deepens with the act of making (Scrivener, 2000). Within this project, the actions and processes of making encouraged a deeper investigation into the research. As a process, '*interbodiment'* occurred as thematic grouping began to merge and morph into each other. Key aesthetic elements from one thematic group began to infiltrate later iterations. *'Interbodiment'* can also be used to describe the process of synthesis on reflection, realising and recognising key stages of intuitive incorporation of elements or ideas.



Chapter Five

Chapter 5. Project Outcomes and Commentary

An overview of the creative work produced through this research is presented in this chapter. The thematic groupings (as outlined in Appendix 1) are used to organise the discourse on the artefacts produced. These thematic grouping relate to the conceptual levels of inquiry of *disembodiment, embodiment, post-embodiment,* and *interbodiment*. Some of these works exist as pixels, suspended as an Adobe Photoshop file, while others take form as digital textile prints on fabric, and some even morph into sculptural and conceptual forms.

5.1 Disembodiment

The print themes identified in this level of inquiry are titled ‘Manufactured,’ ‘Second Hand’, and ‘Smokestacks.’ Initial research into the literature focused on the systems that influenced or resulted from fast fashion as a dominant paradigm. Areas investigated included industrialisation, globalisation, mass production, sustainability evolution, consumption theory, and hybridity.

Critical visual ideas explored included the use of urban and industrial images, experiments with macro and micro scale, playing with scale of objects to focus importance and exposing warp and weft of a base cloth by blowing up the scale. Some of these stylistic methods can be seen in the accompanying image from the ‘Smokestack’ series. Techniques in this thematic grouping included experimentation with Adobe Photoshop tools of liquefying, adjusting opacity levels, blending objects, and grid-like structures.

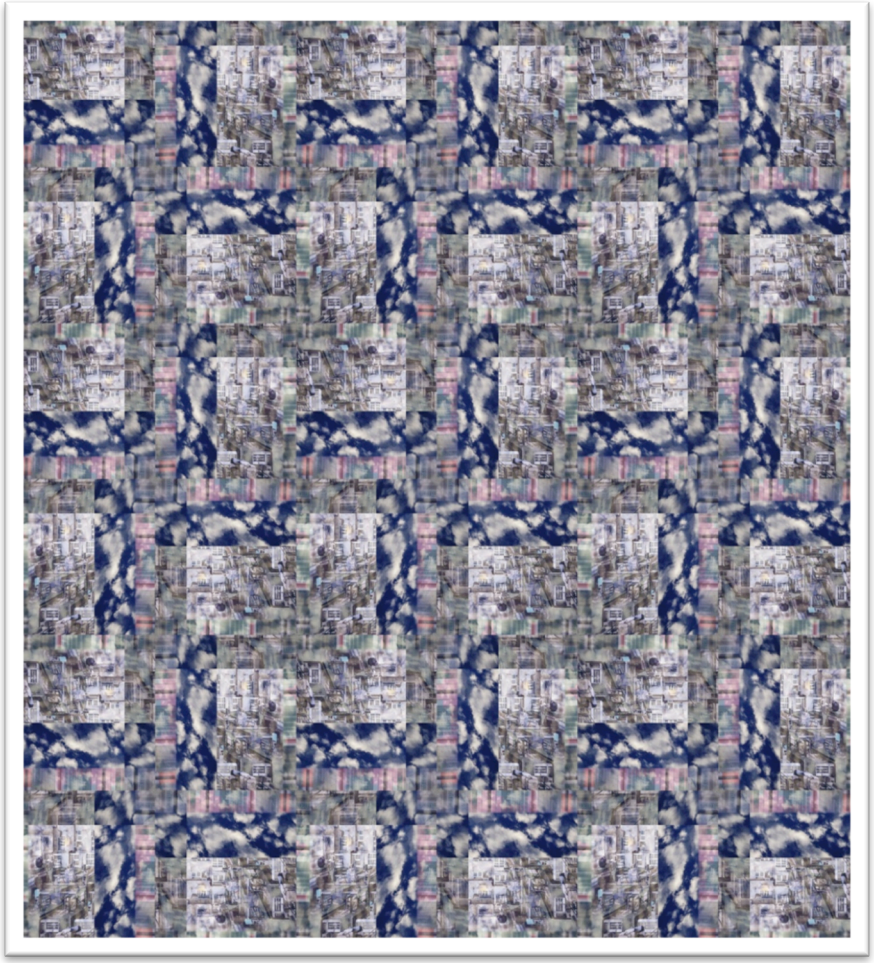


Figure 33 "ManufracturedRepeat#2” Adobe Photoshop file by M Smitheram 2012

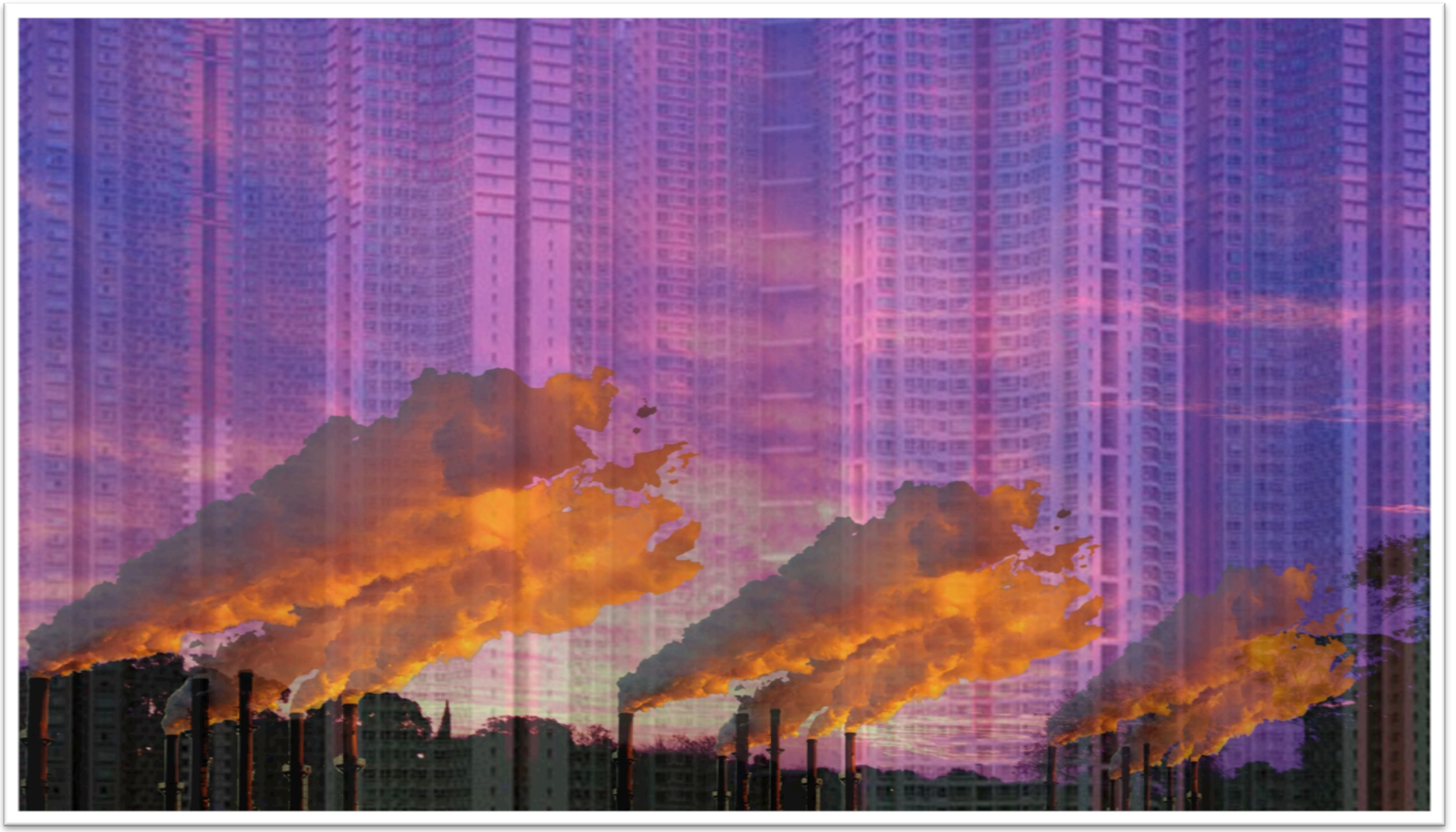


Figure 34 "Smokestackswirl#23" Digital Print on silk georgette, M Smitheram 2012



Figure 35 "Smokestackswirl#1 Digital Print on silk georgette, M Smitheram 2012



Figure 36 "Smokestackswirl#14" Adobe Photoshop, M Smitheram, 2012

5.2 Embodiment

At this level of inquiry of embodiment, the critical framework and central ideas surrounded the corporeality of cloth, its artefactual nature, and the superfluous nature of pattern. There was also an underlying philosophical framing associated with the exploration of digital and analogue multimodality.

A key stage in this associated thematic group ‘Textile Dumps’ was the move away from repeat patterns, reflecting a conceptual shift away from industrialised modes. I began to develop collage and cut ‘n’ paste techniques that related to theory in a more abstracted way. *Fashion thinking* was tacitly employed as methods of design within Adobe Photoshop as discussed in Chapter 4.5. This was a significant stage in beginning to develop a distinctive aesthetic.

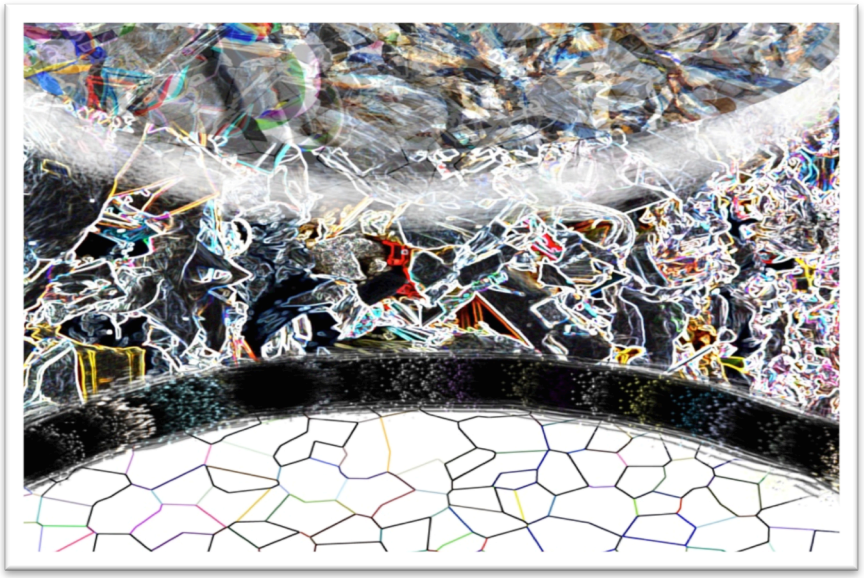


Figure 38 "TextileX" Adobe Photoshop file, M Smitheram 2012

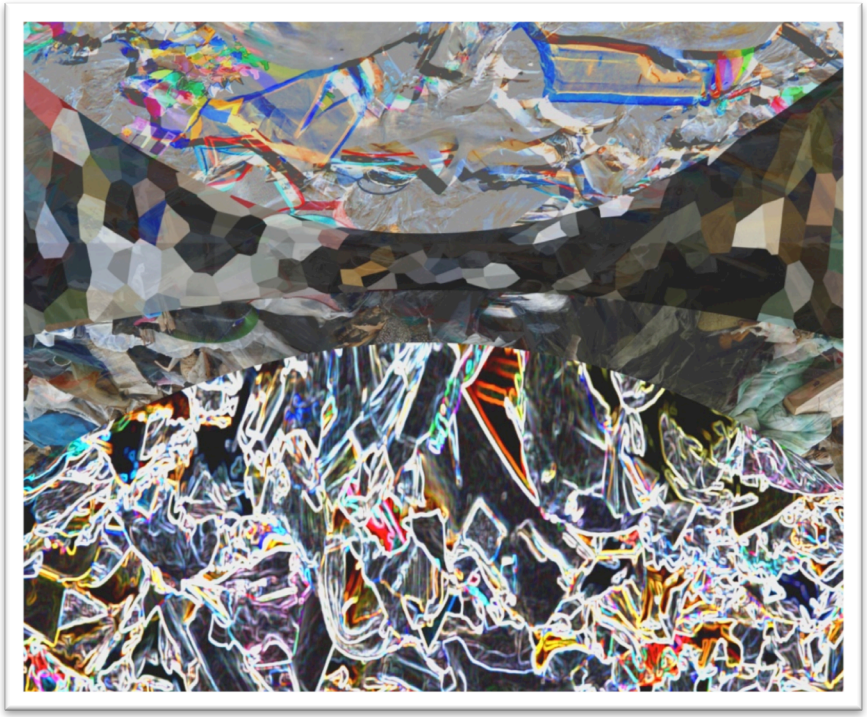


Figure 37 "TextileY" Adobe Photoshop file by M Smitheram, 2012

As figures 37 and 38 demonstrate, methods in Adobe Photoshop such as filters were used to stylize and extrapolate and expose ‘threads’ across the original photograph of a textile dump. The intention was to remediate through morphing an inherently ugly image into a new kind of beauty. Glowing edges were applied to the objects in the photo, and using layers, the image was reinterpreted through different digital techniques.

The body was referenced by a curved pattern that suggested the dynamic contours of a body, creating potential garment design lines.

5.3 Post-embodiment

The print theme ‘Collage’ interprets ideas from the literature and precedents examined around future fashion systems such as open-source and on demand. Digital-craft and digital morphing were considered and contrasting elements of vintage tapestry and hand embroidery were incorporated into hyperreal prints. *Fashion thinking* techniques of ‘appliquéing’ in Adobe Photoshop were used as a way to embed a maker’s mark into the prints. This level of inquiry looked at a futuristic, even utopian ideal of *re-enchantment.* This is evident in the metamorphosis of the imagery through digital morphing, seen in the stylized narrative folk/digital prints of ‘Collage’, and in the otherworldly images in the thematic group of ‘Crystalline Space’.

This group of prints became progressively dialogical and biographical, serving as both an internal reflection on theory and as external commentary on sustainability and consumption. In figure 39 a relationship can be seen with previous figures 37 and 38, as this image starts to progress into a more narrative form, with a horizon line. Insight gained from the literature surrounding these themes are communicated through elements of local landscapes reflected and remediated on these theories of the global and local.

In figure 40, high-rise apartments in Auckland can be seen looming above the landscape, while a crane menaces the blue sky in the lower right side, as it demolishes local shops in my neighbourhood to make way for a mall. In figure 41 sale signs and racks of garments from chain stores form hillsides, contrasted against the exquisite beauty of a harbour sunset.

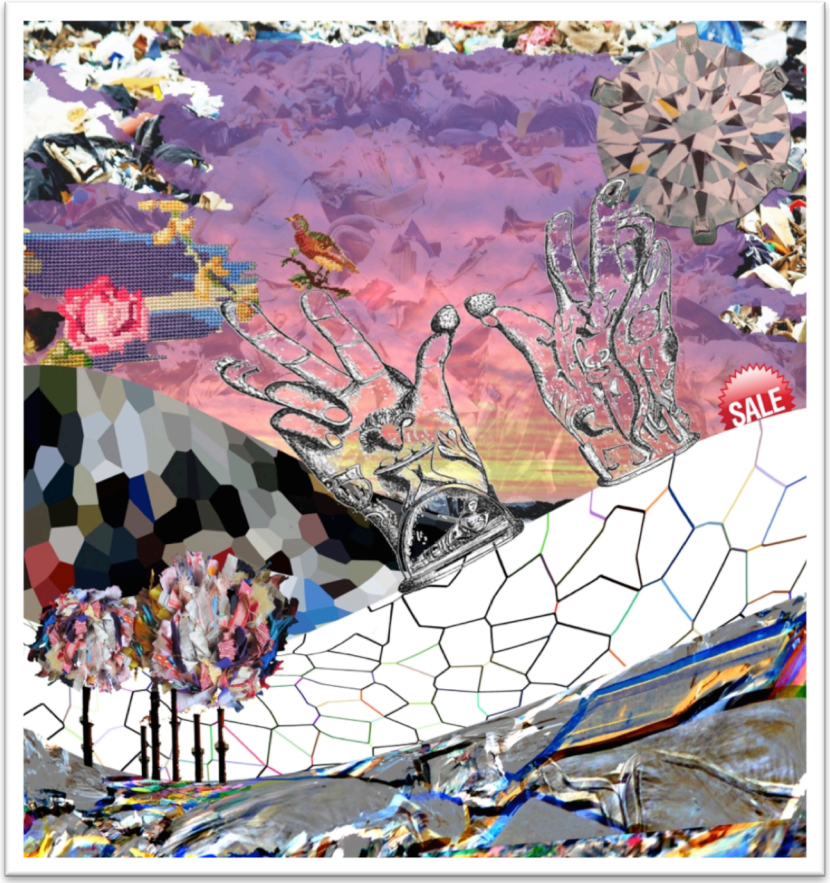


Figure 39 "Composite#3" Adobe Photoshop file by M Smitheram 2012



Figure 40 "TapCol#4" Adobe Photoshop file by M Smitheram 2013



Figure 41 "Cityscape" Adobe Photoshop file By M Smitheram, 2013



Figure 42 "Morphing Beauty#2" Digital Print on silk charmeuse, M Smitheram 2013



Figure 43 “Raised” Digital Prints, M Smitheram 2013

Critical texts related to images in the ‘Collage’ theme were *The Comfort of Things* by Daniel Miller (2009) and *Windows and Mirrors: Interaction Design, Digital Art, and the Myth of Transparency* by Jay Bolter and Diane Gromola (2005). The embroideries and tapestries reference Miller’s assertion of the corporeality of cloth changing and fading as it assimilates to the body within.

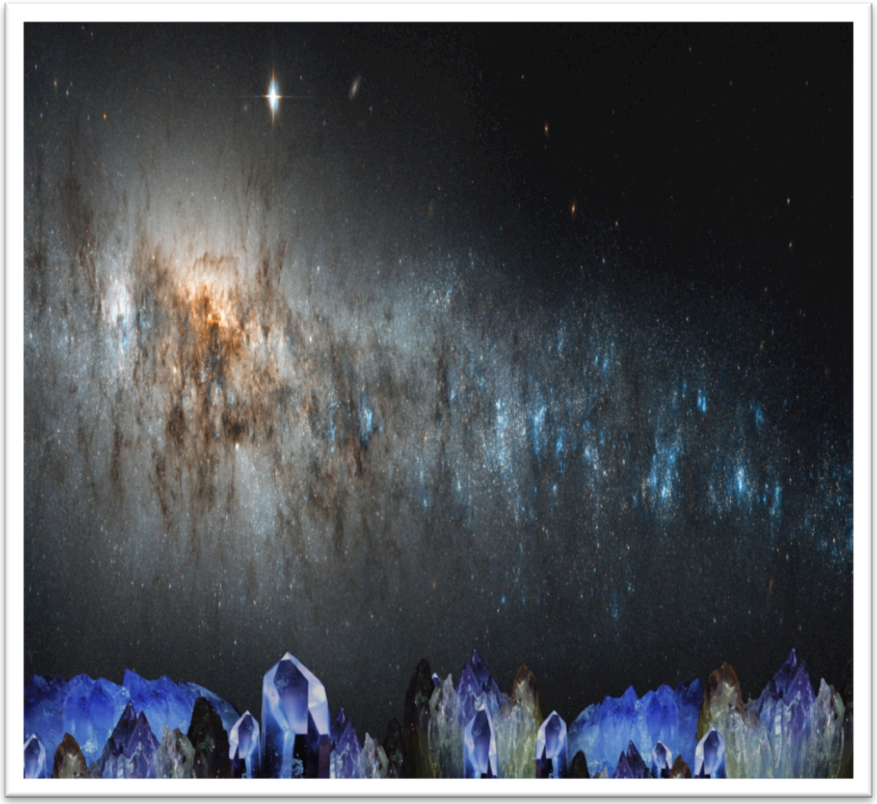


Figure 44 "Belly of the Whale" Digital textile print on silk charmeuse, M Smitheram 2012

These prints (figures 44 and 45) belong to the thematic group of ‘Crystalline Space’. The digital print components of constellations seen through NASA telescopes, amethyst crystal structures and smokestacks are mirrored and techniques of fading, morphing, and layering applied. This theme was originally an escape into ‘otherworldly‘ dimensions as a response during making to global consumption and sustainability concerns. This theme wasn’t pursued further due to this reactionary nature.

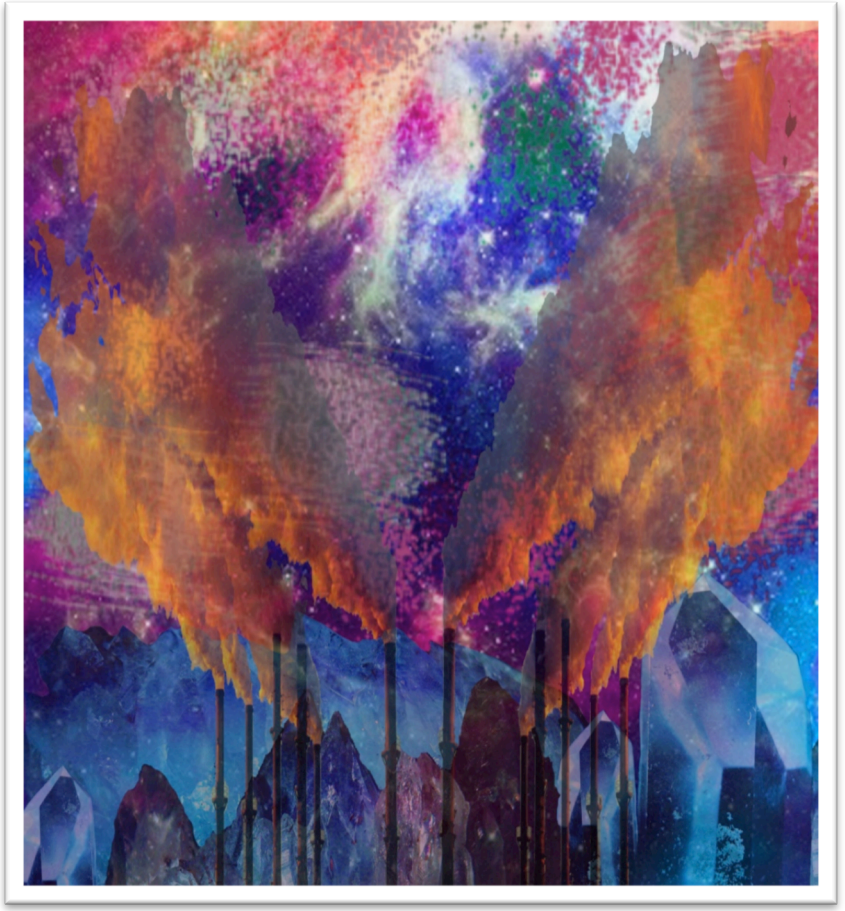


Figure 45 "Spacejunk#2" Digital textile print on silk charmeuse, M Smitheram 2012

5.4 Interbodiment

Interbodiment acts as a connecting device, framing the work both as a process and as an outcome. Within the digital textile prints *interbodiment* occurred as thematic groupings began to merge and morph into each other. In the final works, key aesthetic and conceptual elements from the different thematic groups began to infiltrate the final iterations.

The print theme 'Globalideation' (fig 47) demonstrated early synchronistic instances of *interbodiment,* with critical points involving the concepts of replication and re-appropriation. Techniques of warping and distorting are initiated in Adobe Photoshop to simulate multi –dimensionality in the artworks. Sobchack (2000), Baudrillard (1990) along with Gablik (1992) inspire this idea of morphing as allegory of realism. The essence of the ideas developed in figures 46 and 47 carry through into the project's final artworks.

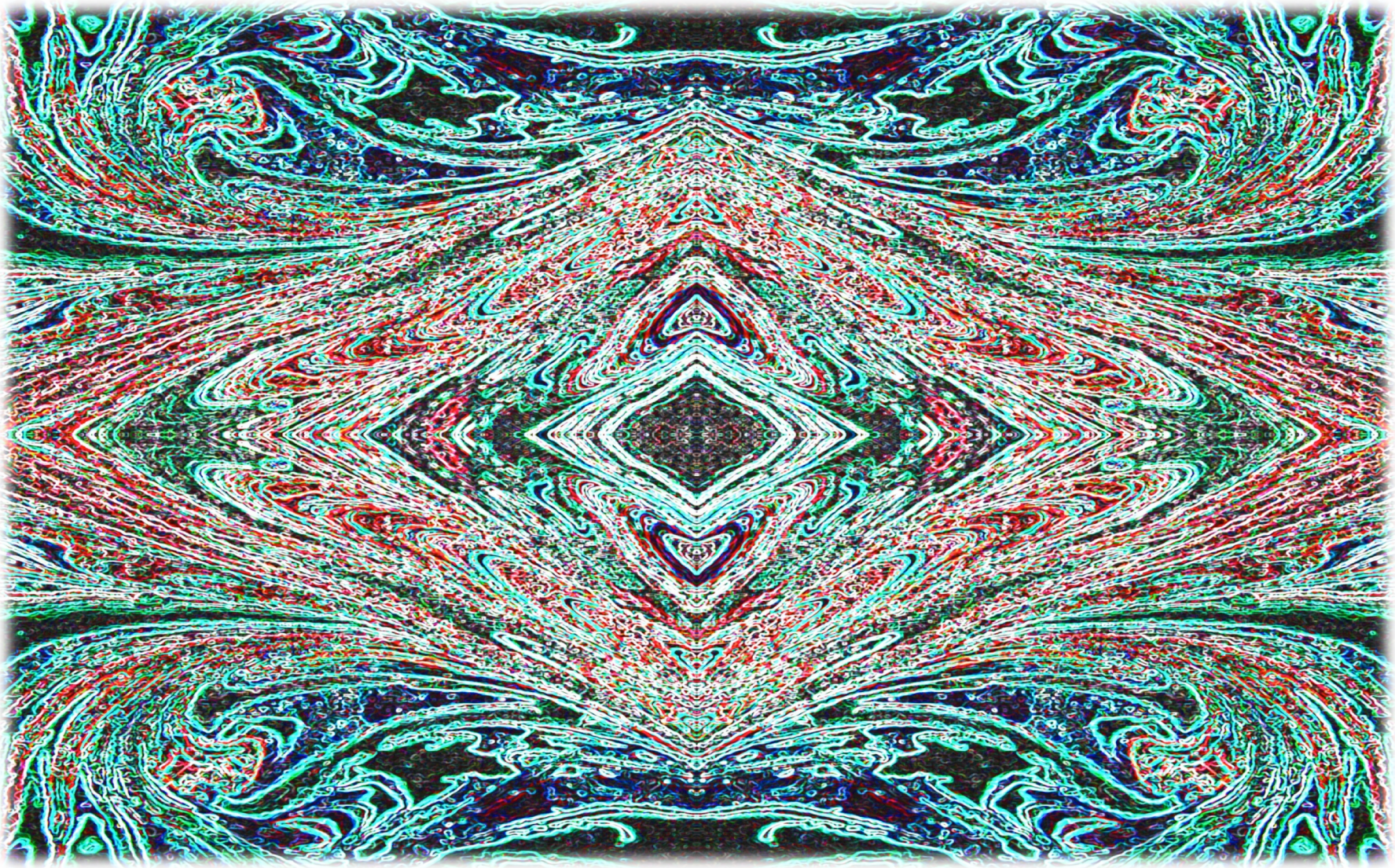
Pivotal visual elements combined within this theme included hand-made marbled fabrics with exaggerated scale, local photography, and 'Two Dollar Shop' Chinese paper-cut dragons, warping of images and collaging. Elements such as remediation, local/global and past/present encapsulated the conceptualisation of theme.



Figure 46 "Dragonwarped#1" digital textile print on silk charmeuse by M Smitheram 2012



Figure 47 "Globalideation#3" digital textile print on silk charmeuse by M Smitheram 2012



Chapter Six

Chapter 6. Three-dimensional artworks and exhibition

An exhibition of final works for examination was held in *Testspace*, a gallery space for testing installations at Auckland University of Technology school of Art and Design in mid May 2013. The final works selected for examination were chosen for their success in capturing and conveying the essence of the inquiry and the aesthetics of the resolution of colour, pattern, form and technique. Also of consideration was the cohesiveness of the work in its entirety. Figure 49 shows a panorama of the exhibition.

6.1 Light-boxes #1 and #2

A series of five light-boxes were constructed for the examination from textile designs digitally printed on silk charmeuse, recycled ply wood, repurposed LED lights, electrical cords and plugs. As discussed on page 49, the idea of carrying through the illumination to the artefact had both conceptual and practical basis. Creating light-boxes referred to the digital relationship of the computer screen and also highlighted the warp and weft of imagery within the artwork and the actual surface of printed fabric.

Figure 48 illustrates a pair of light-boxes, both featuring mirrored engineered designs. The light box on the left featured a photograph of a rubbish dump, with an over-laying image of a Chinese paper-cut dragon. This image was flipped and mirrored, and a photographed image of local moss morphed through the dragon, creating a hybrid image. There is a suggestion of a mask, a face, or a ‘green man’ created by the mirrored imagery. The light-box on the right had as a background mirrored and engineered photographic imagery of fabric off-cuts, selvedge and scraps. Integrated and morphed into the fabric were images taken of local chain stores and newspaper images of the aftermath of factory fires in Bangladesh and Pakistan clothing manufacturers in 2012.



Figure 48 Light-box #1 and #2, M Smitheram 2013



Figure 49 Panorama view of installation, M Smitheram, Testspace, 2013

6.2 Light-boxes #3 and #4

Light- boxes #3 and #4 featured abstract placement prints, both with a fabric edge that extended off the frame. The prints for these were designed with one border where the print image is swirled in Adobe Photoshop, and appears to disintegrate and dissolve. The light-boxes were constructed as 3-sided boxes to accommodate this irregularity, which explored the materiality of the cloth by the form freeing itself from the screen and frame.



Figure 50 Light-box #3 with extended fabric edge, M Smitheram 2013



Figure 51 Light-box #3 M Smitheram 2013

6.3 Wall hanging and light-box#5

Hanging as a pair on the back wall of the gallery space was a kimono-esque wall hanging and the final light-box. These sat together, with soft lighting and a sense of optimism. This light-box had a large scale of 145cm width by 85cm height. The lights used for this artwork were diffused and more intermittent than the other light-boxes- as the softer tones of the digital print would otherwise have allowed stronger lights to be visible through the silk. The subject matter was likewise diffused, softer, hopeful.

The wall hanging as an artwork showed the raw materiality of unformed cloth- other than the surface design the length is uncut, and unaltered. Just a simple coat hanger suspends the work, and a few hidden pins create a sculptural insouciance through a shrug suggested by draping. A single spot light illuminated the surface.

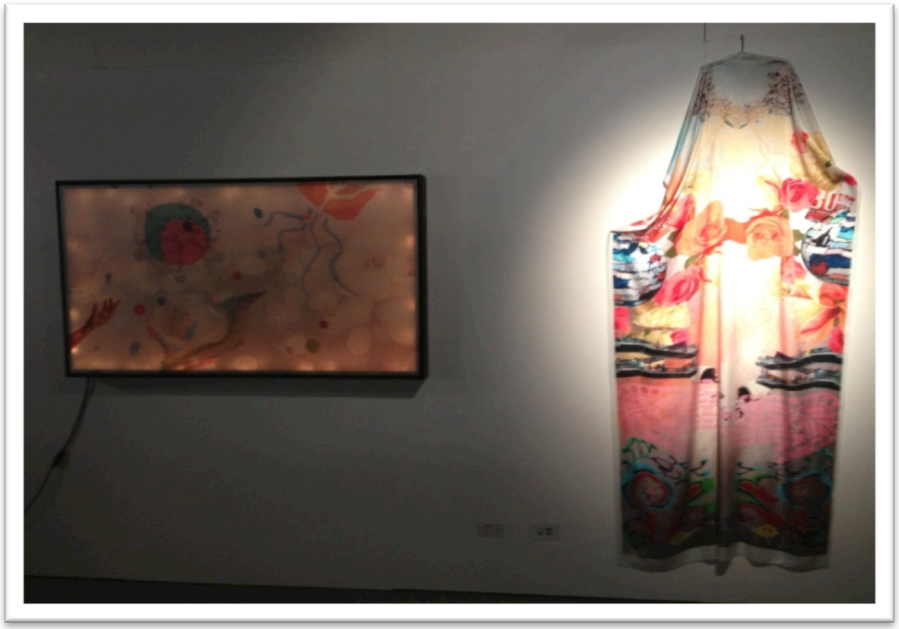


Figure 52 Back wall of gallery showing Light-box #5 and wall hanging, M Smitheram, 2013



Figure 53 Wall hanging, M Smitheram 2013

6.4 Pyramid forms

Three spherical forms rested on the floor of the exhibition space. These artworks had a temporal structure, with a single length of cloth draped over the form and pinned to the base. These digital prints were the only truly abstract prints in the installation, with no recognisable imagery or symbol. Each print evolved from photographs of rubbish dumps, and underwent numerous processes in Adobe Photoshop to enhance, magnify, extrapolate light, pixelate, distort, and re-imagine the original photograph. These artworks suggested a remediation and reconfiguration of consumer rubbish and discarded artefacts, provoking commentary through form and surface on what structures we leave behind as a society- pyramids or rubbish dumps.



Figure 54 Detail of Pyramid forms, M Smitheram 2013



Figure 55 Pyramid forms, M Smitheram 2013

6.5 Animation film and installation

I created an animated gif of over a hundred of my digital print files in Adobe Photoshop using the timeline function. I ordered the digital files according to the thematic groupings and then designed transitions between each file, which allowed the viewer a sense of each print evolving into the next. I then made the animation into a four-minute movie, which was projected across the gallery space from the roof onto a static installation of three mannequins, swathed in gestural lengths of white cloth. The fabric created a backdrop for the projections, with some transparent fabrics adding a multi- dimensionality as the projection went through and across the transparent layers. A clip of the installation and projected animation is viewable as Appendix 3.

There were several unexpected elements that eventuated from designing the spatial relationships between objects in this installation. This tableau was viewable from three sides, and I constructed the space with shadows of the mannequins playing across the back wall adding a depth of negative space to the installation. An unintended outcome was that the transitions between each two prints generated a third 'ghost' print- as one print faded out and a new print emerged a temporal third print momentarily appeared. I was able to photograph and capture some of these liminal transitions; an example can be seen in figure 56.

This installation referred directly to the digital nature of the prints and the suspended animation of the files. The virtual clothes worn by the mannequins are neither fixed nor consumable. They flicker and shape-shift, creating a dimensional transcendence of cloth through ambiguity and ephemerality.



Figure 56 Projection Installation work, showing transition from one print to next.



Figure 57 Installation piece, M Smitheram 2013



Figure 58 Installation piece, M Smitheram 2013

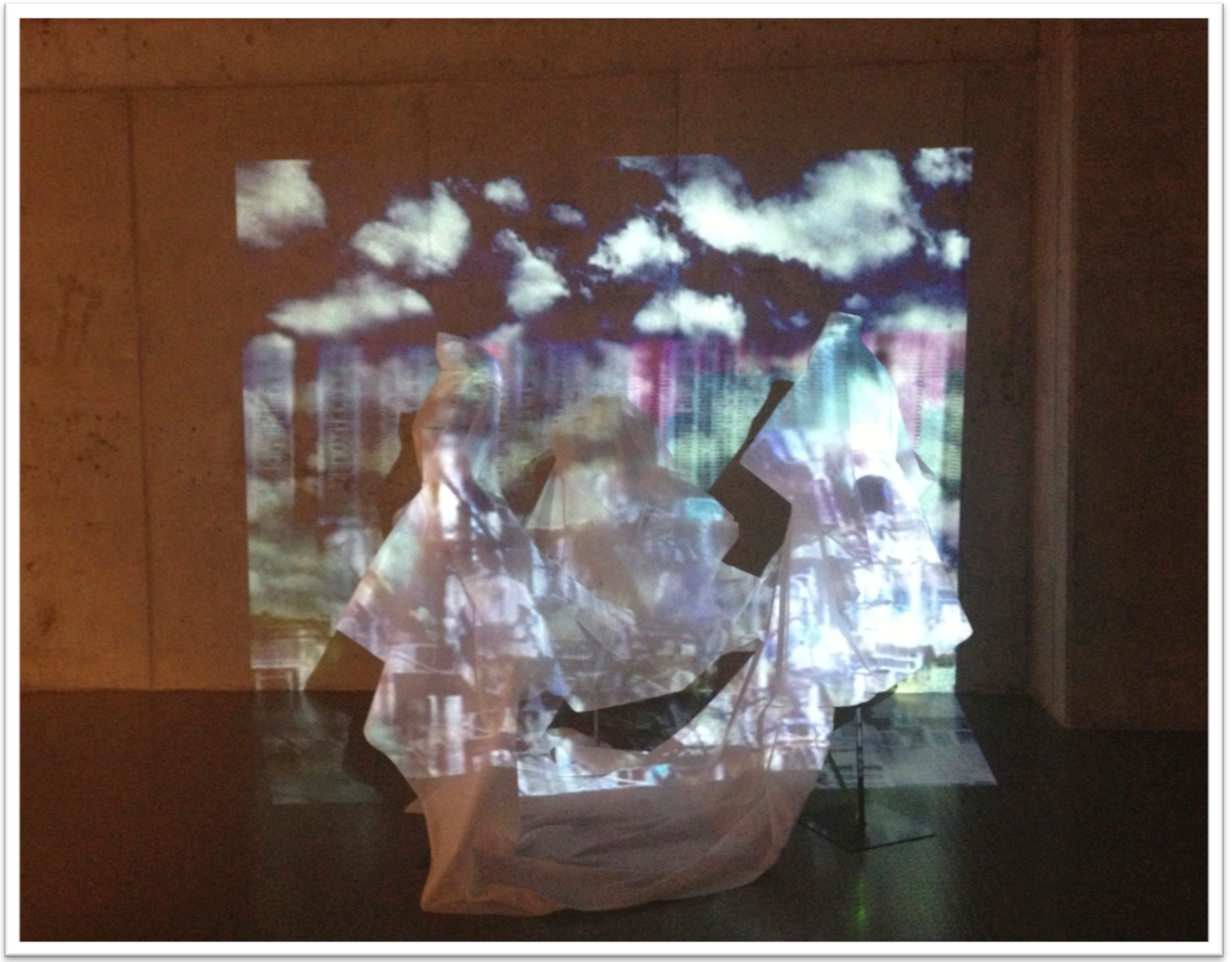
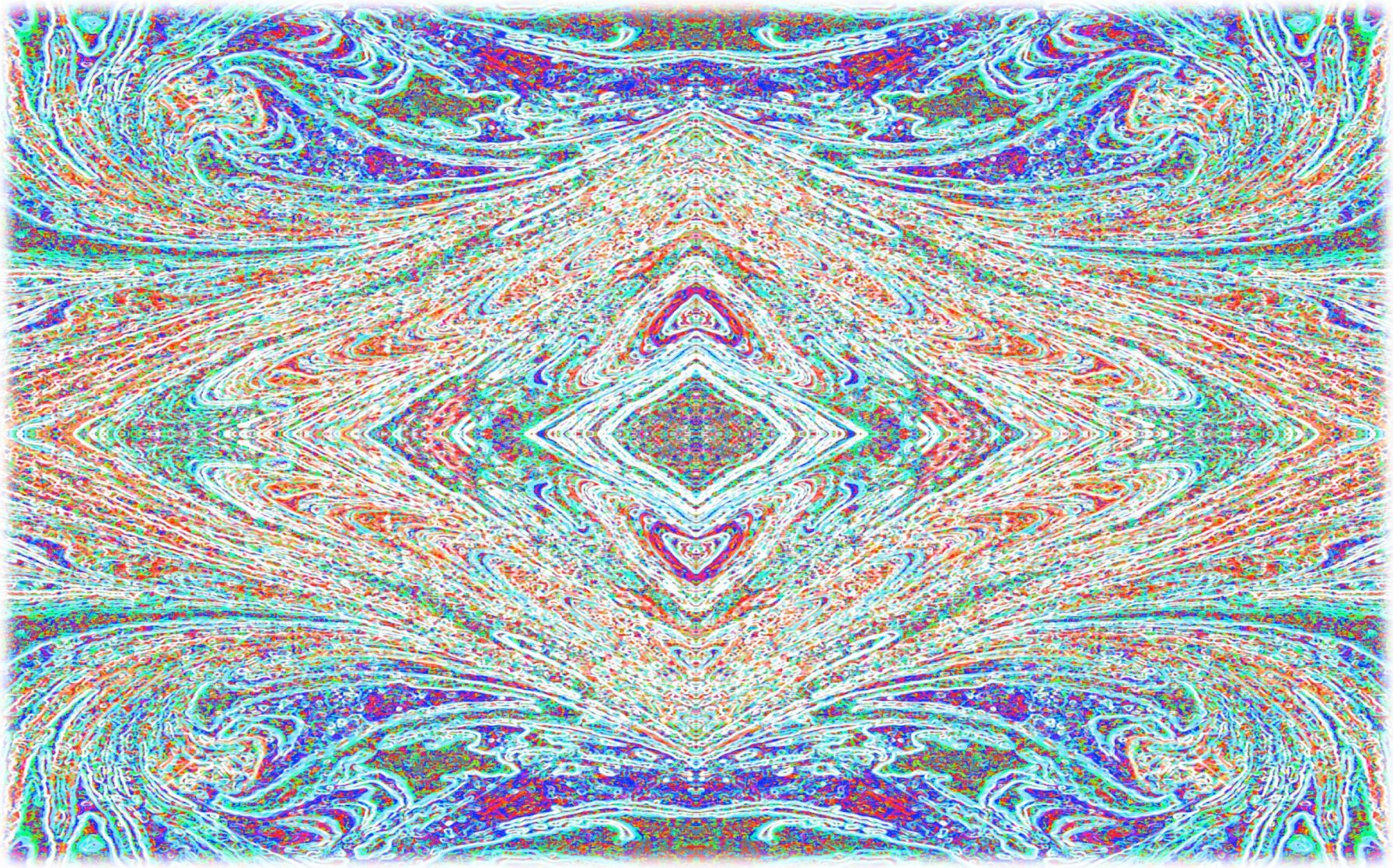


Figure 59 Installation, M Smitheram 2013



Chapter Seven

Chapter 7. Conclusions

This thesis has incorporated a critique of the fashion system, digital production methods and designerly processes to develop creative works through practice-led design research. The resulting artefacts commentate and contribute to a discourse about new and sustainable fashion futures.

This exegesis has charted the project development from theory to idea to artefact. The methodological intent was to generate a productive oscillation between context, theory, and the making of textiles and artefacts. The outcomes have been both procedural and conceptual, with extensive visual mapping and rhizomic thinking as directive techniques to navigate the space in between theory and artefact. Key methods of making particular to this inquiry are identified as '*thinking out loud with my fingers*', *'word storms'*, '*word sparks'*, and collectively, '*matrix building'*. These processes incorporated fashion thinking and tacit knowledge as an active register in which to discuss fashion consumption, sustainability and potential future fashion systems.

These approaches have supported the creative work and can also be regarded as outcomes, as original methods that led to the insights gained through the research. Working through levels of engagement identified as *disembodiment*, *embodiment*, *post embodiment*, and *interbodiment*, a multiplicity of conceptual and theoretical ideas have been analysed and synthesized to form a perspective on the challenges facing the fashion industry as a result of globalisation and excessive consumption.

The research has identified a number of areas for possible future inquiry. Disenchantment was recognised as a parergon to fashion consumption, leading to the potential of re-enchantment through a reconsideration of want and need in future fashion systems. Some aspects of remediation were attempted within the project; these were both material ('undoing form' and incorporation of vintage textiles) and conceptual, through use of hybrid symbology. This idea of remediation of materials and materiality could also be developed as an inquiry into value transformation through revalorization, which this project suggests could be a potential area of further research.

Utilising digital textile printing as a medium for creative research also led to unexpected synergistic developments within the inquiry. This medium led the research into both conceptual and practical outcomes of digital framing. The novelty and virtuality of digital textile design is exciting in terms of its possibilities, particularly in relation to a new consumption model of on-demand and customisable design. Creation of imagery through digital formats operated as a medium for reframing binaries in this inquiry. Suspending the 'animation' or production of the artefact until the decisive moment of selection, digital textile design also instigates a different consumption process.

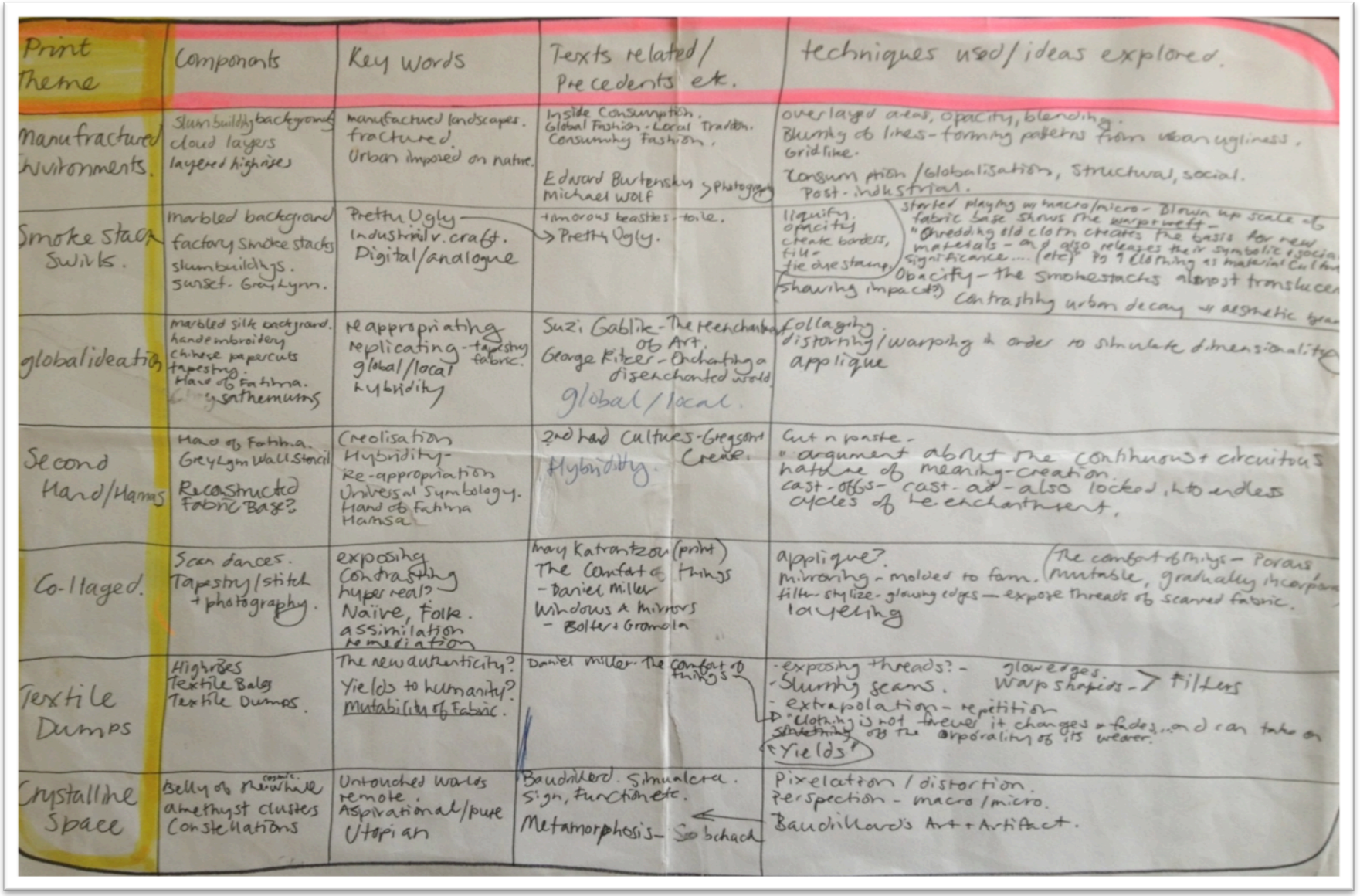
Sustainability awareness is growing as a crucial paradigmatic imperative across many disciplines of design. However there are few formalised design methodologies within the field of fashion and textile design research. There are many different approaches that could contribute to making a fashion future that is not predicated on use and discard. This project highlights one method of communicating some understanding and awareness of fashion seen through a paradigmatic lens of sustainability by contextualising some of the systems that contribute to unsustainable actions, and presenting some new, alternative approaches.

Further development incorporating these findings could lead to the creation of resonant, emotionally durable artefacts that fulfil not only our needs and wants, but also address the ethical responsibilities we face as fashion producers and consumers.



Appendices

Appendix 1 Matrix diagram



Print Theme	Components	Key Words	Texts related/ Precedents etc.	techniques used/ ideas explored.
Manufactured Environments.	Slum building background cloud layers layered highrises	manufactured landscapes. fractured. Urban imposed on native.	Inside Consumption. Global Fashion - Local Tradition. Consuming Fashion. Edward Burtynsky > photography Michael Wolf	overlayed areas, opacity, blending. Blurring of lines - forming patterns from urban ugliness. Grid like. Consumption / Globalisation, Structural, social. Post-industrial.
Smoke stacks Swirls.	marbled background factory smoke stacks slum buildings. sunset - Greenlynn.	Pretty Ugly — Industrial v. craft. Digital/analogue	tamorous beasties - toile. → Pretty Ugly.	liquify. opacity create borders, fill - tie dye stains (showing impact?) started playing w macro/micro - Blown up scale of fabric base shows the warp+weft - "Shredding old cloth creates the basis for new materials - and also releases their symbolic + social significance.... (etc)" re T Clothing as material Culture Obacity - the smokestacks almost translucent Contrasting urban decay w aesthetic beauty
globalideation	marbled silk background. hand embroidery chinese papercuts tapestry. Hand of Fatima. chrysanthemums	Re appropriating replicating - tapestry fabric. global/local hybridity	Suzi Gablik - The Reenchantment of Art. George Ritzer - Enchanting a disenchanted world. global/local.	collaging. distorting/warping in order to simulate 3 dimensionality applique
Second Hand/Hamsa	Hand of Fatima. Greylynn Wall Stencil Reconstructed Fabric Base?	Creolisation Hybridity - Re-appropriation Universal Symbology. Hand of Fatima Hamsa	2nd hand cultures - Gregson Crewe. Hybridity.	Cut n paste - "argument about the continuous + circuitous nature of meaning-creation. cast-offs - cast-art - also locked into endless cycles of re-enchantment.
Co-llaged.	Scan dances. Tapestry/stitch + photography.	exposing Contrasting hyper real? Naive, Folk. assimilation remediation	Mary Katrantzou (print) The Comfort of Things - Daniel Miller Windows & Mirrors - Bolter + Gromala	applique? Mirroring - molded to form. (The comfort of things - Porous / mutable, gradually incorporate) filter - stylize - glowing edges — expose threads of scarred fabric. layering
Textile Dumps	Highrises Textile Bales Textile Dumps.	The new authenticity? Yields to humanity? Mutability of Fabric.	Daniel Miller. The comfort of things	- exposing threads? - glow edges. - Slurring seams. Warp shapes -> filters - extrapolation - repetition "Clothing is not forever it changes + fades ... and can take on something of the corporality of its wearer. "Yields"
Crystalline Space	Belly of the whale cosmic. amethyst clusters Constellations	Untouched worlds remote. Aspirational/pure Utopian	Baudrillard. Simulacra. Sign, function etc. Metamorphosis - Sobchack	Pixelation / distortion. Perspection - macro / micro. Baudrillard's Art + Artifact.

Appendix 2 Summary of Methods

Method of establishing themes

- mood board
- repositionable notes
- text wall with word-sparks and word-storms

Method of capturing/sourcing images

- iPhone photography
- drawing
- embroidery
- hand marbling fabric
- collecting vintage tapestries
- photography of found objects and local industrialisation

Method of collation

- Adobe Photoshop files
- literature collected in Zotero

Method of manipulating image

- scanning using copier
- clear-cutting
- Adobe Photoshop, Adobe Illustrator, InDesign

Methods within Adobe Photoshop

- extrapolating threads, exposing warp and weft
- applique, fashion embellishment
- techniques of handcraft and fashion

Method of digital printing

- experiments with shredded fabric
- fabric choice, print tests
- colour profiles
- consideration of scale/pixels

Method of structuring artefacts

- *Superfluous* garments
- pyramid prototypes
- light boxes

Method of digital media

- recording image via iPhone
- generating artwork through Adobe Photoshop
- developing image through digital inkjet printing
- reflecting on work via blog
- organization of documentation through Zotero
- Pinterest as method of curating ideas through mood board research

Original methods

- *'Word spark'* - (eg. maps from sketch book) can be procedural, establishing connections, visually mapping
- *'Word storm'* - (eg. Text Wall,) non-hierarchical, working through multiplicity to sort out what is most important to me
- *'Thinking out loud with my fingers'* – working through ideas by making
- *'Matrix building'* - overarching method that connects and defines my methodology

Appendix 3 CD Rom of Animation Installation

References

Acheraiou, A. (2011). *Questioning Hybridity, Postcolonialism and Globalization*. Palgrave Macmillan.

Attfield, J. (2000). *Wild Things: The Material Culture of Everyday Life* (1st ed.). Berg Publishers.

Barthes, R. (2006). *The language of fashion* (English ed.). Oxford ; New York: Berg.

Baudrillard, J. (1990). *The revenge of the crystal: selected writings on the modern object and its destiny, 1968-1983*. Leichhhardt, N.S.W: Pluto Press Australia in association with the Power Institute of Fine Arts, University of Sydney.

Baudrillard, J. (1994). *Simulacra and simulation*. Ann Arbor: University of Michigan Press.

Baudrillard, J. (1998). *The consumer society: myths and structures*. London ; Thousand Oaks, Calif: Sage.

Baudrillard, J. (2005). *The System of Objects*. Verso.

Birtwistle, G. (2007). Fashion clothing – where does it all end up? *International Journal of Retail & Distribution Manage- ment*, *35*(3), 210–216.

Bishop, R. (Ed.). (2009). *Baudrillard Now: Current Perspectives in Baudrillard Studies* (1st ed.). Polity.

Bolter, J. D., & Gromala, D. (2005). *Windows and Mirrors: Interaction Design, Digital Art, and the Myth of Transparency*. MIT Press.

Bowles, M. (2012). *Digital Textile Design* (2nd ed.). London: Laurence King Pub.

Bowles, M., & Isaac, C. (2009). *Digital Textile Design*. Laurence King Publishers.

Carden, S. (2011). Authenticity in digital printing. In *Proceedings of the 2011 Conference on Designing Pleasurable Products and Interfaces* (p. 49). Retrieved from http://dl.acm.org/citation.cfm?id=2347557

Carter, M. (1997). *Putting a face on things: studies in imaginery materials*. Sydney: Power Publications.

Clark, H. (2008). SLOW + FASHION--an Oxymoron--or a Promise for the Future…? *Fashion Theory: The Journal of Dress, Body & Culture*, *12*(4), 427–446. doi:Article

Colloredo-Mansfeld, R. (2003). Introduction:Matter Unbound. *Journal of Material Culture*, *8*(3), 245–254. doi:10.1177/13591835030083001

Cross, N. (2007). *DESIGNERLY WAYS OF KNOWING*. Springer.

DIY Couture Competition! The People's Print. (n.d.). Retrieved February 25, 2013, from http://www.thepeoplesprint.com/portfolio/diy-couture/

Ehrenfeld, J. R. (2009). *Sustainability by Design: A Subversive Strategy for Transforming Our Consumer Culture*. Yale University Press.

Fletcher, K. (2008). *Sustainable Fashion and Textiles: Design Journeys*. Routledge.

Fletcher, K. (2010). Slow Fashion: An Invitation for Systems Change. *Fashion Practice The Journal of Design Creative Process & the Fashion Industr*, *2*(2), 259–266. doi:10.2752/175693810X12774625387594

Fletcher, K. (2012). Durability, Fashion, Sustainability: The Processes and Practices of Use. *Fashion Practice: The Journal of Design, Creative Process & the Fashion*, *4*(2), 221–238. doi:10.2752/175693812X13403765252389

Front Row Society. (n.d.). Retrieved November 4, 2012, from http://www.frontrowsociety.com/boutique/modules/contest/contest-detail.php?c_id=1364&id=48

Fry, T. (2011). Urban futures in the age of unsettlement. *Futures*, *43*(4), 432–439.
Fry, Tony. (2008). *Design Futuring: Sustainability, Ethics and New Practice*. Berg.
Gablik, S. (1992). *The Reenchantment of Art*. Thames and Hudson.
Granata, F. (2012). Fashion Studies In-between: A Methodological Case Study and an Inquiry into the State of Fashion Studies. *Fashion Theory: The Journal of Dress, Body & Culture*, *16*(1), 67–82. doi:10.2752/175174112X13183318404221
Grau, Donatien. (2012, November 20). An Intellectual Fashion - Suzy Menkes | AnOther. *AnOther Magazine*. Retrieved December 10, 2012, from http://www.anothermag.com/current/view/2347/Suzy_Menkes
Hansen, K. T. (2004). The world in dress: Anthropological perspectives on clothing, fashion, and culture. *Annual Review of Anthropology*, 369–392.
Harris, J. (2012). Digital practice in material hands: How craft and computing practices are advancing digital aesthetic and conceptual methods. *Craft Research*, *3*(1), 91–112.
Hinte, E. van. (1997). *Eternally Yours: Visions on Product Design*. 010 Uitgeverij.
Jackson, S. (2005). Performing Show and Tell: Disciplines of Visual Culture and Performance Studies. *Journal of Visual Culture*, *4*(2), 163–177. doi:10.1177/1470412905055050
Joseph, F., Fraser, A., & Cie, C. (2010). Future Professionals: The Teaching of Digital Textile Design (pp. p. 518 – 527). Presented at the Fashion: Sustainability and Creativity IFFTI 2010 Conference Proceedings, International Foundation of Fashion Technology Institutes and Taiwan, Fu Jen Catholic University. Retrieved from http://www.academia.edu/895246/Future_Professionals_Teaching_digital_textile_design
Koskinen, I. (2009). Throwing the baby out or taking practice seriously. *Reflections and connections: On the relationship between production and academic research*, 11–17.
Küchler, S., & Miller, D. (2005). *Clothing as material culture*. Oxford, UK ; New York: Berg. Retrieved from http://ezproxy.aut.ac.nz/login?url=http://www.loc.gov/catdir/toc/ecip055/2004030414.html
Kwint, M., Breward, C., & Aynsley, J. (1999). *Material memories*. Oxford: Berg.
Loschek, I. (2009). *When Clothes Become Fashion: Design and Innovation Systems*. Berg.
Mackay, Stuart. (2008). NON-CONSUMERISM: Less becomes more - ProQuest. *Brand Strategy*.
Manzini, E., & Jégou, F. (2003). Sustainable everyday: scenarios of urban life. Presented at the Triennale di Milano, Milan: Edizioni Ambiente.
Maynard, M. (2004). *Dress and globalisation*. Manchester ; New York New York: Manchester University Press ; Distributed exclusively in the USA by Palgrave.
McCracken. (1990). *Culture and Consumption: New Approaches to the Symbolic Character of Consumer Goods and Activities*. Indiana University Press.
Miller, D. (2005). *Materiality*. Durham, N.C.: Duke University Press.
Miller, D. (2009). *The Comfort of Things* (1st ed.). Polity.

Miller, D. (2012). *Consumption and Its Consequences*. Polity.
Miller, D. (Ed.). (1998). *Material Cultures: Why Some Things Matter* (1st ed.). University Of Chicago Press.
Niedderer, K., & Townsend, K. (2012). Tracing the essence of craft. *Craft Research*, *3*(1), 3–9.
Niedderer, Kristina, & Townsend, K. (2013). The social life of craft. *Craft Research*, *4*(1), 3–9.
Niedderer, Kristina. (2004). Working papers in art and design, volume 3. Retrieved October 31, 2012, from http://sitem.herts.ac.uk/artdes_research/papers/wpades/vol3/knfull.html
Nimkulrat, N. & O'Riley, T editors. (2009). *Reflections and Connections: On the relationship btween creative production and academic research.* Helsinki: University of Art and Design Helsinki.
Nixon, N; Blakley, J. (2012). Fashion Thinking: Towards an Actionable Methodology. *Fashion Practice: The Journal of Design, Creative Process & the Fashion*, *4*(2), 153–176. doi:http://dx.doi.org.ezproxy.aut.ac.nz/10.2752/175693812X13403765252262
PennWell Corporation. (2013). Trash talking- Textile recycling. *Waste Management World*. Retrieved from http://www.waste-management-world.com/articles/print/volume-13/issue-6/features/trash-talk-textile-recycling.html
Rees, W. E. (2002). Globalization and Sustainability: Conflict or Convergence? *Bulletin of Science, Technology & Society*, *22*(4), 249–268. doi:10.1177/0270467602022004001
Reiley, K., & DeLong, M. (2011). A Consumer Vision for Sustainable Fashion Practice. *Fashion Practice The Journal of Design Creative Process & the Fashion Industr*, *3*(1), 63–84. doi:10.2752/175693811X12925927157054
Ritzer, G. (2010). *Enchanting a disenchanted world : continuity and change in the cathedrals of consumption*. Los Angeles: SAGE.
Santos-Granero, F. (2009). Hybrid Bodyscapes. *Current Anthropology*, *50*(4), 477–512.
Schön, D. A. (1992). Designing as reflective conversation with the materials of a design situation. *Knowledge-Based Systems*, *5*(1), 3–14. doi:Doi: 10.1016/0950-7051(92)90020-g
Scrivener, S. (2000). Reflection in and on action and practice in creative-production doctoral projects in art and design. *Working Papers in Art and Design*, *1*. Retrieved from http://sitem.herts.ac.uk/artdes_research/papers/wpades/vol1/scrivener2.html
Sobchack, V. (2000). *Meta-Morphing: Visual Transformation and the Culture of Quick-Change*. U of Minnesota Press.
Svendsen, L. (2006). *Fashion: a philosophy*. London: Reaktion.
thepeoplesprint. (n.d.). Retrieved October 16, 2012, from http://thepeoplesprint.blogspot.co.nz/
Turner, T. (1980). *Not work alone* (Vol. The social skin).
Ujiie, H. (2006). *Digital Printing of Textiles*. Taylor & Francis.
von Busch, O. (2010). Exploring net political craft: From collective to connective. *Craft Research*, *1*(1), 113–124. doi:10.1386/crre.1.113_7
Wallander, M. (2012, October 31). Textile Recycling: (Don't) Curb Your Enthusiasm. *The Huffington Post*. News. Retrieved from

http://www.huffingtonpost.com/mattias-wallander/textile-recycling-curb-enthusiasm_b_2051106.html

White, N., & Griffiths, I. (2000). *The Fashion Business: Theory. Practice, Image*. Retrieved from http://scholar.google.co.nz/scholar?q=fashion+academic+theory+of&btnG=&hl=en&as_sdt=0%2C5

World Commission on Environment and Development. (1987). *Our Common Future*. Oxford: Oxford University Press. Retrieved from http://www.un-documents.net/wced-ocf.htm