Antifragile

A textile design practice to hypothesise a future scenario for sustainable fashion

A dissertation submitted in fulfilment of the requirements for the Master of Design

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He said: “It is all useless, if the last landing place can only be the infernal city, and it is there that, in ever-narrowing-circles, the current is drawing us.”

And Polo said: “The inferno of the living is not something that will be; if there is one, it is what is already here, the inferno where we live everyday, that we form by being together. There are two ways to escape suffering it. The first is easy for many: accept the inferno and become such a part of it that you can no longer see it. The second is risky and demands constant vigilance and apprehension: seek and learn to recognize who and what, in the midst of the inferno, are not inferno, then make them endure, give them space.”

(Calvino, 1972, p. 165)
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ABSTRACT

Antifragile draws upon my textile design practice to hypothesize a future scenario for sustainable fashion. As a small independent creative practice, I operate within the messy realities of making fashion and textiles in Ho Chi Minh City (HCMC), Vietnam. This research sought to not only contend with the practical challenges involved in establishing ideals in an imperfect scenario but to establish a practice of defining and articulating alternative values — transforming compromised, fragmented vulnerability into antifragility.

Through a series of practice-based creative projects the research explored surface design interventions as alternative upcycling strategies. The approach hinged on the intention to allow space for ambiguity, complicity and impurity. This opened up a dialogue to consider how best to structure a making practice such that it was relevant and specific to local sustainability issues and fashion production realities. How can a textile design practice preserve craft values across chaotic making contexts?

Creatively exploring craft-based responses to chaos cannot rely on any plan to restore ‘order’. ‘Order’ for creative practice relates more accurately to a poetic response that preserves and translates felt impression and emotional tone. Craft’s material grammar arises in conceding to agency through the internalisation of the materials and the embodiment of process. Complicity is not an impediment to craft-based practice but rather a necessary and enlivening condition. The projects developed seek to navigate a new creative path subverting and empowering traditional practices with new processes and materials.

Antifragile was primarily a stance of commitment and suggests an alternative, craft-centric interpretation of sustainability for textile design. It is an active stance which allows practice to remain fluid and open in the face of threatening complexity. The antifragile stance I adopted committed to stay with the trouble, to acknowledge and explore contingency, to adopt a local leaniness in terms of material, technique and technology. Textile design in this context was articulated through, and thus committed to, the specifics of local material sourcing, augmented around available techniques and technologies. An antifragile stance not only accepted these local limits but embraced them as an invaluable creative provocation, grounding and authentication. An antifragile stance created the conditions to innovate around core sustainability meta issues of speed, technological mediation, material excess and the meaninglessness of un-reflexive simulation. I committed to integrating mess into my creative practice and found it not only a worthwhile provocation but a flexible and adaptable approach which held up through a degree of integration with existing fashion and textile making systems and formalised critical inquiry.
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1.0 INTRODUCTION

Antifragile is a phenomenon identified in N.N. Taleb’s (2012) text of the same name. Antifragility can be understood as that which is poised to benefit or take advantage of stress, errors and change.

Antifragile draws upon my textile design practice to hypothesize a future scenario for sustainable fashion.

The practice explored a possible future in which the skillful reconciliation and recontextualisation of the industrial and artisanal, natural and synthetic, digital and the one-off would be a requisite asset in the consideration of potential uses for our collective, chaotic material excess. Drawing upon a notion of crafted control (Wooley and Huddleston, 2016), the design practice sought to allow conditions of craft (Kettley, 2012) to embed and persist within artefacts and making processes which one wouldn’t typically consider sustainable or traditionally craft-based.

Markers of antifragility include what Taleb calls ‘skin in the game’, the ability to thrive in complexity, and leanness.

Crafted Control is a term defined and used extensively by Woolley and Huddleston in their paper “Maintaining the Human Touch — Exploring Crafted Control within an Advanced Textile Production Interface”. Crafted Control refers to the process of designing and reinserting risk into automated textile production, with specific reference to the textile innovations of Swiss textile design firm Schlaepfer. My use of this term differs from Woolley and Huddleston’s research in that it does not involve engaging with active substrates, but rather substrates which are passive. Further discussion around the idea of active substrates can be found in the above-mentioned research by Woolley and Huddleston.

Kettley, in her paper ‘Reflections on a Craft Design Protocol’ identifies 7 conditions of craft: risk and visual language, extending material, internalization and visual language, process of internalization, embodied process, signifiers and authenticity and undecidability.
1.2 BACKGROUND TO PRACTICE

The impetus to begin this practice-based masters arose from a desire to walk away from pseudo assurances of hermetic, sustainable lifestyles and their incumbent notions of purity and authenticity and instead move towards locally-grounded creative practice.

The research started with an idea of developing an approach to surface design on synthetics embracing the unlikely poetry of the man-made & artificial. This reflected the tensions I had experienced as a practicing textile designer in Vietnam. A dominant sustainability paradigm in the fashion and textiles industry in the region is still defined by an ideological stance with regard to materials and making, preferencing “natural” fibers, dyes and pre-industrial craft processes. Under the assumption that a return to some modicum of purity in production and use is the answer to the myriad problems created by the industry, the project sought to explore options for embracing what exists within the man-made & artificial.

As a small independent creative practice, I operate within the messy realities of making fashion and textiles in Ho Chi Minh City (HCMC), Vietnam. This research sought to not only contend with the practical challenges involved in establishing utopian ideas in an imperfect scenario but to establish a practice of defining and articulating alternative values — transforming compromised, fragmented vulnerability into anti-fragility.

1.3 RESEARCH FOCUS AND AIMS

The research investigated how design practice may preserve craft values across hybrid sourcing and production contexts so as to speculate on hypothetical future making scenarios.

Led by a making practice engaged in the sampling and prototyping of surface design interventions, the research considered how textile design can meaningfully propose felt rhythms within digital and industrial flows, and articulate new material narratives from disparate, discarded fragments.

To reflect contemporary, local fashion and textile production realities, the practice was contextualized within parameters that invited alternative articulations of sustainability with respect to textile design practice. Material sourcing, embellishment and repurposing were creatively reconfigured through local materials, technologies and techniques. The practice deferred to craft as a means of practically disrupting and reimagining the local sourcing and making context - transforming the threat of chaotic complexity into a ground for exploring design opportunities.
Research Question:
How can a textile design practice preserve craft values across chaotic making contexts?

1.4 FACING CHAOS

1.4.1 Overview of a Chaotic Context

The global fashion industry is at a critical turning point (Pulse of the Fashion Industry, 2018). Peak industry bodies recognise that current practices are unsustainable, however new models have not yet emerged. This is leading many to ask how we might adapt or even abandon our current systems of fashion production and consumption. There is much discussion around the idea of the responsible object (Helvert, V., 2017) and accompanying models of mindful use as an antidote to the endemic chaos. The need for more sustainable (less wasteful) practices has arisen from these conditions.

Sustainability asks that we account for everything in our material and technical domain — create a microcosm of an unpolluted and just world — though increasingly we are poised to contend with disconnection, disorder and disarray. Accounting for everything in our domain from a material perspective creates a certain audit mentality, usurping the risk and creative dimension of design decisions with discussions around purity. From a technical perspective, if we take account by taking personal control we have no choice but to slow down, since sophisticated high-tech production systems are generally pure engines of profit-creation and we have no predefined means of mediating such monolithic apparatuses. Making can only be slow in comparison to such systems of hyper-production. A non-sequitur argument following these otherwise logical progressions is that slow making is culturally authentic, and that slow materials are exemplary of purity. Consequently, it is by demonstrating degrees of purity and authenticity underpinning decision making at the core of our craft of making that we may participate in sustainable fashion and textile design culture.

How can we make choices that reflect purity of materials or authenticity of cultural production when we are all enmeshed in chaotic contexts?

How can we direct creative practice beyond functioning as a vehicle for eco-ideology?

Deferring to purity or authenticity for those practices that genuinely engage with chaos fail to engage with the more profound realities of literal and metaphorical pollution. It is extremely difficult to dodge pollution, either as our own act of intentional or unintentional polluting or as a harm absorbed via the polluting acts of others. We all face complicity and vulnerability and are increasingly concerned with establishing and reestablishing cherished boundaries. A key question for textile
design is — how to sustain creative practice whilst maintaining genuine engagement in such a challenging position? This context will be discussed later in this chapter and unpacked in the Contextual Review, Chapter 2, through a discussion around “chaos of consciousness” and “chaos of matter”.

1.4.2 Chaos of Matter, Chaos of Consciousness

We simply cannot accept that our world is permanently polluted, and we want to do something about it. Faced with chaotic, mindless excess, sustainability researchers and practitioners typically respond to either a perceived chaos of matter, or a chaos of consciousness.

‘Chaos of matter’ is the chaotic excess of material havoc ensuing in the wake of unchecked capitalist greed. Pure profit-preferencing design strategies have seen the rise of planned obsolescence, industrial upgrading, vertical integration and agglomeration centered on a concept of fast (and faster) response. Where the aim is to sort the mess, the role of the designer is then to bring order and aesthetic dimension to the goods we consume, with the assumption being that good design - things made well - could in fact save (at least one little part of) the world (in a few people’s eyes). Sustainability researchers target industry at the core of the issue, collecting data around production and use in order to understand the industry well enough to propose sensible, tangible shifts. These approaches generally assume an anachronistic model of pollution based on unacceptable transgressions and acceptable limits. Discussing transgressions of cherished boundaries are a simple means to convey to a general public in denial and an industry epitomised by its speed and profits that acceptable, mutually agreed-upon limits must be observed. It naturally follows then an antiquated model of pollution is the standard.

An approach centered on addressing a ‘Chaos of matter’ can be seen in the pursuit of (material) purity and is characterised by efforts to reestablish trust through materials-based assurances.

‘Chaos of consciousness’ refers to the superabundance of hollow, pseudo-authentic faux-choix* within our material cultures and the pervasive, asphyxiating saturation of marketing rhetoric pervading each and every cultural context. Craft is often proposed as a salve to our battered consciousness (Mazanti, 2011), however when tropes of generosity of effort and nostalgia (Kettley, 2016) are tossed around casually and liberally we should be careful how we define craft if we seek any kind of meaningful catharsis.

Strategic design capitulating to craft’s subjective idiosyncracy is an interesting notion though one which requires careful delineation of terms, means and intentions so as to not covet the same tropes as fast and corporate fashion and further bury craft under the stifling weight of tradition and medium specificity.

An approach facing “chaos of consciousness” can be seen through the pursuit of (creative, technical and cultural traditions-based) authenticity and is characterised...
by efforts aimed at restoring faith in culture as nourishing and nurturing, fertile and diverse.

In addition to the complications mentioned above, there is an additional consideration — both a blessing and a curse to come from our increasing understanding of the devastating impacts of pollution. With the exponential rise of plastic pollution comes the realisation, simultaneously liberating and crushing, that our notions of pollution as traceable causal events and discrete entities are outdated and that a more appropriate model would be that of agency. Acknowledging that our world cannot be restored to an Arcadian pre-industrial state and that such notions themselves are as mythical as the garden of Eden makes engaging with a 'chaos of matter' from an intention to restore order a questionable strategy. There is no order — only relationship. Though we may loath to admit it, pollution is now inextricably bound to our most dearly-held notions of nature.

1.4.3 Sustainable Strategic Design for Fashion and Textiles

Committing to a stance that faces the chaos of mindless excess in our material cultures is one of the core aspects of sustainability. Coming to terms with and responding to the extremity of the hot water we are in takes varying forms, many of which cannot help but propose solutions. Strategic design has always been engaged in putting forward clever fixes to socio-cultural disarray — sustainable fashion design is in many ways a continuation of this tradition.

Committed sustainability researchers (see Figure 1.2) take into account the complexities implicit in contending with chaos as a convoluted, clustered network of issues. It is the positive, steadfast intent of these sustainability researchers to face chaos with open eyes that initially inspired the research, and was retained despite the ostensible departure from a strategic design approach which followed as the projects progressed.
1.5 AN ANTIFRAGILE APPROACH

1.5.1 Prelude to an Antifragile Approach

Considering the nature of craft, its role and potential application in contemporary contexts provides concrete and tangible means to work directly with the problematic. However, rather than providing us with the tools to solve the kind of problems strategic design seeks to address, craft helps us to identify and clearly define idiosyncratic problems related to personal expression. Rather than conquering the problems of everyday life, craft allows us to sit with the uncertainty and ambiguity of complex choices. Making in these ways helps to preserve craft values.

This research takes up an approach which applies craft values to an alternative definition of sustainability for fashion and textiles in an ostensibly chaotic context. I refer to this approach as Antifragile. Antifragility is an active stance which allows practice to remain fluid and open in the face of threatening complexity.

Creatively exploring craft-based responses to endemic chaos cannot rely on any plan to restore ‘order’. ‘Order’ for creative practice relates more accurately to a poetic response that preserves and translates felt impression and emotional tone. Craft’s material grammar arises in conceding to agency through the internalisation of the materials and the embodiment of process. Complicity is not an impediment to craft-based practice but rather a necessary and enlivening condition.

1.5.2 The Antifragility of Craft

An antifragile approach mirrors & supports craft-based explorations.

Craft has three key markers of Antifragility

A. Craft is contingent, humble and site specific
B. Craft thrives in complexity, it stays with the trouble
C. Craft is lean

I will go through each individually.

Inherently contingent, humble and site specific, craft has always had what Taleb (2012) refers to as ‘skin in the game’\(^5\). An antifragile, craft stance is thus similarly site specific, contingent and imminent. Rather than operating at a remove or offering an autonomous critique on the wrongness of middle class hyper-consumption and the aesthetic casualties of industrialisation, craft’s stance is that of an advocate — in service and working within the system (Metcalf, 1993). Craft is antifragile in its unique ability to act as a conduit, ground and a trans-disciplinary language with which to come to terms with some of the challenges at the core of today’s sustainability discussions directly, in concrete terms.

Traditionally defined in terms of generosity of attention and effort, craft’s human touch thrives in the complexity of the personal and idiomatic. Craft making is characterised by richly intricate, intimately connected decision-making micro-events.

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\(^5\) Taleb puts forward the idea that acts of taking skin in the game, advocating for ‘skin in the game’, which he explains as a symmetry between incurred risk and the rewards and responsibilities of the risk-taking act and its repercussions. He states that it’s unethical to walk away from the risk you created for others, or as he puts it — “I eat my own cooking” (Taleb, 2012, p.14).
contributing to an idiosyncratic expression that is "as much functional economy as aesthetic stance" (McCullough 1998, p. 10). Such decision making is subjective, harmonised and intentionally rendered invisible. Craft's landscape has always been that of navigating and harmonising tensions — in as much as it strives to be intimate, useful and meaningful, it by nature 'stays with the trouble' (Haraway, 2016). This is essentially the position creative practice should occupy in order to innovate around sustainability and it is this stance which lends antifragility in a climate of extreme vulnerability.

Finally, and most importantly in an age characterised by the superabundant & superfluous, craft is antifragile in that it is essentially lean⁶. Without the ego of the artist and always acting in service, the craftsperson is a 'scholar of the niche market, discovering vacuums of meaning' (Metcalf, 1993, p. 5). The seemingly simple question 'does it serve?' echoes through a labyrinth of non-linear decision making processes, through tools, hands and material, in service not only of the most personal and intimate concerns of a user but also the kind of socio-cultural macro issues sustainability research seeks to address.

⁶ Taleb celebrates a certain stoicism and defines Antifragile as a position in which one has nothing to lose - what he terms a favourable asymmetry. (Taleb, 2012, p155)
1.6 METHODOLOGY

1.6.1 Overview of Methodology

This chapter provides a methodological framework for the research.

The process of inquiry underpinning Antifragile is that of the reflective practitioner (Schon, 1983) making room for serendipity (Makri & Blandford, 2012) whilst embedded in the ‘complexity, dynamism and unpredictability of the real world’ (Malins et al, 2016, p.23). Methods are phenomenon-driven, and explorative in nature encompassing reflective writing (Shumack, 2010), annotation and tagging, mapping (Butler-Kisber & Poldma, 2010), sampling (Marr and Hoyes, 2017) and craft-based prototyping (Schrage, 2015, Stappers, 2015). As I will go into in this chapter, these methods were used to investigate, clarify and interrogate the practitioner’s insider knowledge. Hinged on the centrality of the artist-researcher as self reflexive actor, the research dove into the messy realities of making with locally sourced waste materials.

Exploring surface design interventions and material provocations as alternative upcycling strategies, the approach to textile design practice adopted for the research projects rested on the intention to allow space for ambiguity, complicity and impurity. This approach opened up a dialogue to consider how best to structure a making practice such that it was relevant and specific to local sustainability issues and fashion production realities.

Situated in Ho Chi Minh City (HCMC), the local context served as a site of design exploration, production and narrative. The practice took inspiration from the urban landscape, investigating a source of materials and material experiences upon which to base an embodied, internalized notion of local craft.

The project adopted a craft based prototyping methodology in conceiving, creating and considering alternate realities to that which drives current textile production and consumption for global fashion. Where mainstream sustainability aims primarily to offer solutions to problems created by the industry, these projects seek to navigate a new creative path subverting and empowering traditional practices with new processes and materials.

1.6.2 Making in an Antifragile Way

The research imagines a future in which rather than waiting on solutions imported from Europe like champagne and Ikea furniture, we would see the preferencing of local hacks and creative tinkering around what is already in abundance.

The initial practice phase was characterized by an engagement with developing material knowledge specific to the local context — socio-cultural design problems were set aside. An open-ended, process-led textile research approach involved sampling guided by craft-based making strategies. This method of engaging with
METHODS EMPLOYED TO SUPPORT REFLECTION  
and MAKE SPACE FOR SERENDIPITY

Some conditions of craft, as defined by craft researcher Sarah Kettley, which have informed the processes adopted in practice
‘Craft process is generally not framed by a single defined problem, but is concerned with potentiality. Ontologies are fluidly constructed in acts of practice. Empathy is an intended outcome for craft, as well as a starting point.’ (Kettley, 2016)

Some of the varied approaches to sketching, visualisation and embodied making used in the practice

You tend to end up with lots of bits of information and notes and articles and the difficult thing is trying to construct them into a coherent narrative’ Interviewee cited by Makri & Blandford, 2012

reflections on local notions of beauty & pollution / capturing a ’mistake’ / documenting and reflection on digital design process

tagging notes while documenting and reflecting on practice helps in identifying key themes for the research and for gaining a big picture understanding of the practice.

key themes emerging from tag data
1. city
2. craft
3. digital design
4. fashion
5. sustainability
6. synthetics
7. plastics
8. local
9. pollution
10. poetry

techniques emerging as key to the practice in pursuing these themes through research
1. digital embroidery
2. ECC (embedding crafted control)
3. digital design
4. surface design
5. up cycling
6. tape
7. 3d led surface design
8. hand
9. laser
10. surface treatment

Figure 1.1 – Methods employed to support reflection, documentation and to make space for serendipity
1.6.3 Imagining an Antifragile Future

Chaos is unmistakably present in the local context of HCMC. While to correctly understand the nature of pollution we would know that chaos is in fact everywhere, nevertheless the visible waste and disorder we find blatantly apparent in HCMC acts as a constant reminder that sustainability issues are pressing, urgent and have social impact. In addition to a sense of overwhelming brokenness, I also see antifragility emerge in those living in highly polluted urban environments, at risk of cancer, losing their property to flooding and without access to clean air or water. Making do with what you have in the imperfect scenario in which you find yourself through creative decision making is a way of holding onto what is most valuable in the face of the threat of chaos. Observing this chaotic context and these antifragile responses has led me to imagine what would constitute antifragility in artists, designers and craftspeople considering the impacts of these threats.

Purity and authenticity are key notions at the heart of sustainability, though can be challenging to define across diverse, complex contexts. As a sustainability practice, purity and authenticity need to be continually defined in relationship. Craft practice takes this project up in concrete terms.

Craft-based interventions are proposed as creative means of navigating complexity and sustaining creative practice. The research considers those practitioners who do this in an antifragile way, and likewise proposes, examines and reflects upon its own antifragile approach.

1.7 PARAMETERS

Local as grounding, reinforcement and support for embedding craft values in practice

Socio-cultural design issues implicit in the local sourcing and making context were used as an impetus to set early parameters for the practice to follow. These decisions were informed by a review of literature and reflection on my community of...
practice around sustainability for fashion and textiles and through what was already understood via prior engagement with sourcing and making in the local context. This early design decision making was akin to setting the stage - after which point the design-based problem-solving approach was intentionally postponed so that a different kind of materials thinking could emerge.

The setting of parameters created the conditions for adopting a ‘city as studio’ approach whereby the local context acts as grounding and support for embedding craft values. By applying strategic parameters to a chaotic context it was possible to delineate a ‘sustainable’ semi-chaotic space in which to play with ideas around the material chaos of pollution, the imminent demise of the idiosyncratic in the local and the complexity implicit in reestablishing and differentiating trust and authenticity from meaningless excess in a concrete, practical sense.

The following basic material parameters were assembled based on the institutional research and strategies applicable to the chosen local textile source, and were observed throughout the duration of the project:

- use only textile waste available within the city, incorporating both pre-consumer waste from local factories and post-consumer waste sourced from ‘Ao Sida’ stalls in local markets in HCMC
- add no known toxins in the treatment or manipulation of the textiles
- create no new waste
- explore an additive - subtractive approach to surface design
- use available technologies/applicable techniques: laser etching, laser cutting, tape lace construction by hand and by machine, laser cut, machine embroidery, hand embroidery, sublimation/digital printing and enzyme scouring
- visually reference the local context

The initial setting of parameters was a valuable method of defining practice in relationship to greater field of Sustainable design practice and in relation to current issues in Sustainability literature (see Figure 1.2). In a sense these parameters remained in the background for every decision made for sampling and prototyping phases of this research, however consideration was within the context of antifragility in respect to creative practices engaging with the messy and chaotic, as is often the case when making fashion and textiles. Thus these parameters became a more manageable semi-chaotic space to interrogate future-facing practices, blended with an antifragile approach. Consequently, through practice I resisted and seriously questioned allowing:

- anything new, virgin fibres
- known toxins or harmful substances
- imports
- pre-fabricated elements or embellishments
- standard making protocols and traditions

My parameters allowed for imperfection, yet set the scene for creative provocation.
Researchers whose work touched upon upcycling, the complexities of mixed materials, the problematic aspects of the fashion and textile industry and contributed to the discussion around sustainable design practice were mapped onto the framework of a compound - b-cyclodextrin. This compound was selected as it is a ring, suggesting cooperation and sharing, and for the fact that it is highly versatile and non-toxic.
DESIGN PARAMETERS

• use only pre and post consumer waste sourced locally
• add no known toxins
• create no new waste
• explore an additive-subtractive approach to surface design
• use available technologies/applicable techniques
• reference the local context

DESIGN TO REDUCE WATER AND ENERGY USE

DESIGN THAT EXPLORES CLEAN TECH (UPCYCLING)

REVEAL EXPAND

ENGAGE PARTICIPATE

EVOLVE

REFLECT

SLOW DESIGN

UPCYLING

DESIGN ACTIVISM

DESIGN FOR ETHICAL PRODUCTION

DESIGN TO MINIMISE WASTE

DESIGN FROM NATURE & HISTORY

DESIGN TO REDUCE THE NEED TO CONSUME

CLOSED LOOP GARMENT MANUFACTURING

ANTIFRAGILE

1.0 INTRODUCTION
1.8 STRUCTURE OF THE DISSERTATION

The dissertation is structured into five chapters representing and reflecting on critical phases of my practice-based research. Within each of these chapters are references to aspects of my practice and how current theoretical concepts have been used to assist my thinking.

Chapter Two
Narrative Field

This chapter provides a contextual review and sets up the preface to practice. This chapter examines the review of literature and how I situate my practice within my community of practice.

The literature review looks at the greater socio-cultural context in which our polluting fragile systems of global fashion and textiles have arisen. It considers how identity and narrative have been constructed in such systems and how these structures have influenced a material culture defined by an innately irresponsible discard-and-move-on ethos characterized by obsolescence and the ubiquity of the imposter. The review picks up the issues implicit in deferring to notions of authenticity and purity as we strive for the utopian designer ideal of social-responsiveness and responsibility. Lastly, the review considers how these challenges have been picked up within a community of practice-based creatives seeking to champion material thinking and narrative as a way out of the chaos of meaningless excess.

With a theoretical and practice-based framework set up, the three phases of the research are presented (Chapters Three and Four). Each phase represents key moments within the practice.

Chapter Three
Antifragile Making

This chapter discusses the initial phase of practice, which employed sampling in the development of new design associations and materials possibilities specifically pertaining to the local context.

It elaborates on those definitions of craft which were adopted by the practice to facilitate material thinking and elucidate meaningful associations in the material excess to be found in the local context. This chapter goes into detail to explain the design-based decision making behind the setting of parameters and how this paradoxically relates to the parallel intention to retain ambiguity, undecidability of purpose and other similarly elusive conditions of craft.

This chapter examines my process of textile sampling. The first practice phase, as it was initially instigated, effectively functioned as a process-based umbrella for testing strategic design strategies, for ongoing messy explorations (which may or may not ‘go somewhere’) and for considering in material form (via sampling) the more poetic leanings of the research. This phase was supported by dozens of small textile samples.
Chapter Four  
Speculations on Future Practice

This chapter discusses the second and third phases of practice, examining how I prototype.

Later project phases explored craft-based prototyping as a vehicle to explore craft interventions and to embed ‘crafted control’ (Woolley & Huddleston, 2016) in process and artefact. I employed these methods to allow the conditions of craft to persist in atypical craft materials and making processes.

Primarily defined by practical prototyping activities in the local context of HCMC based SMEs, the final practice phase explored designing bespoke industrial making processes which would allow for the inclusion of atypical materials and making processes. This strategy allowed the material thinking developed in earlier phases to persist in more resolved designed objects and ensured that both process and artefact specifically related to the local context. These final practice phases provided real, tangible feedback on an application of sustainability for fashion and textiles within an imperfect local context, outside of corporate production or the safety of an institutional laboratory. In this way the final practice phases opened up a space enabling speculation on possible future making scenarios. Chapter 4 speculates on future practice through two projects which are addressed in discrete subsections — Saigon Shirt and Ao3.

Saigon Shirt — a ‘prototype as marketplace’ — traces a narrative of making as the research shifts between textile sample to craft-based prototype for a tangible fashion-textile product with a controlled production process and schedule, a defined consumer segment, a market and a deadline. In collaboration with Melbourne based independent fashion label Chorus a small scale investigation of the scalability of digital design for upcycling within an industrial manufacturing context was explored. Exploring the practical application of a locally relevant iteration of sustainability best practice, the project put design and surface treatment of upcycled textiles towards a market facing reality.

Ao3 discusses the final project — a ‘prototype as hypothesis’ — which more thoroughly explored an upcycling practice in the creation of a fashion garment, seeking to synthesize and practically apply the tacit knowledge developed prior to this phase through extensive material research. Practice in this final phase investigated means of inserting crafted control into digital, automated and industrial textile and garment production systems, and was simultaneously a practical experiment in disrupting traditional practices with new processes and materials. The work sought to aestheticise the binaries inherent in exploring a sustainability practice inevitably complicit in unsustainable practices, practically exploring how to cultivate empathy with people and material through creative practice. The final artefact created in this phase was exhibited in Slow Fashion Lab, part of the Fast Fashion exhibition in Melbourne.
1.9 LIMITATIONS OF THE RESEARCH

The local context
The local and ideas around the local are not the focus of the research. The messy conditions of textile design practice in the local context was instead a grounding for a particular craft-based prototyping approach. This approach gave concrete instantiation to ideas on how to design for chaotic making conditions.

The source of waste
Alternative sourcing was adapted as a strategy to making whereby focus was placed on delineating a semi-chaotic space. It can not be considered indicative or a comprehensive representation of textile waste available in Ho Chi Minh City (HCMC). Obtaining textile waste and purchasing second-hand clothing in HCMC, while at times ‘systematised’ and an interesting area of potential study, was not the focus of this research.

Sustainability and local Small to Medium Enterprises (SMEs)
The research was not enquiring into how to structure or support local SMEs, was not exploring ways to make them more sustainable. The later practice phases involved applying mastery in a local production context, which provided some insight into how to innovate around facing chaotic making and use conditions in the local context as a textile designer. However, gauging or speculating on any potential or latent effect these design-based interactions instigated on the SME itself was not the purpose of the research.

Fashion Design
While upcycling and surface design interventions for a fashion context in many ways necessitate the consideration of pattern cutting, garment construction and at times an orientation to a specific market context, these decision making and design activities fall outside the scope of the research.
2.0 NARRATIVE FIELD — A CONTEXTUAL REVIEW

The threat of climate change and extreme pollution have brought the concept of chaos into focus by disrupting our ideas around nature, purity and authenticity. This chapter begins by examining typical strategies for setting oneself apart from chaos - that ‘other’, the vast profusion of meaningless excess outside and beyond our own imagined boundaries. The discussion shifts to a more pointed contemplation of the greater fashion industry’s approach to the chaotic threat of ‘Zones of Uncertainty’ and a battle to retain relevancy in an age of superabundance and waste, and reflects on the strategic approaches proposed within sustainability literature for fashion and textiles. In examining these strategies, the discussion reflects on those aspects of strategic design that may be problematic in the context of textile design and craft, and considers alternatives from within contemporary craft practices, as I will discuss. Finally the chapter contemplates how slow digital contemporary craft practice might be uniquely antifragile in its ability to contend with the complex and ostensibly chaotic, considering a community of practice exemplifying antifragile, future-proof craft practices.

2.1 CHAOS

We have always been trying to contend with the chaotic. ‘Where there is dirt, there is a system’ (Douglas, 1966, p. 35) — we have created myriad systems for dealing with ‘matter out of place’. We wrap, encase, partition, seal, de-crease, streamline and sterilise, ostensibly relying on the synthetic. The urge to separate and contain, a thing-ing (Woodard, 2013, p. 253) approach to ‘visible nature’ — this tree, these birds, this body of water (Woodard, 2013, p. 266) is how we cope with the “dirty” ‘Kakosmos’ (Latour in Cohen, 2013, p. xxiii) the ‘tangled, fecund, and irregular pluriverse [we] inhabit’. Ironically, as we come to understand the volatile and insidious agency of plastic pollution (Liboion, 2015, p. 1) - we stumble into a realisation of a greater ‘ecological interconnectedness’, not so much ‘happy-go-lucky fact [as] terrifying over-proximity’ (Morton in Woodard, 2013, p. 264). From this awareness we can understand how our ideas of nature and order have been fundamentally and irreversibly disrupted. That which we employ to sequester off and contain has eviscerated the very notion of containment itself. We are waking up from notions of ourselves in nature as a ‘simple pastoral’ ideal (Buell, 1998, p. 647) or a ‘pleasant view’ (Woodard, p. 264) — to an unbounded, ‘ever-unfinished’ world (Cohen, 2013, p. xxii) ‘without refuge from toxic penetration’ (Buell, 1998, p. 648). As Bennet writes in Vibrant Matter, we cannot ‘un-stir the cream from the coffee’ (2010, p. 116) — our home is polluted, pollution is our home.
2.1.1 FASHION FACING CHAOS

The chaos of plastic pollution is extremely disruptive from a systems perspective, provoking a crisis as pervasive as the material itself. Disruption entails not only the trauma of waking up from a polite, pre-Arcadian idea of nature as ‘a verdant forest filled with trees, birds, worms, small mammals, and the like’ (Woodard, 2013, p. 264) but of the reality of non-causal, clustered harms. Sustainability literature often approaches the idea of disruptive harm through reference to quantitative scientific research on climate change, employing graphs and pie charts and obscenely large figures.

The Pulse of the Fashion Industry (Global Fashion Agenda & The Boston Consulting Group, 2017) alters us to various chaotic excesses — that the fashion industry uses 32 million Olympic size swimming pools of water annually (p. 11), that it generates carbon dioxide (CO2) emissions equivalent to 230 million passenger jet vehicles running for a year (ibid), or that the production of its conventional cotton equates to a cost of seven billion euros in cancer and pollution related illness treatment (p. 12). Thresholds have been crossed, boundaries have been transgressed. The word ‘safe’ in the context of the report does not mean ‘protected, ‘not exposed’ or ‘uninjured’ (New Oxford English Dictionary, Second Edition, 2005) but is rather a term invoked to speak about a distance from ‘dangerous levels’, with dangerous levels implying tipping into a ‘Zone of Uncertainty’ (Rockström, Steffen et al, 2009). Arguably we are in such a zone already.

On an ostensibly less grandiose scale we find monomers, ‘bad actors’ (Liboion, 2015, p. 1) knocked loose from the more durable polymer chains of acrylic nails and yoga pants and perspex backpacks, now residing in our sushi and bottled water. Perhaps most chaotic in this perverse scenario is how monomers act in our cells, scrambling native endocrine system code writing in a way not only unpredictable but unseen, immeasurable and untraceable (Liboion, 2015, p. 4). These hellish scenarios cluster and comprise what Beck (cited in Buell 1998) refers to as ‘risk societies’, contributing to a collective condition of ‘immisseration’, which we could also reasonably define as a Zone of Uncertainty. In this instance however, an exquisitely slow and intimate disaster of this kind is more challenging to quantify or represent as a cogent account.

How did we get here?
2.1.2 CHAOS OF MATTER

Chaos of Consciousness and Chaos of Matter are terms that delineate poles on a spectrum of engagement with Chaos. These terms inform one another and thus cannot be neatly separated.

Chaos of matter is like the plastic fog in our oceans. We can scoop up the big pieces but a kind of smog remains, its impacts devastating though largely imperceptible. We are now living in a state of permanent pollution, nothing will ever be 'in its place' again. Chaos of matter is matter out of place.

I use the term Chaos of Matter to speak to the reality of permanent pollution, whereby it is increasingly difficult not only to determine where things belong but to respond to the impossibility of restoring order. Responding to a perceived Chaos of Matter would involve actions which seek to order and control convoluted and contaminated material clusters.

The current practices of preferencing profitable and expedient processes began over a century ago by Walter Carothers when he invented Nylon (ACS, 2000). The first to succeed at imitating the magic of the silkworm & the spider in a laboratory, he drew the world’s first artificial silk plastic thread from an adipic acid suspension, creating a blueprint for the mass production of synthetic textiles that we know today. While holding Carothers innovation up against what a spider makes may be like asking a non-English speaking Chinese national to write a paper for The Paris Review using Google Translate, his discovery led to one of the most profitable innovations of the 20th century.

The perfection that is the structure of silk comes about according to a flexible template, laying down the structure of its story as it goes along (Mathias, 2003). It does not, as Butler (2005, p. 44) says, in reference to how identity is constructed, ‘yield to a sequential account’ rather it occurs ‘in media res’, ‘always arrives late’ and is ‘always recuperating, recon structing’. Each moment in creation is partial and may appear messy up close. There is a template but no formula, there are irregularities and variations yet these lend adaptability and extreme resilience. However, the mono-speed and convenience of a peptide synthesiser is more compatible with Global Fashion’s systems of production.

Aligning Carother’s invention with fashion immediately enabled Du Pont to capture a market segment, sending women into a kind of frenzy (Spivak, 2012). This technological innovation turned market gold is the basis for a production and marketing model that has been deployed ad infinitum by the fashion system (Anguelov, 2016, Goldsmith 2014), predicated on what I will refer to as the Google-Translate approach. The crisis we are currently facing is not simply the result of rampant production and consumption of global synthetic textiles or global clothes, which would be problematic in and of itself for numerous reasons. We are facing a global crisis in the wake of the obscene excesses of an unconstrained Global Fashion system, which involves the mass production not only of fibre, textile and garment but ‘fashionable’ garments made cheaply from non-renewable resources whose ‘hellish longevity’ (Dickinson in Queyeras, 2013) is posing insurmountable
environmental and health issues, as previously mentioned. In addition to the more obvious ramifications of using speed as ‘an economic tool, a lever to be pushed and pulled... to increase product throughput and grow profit’ (Fletcher, 2010, p. 260), it has plunged us into a culture drenched in irreparably broken links and signs without signals.

A Google-translate approach seeks to process the nuances in any given craft according to the convenient speed of running an algorithm. As Hofstadter (2018) observed when attempting to test the idea that a machine could in fact replace a translator - what he got was not an intelligible translation negotiating the transfer of a ‘rich halo of related scenarios’ but instead a ‘word salad’. He goes on to say that it was “just throwing symbols around, without any notion that they might symbolize something”. By designing and making to big-data certainties, accepting technological limits as our own capabilities, and placing expediency and convenience above all else we are effectively accepting word salad as the poetry of our age.

A blueprint of them Google-translate approach can be observed at a molecular level in the way the first Nylon was made, its building blocks repeating endlessly, bonds identical and mirrored, mistakes in its chain impossible to correct (Clarke, 2004). A Google-translate approach is similarly signified in the social platforms of belonging (Angeulov, 2016, p. 23) that bind identity to heavily mediated narratives of lifestyle, self-hood and community (Binkley, 2008, p. 601), which have gone viral with the spread of social media. Not dissimilar is the model of Global Fashion, which turns out product as a peptide synthesiser throws out polymers (Mathias 2003), systematically faking the kind of craft-based innovation which has formed the unseen spine of traditional fashion and textile making for centuries — for immense financial gain.

Fast fashion garments have obsolescence doubly inbuilt through low quality construction and trend driven styling (Chapman 2005, Fletcher 2010, van Helvert 2016). Alignment to fashion enables the Global Fashion system to send its products to an early grave much like the modern lightbulb pioneered by the Osram, Philips & GE cartel of 1924 (van Helvert, 2016, p. 110). Our lights, like our fashion design luminaries, have been burning out on a capitalist schedule ever since.
2.1.3. CHAOS OF CONSCIOUSNESS

Chaos of consciousness is like marketing rhetoric, atomized brand content so imperceptible we inhale it without realizing. It is no longer possible to discern marketing from meaningful content. Chaos of consciousness refers to the fact that in our cultures there is no space left for genuine affect and emotion. The sensitive, messy, complex human is out of place.

I employ the term Chaos of Consciousness to refer to a cultural phenomenon whereby genuine emotion is increasingly simulated and/or absent. Responding to a perceived Chaos of Consciousness would involve efforts to restore or reinstate narratives of cultural authenticity.

The fashion system, operating on principles of corporate finance, regards talented creatives in a way not dissimilar to how textile engineers regard the spider. The dominant approach to creativity in the fashion system comes back to the same basic intention – to mimic craft process and fake narrative in order to extract the maximum economic value. The risk-taking involved in authentic creative innovation takes too long, is too messy and doesn’t yield adequate volumes. Luxury fashion houses and Global Fashion brands continually attempt to synthesize the elusive magic of what a creative does, as if to isolate and trademark the DNA sequence of creative genius and place it in the belly of a docile, productive grub - fashion’s Monster Silk™. As with early attempts at cultivating spider silk in farms, when the scientists apparently forgot that arachnids typically eat each other, luxury fashion’s ‘transgenic-creatives’ experiment has yet to be sustained for any extended period of time – demonstrating that ‘libertarian spirit.. is very hard to decree into being in a corporate context’ (Olma, 2016). Perhaps the singularity is indeed not far off and AI will give us our next Galliano or McQueen – prolific genius sans drunken rants, emotional breakdowns, acerbic self-doubt or the haunting urge to erase one’s own map (DFW, 1996).

By contrast, the capitalist maxims As Fast as Possible & By Any Means Possible applied to fashion’s traditional objective of being a companion to the individual exploring their own evolving identity (Williams, 2014, p. 3) has produced an unusual, distorted phenomenon on an epic scale. It seems we are increasingly incapable of ‘traversing [the] territories’ of the self without the help of GPS, without ‘following the instructions on a map’ (Berardi, 2017, p. 141), relying on a ‘fixation of our previous experience’ processed by an algorithm and presented to us.

As with the lead-poisoned mad hatters of the Victorian era, perhaps the monomers and phthalates irradiating from the ubiquitous plastic stuff of our time have gone to our heads. ‘We want to believe that there are spaces in our lives driven by genuine affect and emotion, something outside of mere consumer culture, something above the reductiveness of profit margins, the crassness of capital exchange’ (Horning, 2017), though in our fear of being deemed as meaningless and inauthentic as the things we discard, we are ourselves somehow perpetuating the same old patterns. We dress in cotton of a single strain or polyester from a single repeating molecule (Goldsmith, 2014, p. 9). We shed each polyester-shell self with increasing impatience, continually duped by the ‘faux-choix’ (Goldsmith, 2013, p. 8).
between this and that mass-industrially-produced item. We keep waiting for the transformation, the empowerment, the elusive promise of fashion — that we may be more than we are. There is no finality to this process, we will never be enough.

The freedom of identity-seekers is akin to that of a bicycle rider; the penalty for ceasing to pedal is a fall, and one has to go on pedaling just to retain the upright posture. The necessity for keeping on toiling is a plight without choice since the alternative is too awesome to contemplate

(Bauman, Liquid Life, 2005, p. 33)

Fashion is intimately tied to the ambivalent modern consumer perpetually cycling through identities. To assign fixed identities or to deny the drive to incessantly move-on — while perhaps sustainable — would be categorically unfashionable.

But this leads to the problem of how to 'Design to...’ fall?

2.1.5 FACING CHAOS

Sustainability researchers seek to salvage something meaningful from fashion, rescue what is valuable from a mountain of baggage as fashion as an industry of production and consumption veers dangerously close to its own tipping point. The 'Zone of uncertainty' the industry is heading towards has less to do with a fleet of Boeing 747s worth of CO2 emissions than the threat of a great collective yawn (Byung-Chul Han, 2015) — the irredeemable meaninglessness and extreme excess of the industry are a threat which may finally render fashion irrelevant. The question I ask is not whether or not the ship is going down. The question is — what goes with it.

The role of the designer is being questioned as we consider new ways to not only contend with chaos but to respond sensitively and creatively, to delineate a space apart from the disordered confusion of the fashion industry and demonstrate relevance (McDonough 2013, Goldsmith 2014, Fletcher 2010, Chapman 2005). From within the field of Sustainable Fashion itself, the insurmountable task of facing abject chaos often (d)evolves into varying degrees of sticking to our own 'small gardens' and pulling out the weeds (Bauman, 2017, p. 141).
Sustainable fashion is often referred to as an oxymoron, an awkward union of two irreconcilable camps - hemp and trees and farmers, or ... silk and champagne and popstars’ (Noel, 2016). Keen to distance ‘fashion as an applied art’ (Noel, 206) from fashion as a ‘fantasy community’ of consumption (Binkely 2008, p. 609), exhausted with the ‘drab seriality and moral vacuity’ (Binkely 2008, p. 609) of Zara, Topshop & Co., discussions around what is wrong with the industry and indeed ourselves have deepened beyond greenwashing and trend watching.

Disgust with the ‘superabundance’ (Morris in Miller, 2017, p. 1) of industrial manufacturing is nothing new. In an uncomfortable proximity to the chaotic excess of the Industrial Revolution, William Morris declared that ‘the very essence of competitive commerce is waste’ (Morris in Miller, 2017, p. 47), and pit himself against what he saw was a sheer drop into the terror of an unaesthetic, disordered glut of unnecessary objects. Morris’s scolding criticism, ignited by the theorist John Ruskin’s writing on the inhuman conditions of labour, riled against an Industrial Revolution that was making technocrats more smug, affluent, idle and mobile than they already were, turning a working class into brain-dead automatons and worst of all making things which were simply unbearably crass and ugly. Morris’s battle didn’t seek to directly smash the machine as was the Luddite strategy, but was waged in the decorative arts. He demonstrated through his craft that there are some things that simply cannot be done by a machine, cannot be purchased with the technocrat’s capital - that pouring love into one’s work inoculates against the caustic emptiness of the industrial capitalist virus. The spirit of Morris’s craft-based revolutionary call to arms is very much alive today, and along with it his ‘failure to democratise durability’ (Miller, 2016, p. 46).

A model of production ‘grounded in beauty, materials, durability and good labour practices’ (Miller, 2016, p. 48) was also proposed by designer and academic Victor Papanek, whose impassioned defense of his métier against corporate profiteering echoes that of Morris. Writing in the 70s, Papanek urged designers to ‘stop defiling the earth with poorly-designed objects’ and labelled commercial design a ‘perversion of a great tool’, asking instead for a design of responsible objects, greater research orientation in the field and for its objects to be imbued with humanitarian significance (Clarke, 2016).

Like Papanek, McDonough seeks to right social and environmental ills through good design — which he argues principally involves the careful consideration of materials and their use. Echoing Papenek’s insistence that we ‘stop defiling the earth’, McDonough states that ‘designers do not have the right to inflict suboptimal design on all of us’ (McDonough, 2013, p. 33). McDonough and Braungart’s philosophy and material categorisation system Cradle to Cradle (2002) puts forward a cyclical model of retaining materials within biological/technical cycles or metabolisms, much like flows of matter observable in nature. While visionary and a much needed critique of a ubiquitous Cradle to Grave model, the system has emerged as being somewhat problematic. As David Goldsmith (2014, p.4) remarks in reference to Patagonia’s recycled polyethelene terephthalate (RPET) polyfleece upcycling program, ‘the road to hell is paved with good intentions’, noting the recent findings
on ocean micro-plastics and calling polyfleece a kind of ‘boundary object’. It would seem retaining materials within entirely contained flows and thereby taking full account of what we make and use is an almost impossible task. A lifecycle assessment (LCA) of RPET polyfleece could only ever be a partial account.

2.2 FRAGILE WAYS OF WORKING

On the other end of the spectrum to socially responsible polyfleece, Finn (2001) in her paper “Luxury Fashion: The Role of Innovation…” revealed the value of the nuanced craft of fashion-made-well, noting that there is a ‘distinct connection between luxury, craftsmanship and innovation’ (p. 17), making luxury goods inherently ‘emotionally durable’ (Chapman, 2005). Finn goes on to suggest a ‘non-luxury goods tax’ (p. 18) on items of poor quality as a potential means to reduce the ‘mountains of clothing being discarded’ (p14), an inversion of the current luxury goods tax in Australia. From this argument I understand the logic of valorising the craft involved in cutting and constructing a pre-Lagerfeld vintage Chanel jacket when the stitch quality was immaculate, though rather than democratise durability this strategy simply pronounces durability an elite value. To impose a tax on those without the financial means to choose durability, out of distaste for the chaotic nightmare of wardrobes overflowing with aesthetically dissonant, cheap items in need of some brutal KonMari\textsuperscript{12} is perhaps not a solution that could be applied outside a very specific context.

If luxury is sustainable, and fashion is luxury, what can be salvaged?

Noel (2016) seeks to make a distinction between a ‘fashion [that] celebrates innovation’ and ‘our current fashion system [which] promotes accumulation’. Williams (2014, p. 3) too appeals to an extrication of a certain idea of fashion from that of the global fashion industry when she clarifies that ‘when in balance, fashion draws on and expands culture; it contributes to society and economy and honors the individual in diverse and delightful ways”. Echoing a similar sentiment, Fletcher (2015) calls for a move beyond a definition of fashion that accepts ‘anything that emerges from a certain consumerist machine’ (p. 78) to a kind of unbounded, transitional state seeking positive disruption - in which we can begin to ‘re-appreciate the potential of fashion to nourish and foster other actions — to remake our design and production decisions through our wardrobes and as we dress’ (p. 87). Fletcher, Chapman, Strauss and Pais (2015, 2017) advocate for alternative paces and modes of engagement moving towards what Fletcher and Chapman refer to as ‘adaptive resilience’ — an integrity in the face of uncertainty and change. Where consumption is liquid (Binkley 2008), Fletcher and Chapman call for a solidifying reappraisal of what we already own, use and of our own role in the systems within which we participate.

It appears there is a consensus on what not to do as our current trajectory points to certain neo-liberal hell, though the next step is often alluded to in a more nebulous and imprecise manner. Concrete solutions to these critical issues seemingly

\textsuperscript{12} KonMari is the tidying method of Marie Kondo, author of 'The Life Changing Magic of Tidying Up'. KonMari confronts our era of peak stuff with the exhortation to dispose of anything that doesn’t “spark joy”.
reiterate responsible design ideas that history has witnessed the failure of time and again, ignoring the extreme gravity of the situation we’re in.

2.2.1 Making ‘Sustainable’ Fashion

The idea of a pause, break or transitional state emerges in the literature as one of many responses to the critical issues mentioned above. Vuletich, in her PhD thesis ‘Transitionary Textiles’ chooses to re-articulate sustainability as ‘transitions’, whereby transitions are socially oriented community-centric slow making actions and interventions (Vuletich, 2015). Vuletich’s transitions seek to create the conditions for a shift in values and how fashion is practiced and appreciated. There is a contradiction in the idea of a transition, as Bauman (2017) picks up when he asserts that transition is a ‘name for the passage from one known state to another known state…. people are just passing from an old-fashioned – or abandoned or rejected or collapsed – way of life to a new one which they know, in advance’ (Bauman in Tabet, 2017, p. 139). We cannot possibly transition to something unknown, there is nothing to transition to if we don’t yet know the place. Bauman chooses to articulate transitions, a term he considers widely abused, as ‘interregnum’ (ibid) - a transitory state allowing for pause. While Vuletich employs the term ‘transition’ widely, preferring it to that of ‘the S word’ (Finn, 2011, p. 2) - sustainability - a term far more widely abused than that of ‘transition’ — the latter has arguably more helpful connotations. What Fletcher, Vuletich, Williams Strauss and Pais are alluding to is the reality that we know where we don’t want to be, but we don’t quite know where we should go to just yet.

The ‘transition’ issue is picked up by Vuletich (2015) as she maps the Textile Environment Design Group’s TEN onto a four-level Sustainable Design Continuum framework. Moving from Green Design, to Eco-Design, into Sustainable Design and culminating in the final tier of a more complex “Design for Social Equity”, each strategy involves the officious directive “Design to...”. Vuletich notes that this ‘grammatical structure positions the design practice as being motivated towards a particular outcome’ (p. 57). She notes that there is already a pre-ordained shape that design practice should take, prescribed by a level of engagement - this is strategic design for sustainability. While it is possible to stage an interregnum-like practice from within such a prescriptive framework, the framework itself is perhaps not as conducive to creativity as it could be.

Coming back to Bauman’s perpetually pedaling bicyclist, we are left with the question of how do you “Design to...” fall? How can we not feel empathy confronted with the clear articulation of such a condition, noticing it also in ourselves.

An interregnum asks us to pause.

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<td>green design</td>
<td>single issue product focussed</td>
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<td>eco design</td>
<td>lifestyle approach product focussed</td>
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<tr>
<td>sustainable design</td>
<td>system approach, product and service focussed</td>
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<td>design for social equity</td>
<td>redesign lifestyles, support social equity</td>
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CREATIVE PRactices ADDRESSING / RESISTING CHAOS & MEANINGLESS EXCESS

AVANT GARDE FASHION (ARCHIVES)

CDG
Galliano
Prada
Helmut Lang
Margiela
Susan Gierszkoic | Run
Raf Simons
Undercover

DigiTAL TOOLS & ARTEFACTS (PRAC)

Anette Sih | XMYWorkshop
Dianjen Lin | Post Carbon Fashion
Simon Thoroogood | Textural
Post Couture
Parsons x Kering | My EP&L App

FASHION AT THE PERIPHERY - EMBELLISHMENT < > STRUCTURE

Zaki Muya
Nefika Skoutri
John Hoy Maria
Faustina Stemmets
Xu Zhi
Quinn Alexander
Snedad O’Day
Bianca Saunders
Katharina Dublick
Sini Liu
Paulina Ruzza
Katherine Marriida
Rullie Keath
Sini Pius Kallinen
Yuhua Xu
Elena Muattanen
Marta Tseersona
Akina Kurosawa
Sofia Nauzveborg
Mama Kerkeda
Alexia Chen
Yophi Ignacio
Yue Qin
Chopova Lowena
Nastasia Fine
Shah He
Wenbing Huang
Hanne Jermu & Anton Vartainen
Ceclia Bahnson
Simone Bouch
Material By Product
Wei Hung Chen
Emmanuelle Kyngaurt
Jang Tinh Yue
Caroline Hu
Yael Fruichling
Rachael O’Brian
Wendy Andreu

FASHION AT THE PERIPHERY
UPCYCLING / RECONTEXTUALISATION COLLABORATION

Mania Antinori
Koziakuro Akaska
Kevin Germanier
Bethany Williams
Lya Liu
Sanan Gavsnov
Marie Sophie Benke
Edward Bost
Venice Chan Chit Lo
Ken Bremseong Than
Jen Archer Martin & Holly McQuillan
Mal Yang Liu

Majiale Kano | Re/View
Monia Antinori
Kang Hyuk

CREATIVE MAKING PRACTICES NAVIGATING SUBJECTIVE TERRITORIES

SENSITIVE MATERIAL EMBODYED SENSIBILITIES COLLECTIVE INTIMACY COMPLICITY

CHAOS of CONSCIOUSNESS

CRAFTED EMBELLISHMENT (PRAC)

Nada Albertini | The Sequin Project
Nataliya Brady | Plastic Fantastic
Sveril Gah
Eliza Granville
AV Robertson
Cecilia Heffer
Ejing Zhang
Helen Ryall
Robert Huddleston

FASHION ARTEFACTS (PRAC)

Eli Gaspari | Element Spatial
Lisa Anne Auerbach | Unravel Rug
Jim O’Riain | Opening Ceremony Jumpers
Josh Blackwell | Plastic Baskets
Leslie Wayne | Point Rug
Ejing Zhang | Faux Rocks
Mariah Ruzsa | Flora Series
The Haas Brothers
Helen de Saint Lager
Soft Baroque
Nassia Ingeless
Trix & Robert Hausman

EXPLORING MATERIALITY THROUGH SURFACE & IMAGE

Fashion creatives have the vision and skill to create embodied narratives of complicit complex selfhood, though their work is relentlessly co-opted by the mainstream & they often lack financial & technical support

DIGITAL EMBROIDERY (PRAC)

HAND & MACHINE (IRISH) EMBROIDERY (PRAC)

Holly McQuillan | Make Use NZ
Kate Goldsworthy
Kevin Germanier
Monia Antinor
FASHION STRATEGIC DESIGN CRITICAL DESIGN

program w/ IRM & ECSCP
Burberry x The New Craftsmen Makers House

TRAdition

Dan Too modular garments and embroidery
own collection
NGV closed collection: stomachers, aprons, embroidery samplers
V&A digitised embroidered textile collection
MET digitised embroidery samples

IDEIDEOLOGICAL CRAFT

“The Industrial Revolution was a mistake, go back, we messed everything up”
NARRATIVES OF AUTHENTICITY and CARE in FASHION and TEXTILES

ECO FAST FASHION
Zara | Join Life, Shape the Invisible
H & M | Conscious Range
Mango | Committed Range
Nike | Flyknit, NikeGrind
Adidas | Adidas x Parley
Puma | Forever Faster

ECO TECHNOLOGY

Kering Group | Environmental P&L
Eco Age | Green Carpet
Stella McCartney | Stella & Bolt Threads, Fibreshed
Gucci | Zero Deforestation

LUXURY CRAFT

Loewe Craft Prize
Burberry & The New Craftsmen
Makers House
Christopher Kane | Beauty & the Beast Collection
Saint Laurent | sustainability-focused couture training program w/ IRM & ECSCP

STRATEGIC DESIGN OFFERS MARKET-ORIENTED MEANS OF GETTING OUR STUFF IN ORDER, BORROWS CRAFT TROPES THOUGH SHUNS ITS SUPPLEMENTAL, COMPLICIT SUBJECTIVITY

STRATEGIC DESIGN PROTOTYPING FOR SYSTEM REDESIGN

Dilys Williams (ed) | Habit(ART)
Kate Fletcher | Craft of Us, Fashion Ecologies
The People’s Print | Melanie Bowles
Hannah Macghan | All Makers Now
Jen Archer Martin & Holly McQuillan | Make Use NZ

EMO DURABILITY/MAKING

(Prac)

SYNTHETIC TEXTILES

UPCYCLING

(PRAC)
Valentine et al. (2017) note that textile design with its attendant haptic, emotive and tactile qualities, is a unique field with different values and processes than the greater field of design within which it is nestled. They cite Politowicz (2013) who articulates the nature of textile design process as one of a ‘personal journey’, with textile designers ‘identify[ing] their own values through processes of making, which run parallel or are aligned to the needs of others’ (p. 966). Van Kopplen (2016) in her PhD thesis ‘Envelope’ speaks to the ‘design to..’ phenomenon in contemporary sustainability literature, noting in her students that ‘...instructions did in fact reduce the scope of designer diversity...[and] echoed.. an embedded fear that the complexity of .. sustainability principles hijacked ..[the] design process’ (p. 246).

Sennett (2009) speaks of ‘dwelling productively in frustration’ (p. 221) noting three attendant key skills, which I will discuss further in section 2.4.3 of this chapter — Re-Crafting Control. He states that ‘dwell[ing] productively’ involves ‘prefiguring the problem into other terms’ (ibid). Thus, commencing with a predetermined outcome would likely bypass craft process and in doing so void the primary motivation to ‘design’ in the first place. Sennett writes —

> We should think of fit-for-purpose as an achievement rather than a starting point. To arrive at that goal, the work process has to do something distasteful to the tidy mind, which is to dwell temporarily in mess — wrong moves, false starts, dead ends. Indeed, in technology, as in art, the probing craftsman does more than encounter mess; he or she creates it as a means of understanding working procedures.

(Sennet, The Craftsman, P161)

In short, we have to be somewhat chaotic if we wish to carve out any meaningful sense of peace from the chronic disorder we face. Olma (2016) refers to this ‘doing something distasteful’ as a ‘non-ethical reorientation’ (p. 79). To rephrase his position in pollution jargon — pervasive neoliberal rhetoric with its politically correct quasi-social slogans are akin to monomers scrambling narrative processes in creative fields. Olma argues that creatives should reject any imperative to create to fulfill the rational drive of pretty slogans, should fight to protect a creative space of serendipitous discovery at the heart of actual innovation by allowing for the mistake. Artist Olafur Eliaison (2017) furthers this argument in his essay “From the past with love”, stating that ‘we do not pronounce ahead of time what we need to know’ (p. 135). He suggests that rather than fostering a practice predicated on ‘knowing and conquering’ we could practice ‘extending with generosity’ (p. 135). As Valentine et al. (2017) recognise, dwelling productively in mess or extending with generosity constitute a ‘human or person centred approach to innovation with design capabilities at the heart — empathy, visualisation, prototyping, synthesising, communication, and evaluation’ (p. 966).
2.4 CRAFT AS ANTIFRAGILE

This research is concerned with how craft can future-proof creative practice and help to future proof the communities in which it is practiced. As we face radically unpredictable futures, we need to similarly be radically open minded and flexible in how we define and practice craft. But we need to understand what craft is, and what it is not.

Craft Researcher Sarah Kettley (2012) observes that the term ‘craft’ itself is much abused and misunderstood, not dissimilar to the abuse of the term ‘slow’ as identified by Kate Fletcher. The pattern of misuse of each term echoes the other. Fletcher (2010) objects to ‘slow’ being ‘wheeled in’ to legitimate and impart an ethics that was in no way emergent from creative or business practices of those co-opting the term (p. 262). Fletcher observes that ‘slow culture [has been] transmogrified into a trend’ (p. 265). Similarly, Kettley (2016) explains that craft is used as a ‘shorthand for a ‘traditional’ pre-industrial form of engagement with the world... an idea brought into play when faith in human progress is low’ (p. 166) and is typically employed to signify nostalgia and generosity of effort. She argues that this constitutes a fundamentally uncritical way of engaging with craft and its values, effectively others craft and its processes and perpetuates ‘un-reflexive stereotype[s]’ (ibid). The honed specificity and idiosyncratic intricacy of craft has often been mistaken for medium specific skill (Mazanti 2011, Adamson 2007), rather than understood as an immersed awareness which could be directed and applied creatively in diverse and potentially non-traditional contexts. Adamson (2007) notes that Pye called the term ‘skill’ a ‘thought-preventer’ — we can add slow, craft and transition to a cemetery of once vibrant, now abused terms whose meaning has been corrupted and exhausted. We need increasing sensitivity, care and sophistication in our protection of craft values, and craft must absolutely reject the urge to cling to the past lest suffer association with dead terms.

Slow does not necessarily need to imply hand making, just as craft-based making does not necessarily need to involve unprocessed, heterogenous materials with wood grain, noil and other traditional, aesthetically fetishized defects. As was discussed in relation to the ‘transition’ issue in sustainability literature, such unreflective thinking belongs to ‘an abandoned... rejected or collapsed — way of life’ (Bauman in Tabet, 2017, p. 139). We cannot go backwards, and we shouldn’t wish to.
2.4.1 Fast Means to Go Slow

One way that this research practice attempted to go forward was to embrace the role of digital technologies in craft. Engaging with digital processes is not necessarily in contrast to the discussions of craft as outlined above. Within the field of digital embroidery it is a well established fact that the process of converting an embroidery design into a digitised file is a time-intensive process and one which involves clusters of unseen micro decision making events. Slow digital practices that up-end familiar notions around the rhythms of skilled making are exemplified in the intricacy and nuance of the work explored through the exhibition 'Closely Held Secrets' in which the skills of experienced digital embroidery practitioners were put towards translating the intent of a group of artists whose expertise lay in another field. Given this contextual background, the exhibition explored not only the artist's intent in the medium but also the technical interpretation - demonstrating that 'innovative outcomes are informed by vision but are ultimately achieved through collaborative human-machine interactions' (Townsend, 2015, p. 5).

This hybrid, collaborative concept aligns with Hofstadter's counter stance on the contemporary role of the translator and the idea that an algorithm could do the work of a human mind. In direct contrast to the Google Translate approach discussed earlier, the translation process Hofstadter (2018) describes preserves a 'rich halo of associated scenarios'. This mirrors the process Alice Archer describes in creating her nuanced digital embroidery work — each piece is painstakingly checked for flow, balance and interrelation, thread by thread. Her practice, despite its ostensible reliance on machines, is remarkably similar to a traditional hand embroidery practice — she programs 'every single stitch' (Archer, 2015). A decelerated making rhythm is a function of the intricacy of a complex craft-based making scenario based on a network of inter-related ideas and material relationships. A skilled translation is a key aspect of craft practice which cannot be mindlessly automated or rushed, no matter the medium or means.

2.4.2 Re-enchanting Fast materials

This research is interested in putting craft values into practice by incorporating unconventional (not typically craft-based) materials in relation to techniques and technologies of textile and garment manufacture as a way of staging an interregnum — refusing the old, collapsed ways, preparing for what may be next. Purity and authenticity are no longer terms craft can defer to unreflexively — instead I argue that employing unconventional materials and techniques allows craft to redefine itself in relation to a dynamic, complex world. I will now turn to innovative creative practices that practically articulate contemporary definitions of craft by engaging with unconventional materials and techniques.

While much of the attention around Katherine Mavridis's work has centred on its crafted, accretive, rupturing forms (Edelkoort, 2017) there is little mention of its material composition — acrylic. In the same way that Archer is able to employ machine embroidery to render highly detailed floral imagery into velvet and denim,
Mavridis’s work also speaks to the ephemeral embedded in our relationship to literal durability in contemporary materials. Oil, or petroleum, is often linked to a culture of mobility (Binkley, 2008 Dickinson, 2013) and is arguably responsible for the many ‘unfeeling’ objects in our quotidian lives. Mavridis reconfigures a material with speed in its DNA according to her own idiosyncratic conditions. Her treatment of acrylic is to meticulously coax it through a rhythmic looping and endless circling as if to embed personal, idiosyncratic rhythms into the industrially alien. The ruptures in Mavridis’s work speak to consciousness in human terms, as if to recall our own irregular rhythms of attention, grasping, slippages and moments of pulling together. While mapping Mavridis’s artefacts on Vuletich’s Sustainable Design Continuum would categorically reject her acrylic pieces as belonging neither to Eco nor Sustainable Design. As would be the case with many contemporary craft practitioners, her practice successfully points to what Vuletich refers to as Sustainability 4.0 — Design for Social Equity. There is great scope for customisation not only of the pieces themselves but of the craft system that Mavridis proposes.

We may not know what is next, but we know that pollution, simulation and the increasing integration of new technologies and materials with daily life will figure prominently. Facing uncertainty, and indeed chaos, involves what Sennet calls working at the ‘live edge’. He claims that ‘we need to visualize what is difficult in order to address it... to work with resistance in borderline conditions. We develop skill at the live edge’ (p. 230). Van Heeswijk (2017) outlines a similar scenario whereby we are ‘collectively trying to become while not already identifying what can be’ (p. 45-46). Van Heeswijk calls this ‘training for the not-yet’, describing it as a ‘relational, dialogical, discursive process, and a frictional process as well. It is a field of tension’ (ibid). This is of course echoed in Pye’s (1968) unpacking of the term ‘skill’ - defining it not as an elusive, romantic ineffable quality but a friction and associating it with what he termed the ‘workmanship of risk’. As I will now discuss, ‘workmanship of risk’ can be creatively explored to expand on how craft is defined and practiced.

2.4.3 Re-Crafting Control

‘Machines break down when they lose control, whereas people make discoveries’

(Sennet, 2009, p112)

Two key skills come through Sennett (2009) and Kettley’s (2012) writing on values emergent from authentic craft practice. For Sennet (2009), in order to dwell productively with frustration we need patience. For Kettley (2012), it is not optimal function, a particular aesthetic or even the ostensible pursuit of any outcome at all, instead we need to allow space for undecidability. By fostering variable rhythms and allowing for the idiosyncratic in practice we defer ‘closure’ (Sennet, 2009, p. 221), meaning that we don’t kill anything off just because we don’t yet know where to place it. Drawing from Sennett and Kettley, space is left open for serendipitous discovery where risk can be a creative provocation in and of itself.
While technology is most often employed by fashion systems to remove risk and enable scaling and acceleration, as creatives I propose we can consider these commercially driven strategies as points of engagement on a spectrum then choose and adopt our own scale, speed and methods of engagement. It is in this way that I see that craft practitioners may put their values into play, in the gravity of actual making scenarios. As McCollough clarifies, locating craft’s realm requires a nuanced understanding of a specific kind of creative practice —

But between these modes there remains some realm where scientific production cannot go, where mechanized industry finds too little demand to go, and where artistic discourse cares not to go. Where personal knowledge still combines with practical intent, where the expression is as much functional economy as aesthetic stance, where the products are individual and idiomatic, where the medium is the basis for mastery: there we find craft.

(McCollough, 1998, p. 10.)

Craft values are both the framework through which to productively engage with complexity and are also emergent in processes and artefacts as ‘evidence’ of craft practice. As identified by Pye (1968), Adamson (2007), Mazanti (2001) and Kettley (2012, 2016) risk is a crucial factor in craft processes. As Kettley (2016) explains, it is through ‘risky non-determined process’ that unique visual language is created. It is by extending and internalising material through embodied conception and use of tool and technique that craft expression finds its articulation. Without risk there is no innovation. Woolley and Huddleston (2016) define risk taking in craft on a spectrum of craft intervention, moving from hand-making to what they call ‘crafted control’ whereby a material is rendered ‘active’. In reference to the innovative textiles of the pioneering Swiss textile studio Schapfler, Wooley notes that with the increasing scope for technologically sophisticated production, rather than removing the risk in creating innovative textiles, Schapfler instead innovated around hand crafting or designing interventions into new technological applications. They state that the nuanced micro-decision making events that constitute craft practice can be ‘contrived’ on a spectrum of ‘predictable/unpredictable intervention[s]’ (p. 6), where the act of integrating hand and machine within a ‘single flow’ is crucial to creative innovation. It is not simply the introduction of more sophisticated technologies that innovates, but rather the active, creative confrontation with these technologies that allows us to ‘transcend familiar design boundaries and question what can be achieved.’ (p. 22)

Technology gives us a way to creatively envisage potential futures. Craft values provide the framework within which to engage creatively and productively with visualisation and making technologies through diverse materials. Rather than perceiving technology as a threat to craft values, we could see technology as a creative incitement. As Sennett explains, machine-assisted pretense and approximation of craft signifiers and hand making nuance have been with us since the industrial revolution and present the same provocation now as they did then —
they provide us with ‘the negative we need to print a “real” positive’. Sennet goes on to clarify that ‘industrialized simulacrum’, rather than thwarting craft practice, actually ‘makes us think harder about nature’ (p. 144).

As Tessa Acti (Downes, Acti & Rumble-Smith, 2016) demonstrates through her technically virtuous digital craft, it is possible to intervene in industrial making processes by extending control across media and medium to exert nuanced expression. Her piece ‘Extreme scale stitches’ was inspired by Vionnet though is created entirely in the digital and was produced with a digital embroidery machine. It was created to drape on a form and is effectively surface with no substrate, pure decoration rendered functional. Setting a satin stitch to span side seams, accounting for differences in draped length based on the measurements of a form, combined with a subjective judgment on correct drape distance - the piece effortlessly encompasses myriad micro-decisions and proposes a textile piece that simultaneously suggests a ‘resolved’ garment. Her work references and defers to Vionnet’s innovative draping practice without capitulating to the specific conditions under which her innovation emerged. Acti’s work not only skillfully negotiates the distance implicit in working with technology but transcends the boundary altogether - suggesting an entirely new visual, tactile and technical language.

Contemporary craft that engages with existing and emerging industrial technologies is continuously creatively provoked. Picking up challenges issuing from the past with technologies that point to an unknown future, craft is ‘in motion’. Following Sennett’s argument, we find that by engaging with technology we are pushed to think more critically about the nature of hand-mediated making, and indeed about our own humanity in relationship.
3.0 ANTIFRAGILE MAKING

The creative act is essentially one of resistance... this is to say that the accident acquires social efficacy through the sagacious realization that something new is potentially occurring, followed by an act of resisting the alignment of this occurrence with the existing vectors of knowledge and power. In other words, he or she resists the temptation of going down the path of least resistance in favour of a sagacious effort.

(Olma, 2016, p22)

3.1 INTRODUCTION

This chapter outlines my antifragile making practice and examines the process of textile sampling. This practice phase functioned as a process-based umbrella for ongoing messy explorations and for considering in material form the more poetic leanings of the research. Through sampling I negotiated the inclusion of chaotic elements as a way to open up a dialogue about alternative ways of working sustainably as a textile designer.

In this chapter I show how sampling enabled the internalisation of atypical materials and the embodiment of hybridised making processes, facilitating the development of new design associations and textile possibilities. Creatively responding to the material excess to be found in the local context of Ho Chi Minh City (HCMC), this practice phase was less concerned with finite problem solving than it was focussed on exploring the creative benefit of risk taking. This chapter goes into detail to explain the craft-based decision making behind the setting of parameters and how this paradoxically relates to the intention to retain ambiguity, undecidability and other similarly elusive conditions of craft which enabled the translation of felt impression and affect.

Throughout this chapter I refer to selected key textile samples representative of macro patterns in my practice to demonstrate, explain and analyse my concept of antifragile making. This phase was supported by dozens of small textile samples exploring materials, techniques and their intersecting influence. Sampling opened my creative practice to exploration and created the conditions for serendipitous discovery. In reflection on the sampling process I came to realise that I was working with two key parameters: Fragments and Rhythms. I worked with these parameters through surface design interventions and crafted control, situated in relationship to the ostensibly chaotic — the mess of the local context. The practice sought to challenge widely accepted notions around how sustainability should be defined and practiced for fashion and textile design by exploring an alternative approach.
3.2 PARAMETERS

To make in an antifragile way is to actively create the conditions to work with risk and gain from disorder. As outlined and explained in the previous 2 chapters, I initially set parameters per a “design to...” paradigm with the intention of establishing a semi-chaotic space within which to creatively experiment. These parameters were observed throughout the duration of this practice phase and in subsequent phases. However, as I will show, a design-based problem-solving approach was intentionally postponed so that material thinking could emerge. Consequently, focus shifted towards an emphasis on craft values over materials-based rules as my practice explored local materials and techniques in an embodied, immersed way. The setting of sustainability and craft-based parameters created the conditions for adopting a ‘city as studio’ approach whereby the local context acted as inspiration and grounding and where waste became a key resource, not a problem to be solved. Practice was set up so that it could gain from disorder by taking the mass produced and industrial simulacra as tool and raw material to express a sense of time and place.

Sampling facilitated material thinking, brought about new design associations and gave rise to unique visual language. Ultimately this research phase was not motivated by problem solving to predefined sustainability rules but was rather curiously exploring means to craft risk and idiosyncratic expression back in relationship to the digital, automated and mass produced. This project phase enabled the exploration of a new craft-based language by creating a safe space for mess, for mistakes, ambiguity and undecidability.

Sampling enabled for the structure of a making practice to emerge so as to bring about new material and making associations and to practically consider ways of engaging with common, ubiquitous materials. Antifragile making saw the development of an independent, material based value system around a constructed, fantasy idea of locally fabricated luxury where the local was an inspiration to stay with the mess.

3.3 FACING CHAOS — A SUSTAINABLE STANCE

A central resolution of this practice phase was to pick up a mainstream definition of mess in relation to what can be found in the local fashion and textile production context of HCMC and mine it for meaning. Placing practice in direct relationship to the mess of the local context carried significantly greater risk than that implicit in practices with typical sourcing and making scenarios. In terms of decorative embellishment within a fashion context, it is risky to pick up waste and to work with techniques and technologies which are outdated in contrast to standard industry practice. It is risky to subvert or alter these techniques and not follow standard technical operating procedure with typical materials. I intentionally chose to work with the ostensibly chaotic and messy in order that my practice become more antifragile.

Making in this way forced me to define waste by negotiating a position vis a vis
the system-less, without being caught up in discussions about saving the planet or
fixing anything but rather simply considering what can be done with these materials.
In addition, this approach prompted the negotiation of a position in relation to the
mass produced as a craft-based practitioner. As I will discuss, sampling opened a
space within which to creatively negotiate hybridity as a means of preserving and
embedding felt affect in materials based narratives. Sampling provided an avenue
to creatively consider complicated issues such as the materiality of the aggressively
enduring and their effect and affect in relationship, without the misplaced fantasy of
bearing the burden of solving these grand-scale problems. Lastly making in this way
brought about a certain intimacy with the city whereby material experiments came
about through bricolage and a haphazard gathering of impressions.

I wish to make a clear distinction, as I did in the previous chapters, between
mess — what I will refer to as the ostensibly chaotic — and what I would deem to
be the really threatening chaos of our time. Ostensible chaos is mess of various
shapes and forms, which I will outline shortly. I sought to make my practice more
antifragile by bringing it up against these messy tensions as a way of training for the
not-yet, of future proofing my craft, of making my practice relevant and hence truly
'sustainable'. Mostly I sought to make my own practice more antifragile as these
tensions are creative provocations and incitements that I will argue lend strength
and vibrancy. Finally I placed my practice in situations riddled with obstacles and
tension, amidst ‘chaotic’ mess, to demonstrate that this kind of chaos is not what we
should be wary of. As I claim in Chapter Two, real chaos is arguably not mess per se
but is rather the absence of meaning and human affect. This kind of chaos can often
look neat, well integrated and whole - it is for this reason that it is threatening.

In this practice phase I drew upon an antifragile making practice to face mess and
the ostensibly chaotic in the local context through an internalisation of materials and
an embodiment of making processes.

A preoccupation with certain central elements emerged through practice, which I
have categorized as follows:

Chaotic making
- fast, mono-speed
- dislocated/disjointed
- signs with no signals

Chaotic material
- waste, excess
- impure, mixed, inseparable

As I will show, by sampling with the messy and chaotic I was able to develop new
design associations and possibilities around these processes and materials through
two key foci - rhythms and fragments.
3.3.1 Sampling

As can be seen in the Antifragile Making Map in Figure 3.1, I mapped a selection of samples onto a spectrum encompassing rhythms and fragments. The selection and mapping process made space for meta and sub practice groups and axes to emerge. From this mapping process, I was able to delineate five sub groups among the two greater themes of rhythms and fragments, which I will elaborate on in this chapter in the section to follow. In addition, the map is organized according to two axes. The first serves to organize samples according to whether they demonstrate hybridity or whether their making or material manifestation is of a more mono-speed/mono-material nature. The second axis organizes samples according to whether they serve to aestheticize or embed affect. As can be seen and as I will elaborate on further in the section to follow, embedding felt sense was a central preoccupation for this phase of practice. I will go into each theme and sub group individually and expand on the functions each group of samples served as part of an antifragile making approach.

I identify 5 subgroups — (i) Crafted Control, (ii) Collapse and Flatten, (iii) Aestheticised Temporality, (iv) Crafted Cohesion and (v) Disrupt Homogeneity. These themes emerged through practice and reflect actual rhythms and fragments present in materials and making in the local context. I have summarized these relationships in the following diagram and will expand on these relationships in the subsections of this chapter.

Rhythms
Chaotic making
- fast, mono-speed > variable rhythms observed and synthesized > Crafted Control
- dislocated/disjointed > diverse making processes interlinked > Collapse and Flatten
- signs with no signals > disrupt craft signifiers, allow for an emergent lexicon > Aestheticised Temporality

Fragments
Chaotic materiality
- waste, excess > waste a key resource, value created through idiosyncratic narrative > Crafted Cohesion
- impure, mixed, inseparable > delineations invested with significance, hybridity redefined > Disrupt Homogeneity
antifragile making

mono speed

rhythm

hybrid

aestheticise /
visualise

hybrid

enzyme scouring
lazer etching

fragment

mono material

laser tape lace - hand

perspective broderie anglaise
garment panel

slow fast as a language

laser tape lace - hand

quick digital facades
aestheticise / visualise
digital repair
digital x-stitch tapes
digital lace
laser tape lace - hand
mylar bonding
digital embroidery
indigo
embedding "patchwork"
slow fast as a language
"garment panel"
perspective broderie anglaise
"frock"
"second skin"
enzyme scouring
lazer etching
Figure 3.1 Antifragile Making Map
3.4 RHYTHM

Rhythm
1. a strong, regular repeated pattern of movement or sound
2. the measured flow of words and phrases in verse or prose as determined by
   the relation of long and short or stressed and unstressed syllables.
3. a regularly recurring sequence of events or processes.

Mid 16th century (also originally in the sense ‘rhyme’):
from French rhythm, or via Latin from Greek rhithmos (related to rhein ‘to flow’).


3.4.1 Rhythms: Authentically constructed

Technical choices reflected my ideas around authenticity. Authenticity lay in the
commitment to the here and now. My lifestyle implicates me in the embedding of
technologies of mass dissemination and mass production, to speak to another reality
that I do not know or experience personally would be inauthentic. I have empathy
for people enmeshed in systems faster than their consciousness can keep up with as
I understand how it feels to backtrack, re-do, pick up the pieces, to have to collect
myself. I wear industrially woven textiles, my photography comes from an iPhone,
machines were used to manufacture the clothes I wear, I communicate primarily
through devices. Many of us do.

Allowing for fast and slow making revealed means to ameliorate the tendency to
get lost in technologically mediated making. With new digital technologies we see
image capture and translation not only sped up but increasingly integrated. Less and
less time is spent outside of technologically mediated scenarios. Through sampling,
by drawing on hybridized making processes, I sought to allow the reality of mediated
making to impart structure yet I also used this to gain perspective and reflect on this
phenomenon. Through sampling I explored means of internalizing material and
embodiment process by creating small scale surface design interventions incorporating
both fast and slow making towards the embedding of affect.

The process of sampling revealed the variable rhythms of making in my practice
and spoke to the realities of variable speed in hybrid making contexts. I used my
making practice to actively contend with the fragmenting, abstracting tendency
of the digital and to encounter the risk of translating the intangible across diverse
media and making processes.
3.4.2 Mark time

Technology fragments our experience of time, hybrid rhythms characterize our reality. Craft based interventions in making can bring us closer to life as it is lived by echoing, visualising and embedding the nebulous effects of fractured temporality. Through awareness, crafted action and reflection, sampling in this phase took inspiration from the scattering tendency of the digital and the speed of automated making.

I allowed the reality of mediated making to shape practice. Surface design for fast and slow making was integrated through a hybrid design process which drew upon digital fabrication and traditional craft techniques equally. Some of the hybrid sampling activities I pursued are as follows:

- combining digital print, hand and digital embroidery to produce a synthesised narrative
- inserting a resist print into an automated embroidery process
- designing digitally embroidered eyelets and tape to be laced by hand with a packing needle
- Locking tape embroidery to a substrate through the digital and automated
- Laser cutting a digitally traced pattern derived from an image over its own printed image
- Digitally printing tape lace
- Hand drawn digital synthetic lace

I will go into how I used samples to explore hybrid rhythms in specific detail through the sub groups Collapse and flatten, Aestheticised temporality and Crafted control.
3.4.3 Collapse and Flatten

These samples imagined shape and alternative construction methods for a hypothetical garment and allowed these invented details to inform surface design in the digital. The imagined garments were envisaged as high-low tech modular panels where lacing created a pulling together whilst at the same suggesting a sense of falling apart.

Through the making of these samples I imagined the use of other hands in the pulling apart and drawing together, of a hypothetical garment and its constituent parts and how these simple actions could encourage a shared experience of the printed, crisp-papery, poly cotton I had come to value. These samples enabled the introduction of contrasting materials such as laser cut pure polyester, hand sewn bias cut silk and market-sourced nylon ties. By creating eyelets and lacing contrasting materials I was able to obtain immediate tactile and visual feedback on a theoretical hybrid material poetry based on locally found waste.

Lastly, these samples enabled the floating of a simple idea — that of blending surface design and pattern cutting into the same digital space, or at least establish some kind of permeable membrane where the poetry of each craft could potentially spill into the codes of the other. These samples tested in concrete terms the negotiation of dart values where detailed surface embroideries were concerned, they considered joins such as shoulder and side seams and examined the excess that lay outside of these perimeters. These samples were not set up as design based problem solving exercises but rather used to establish a nebulous space for craft-based investigations.

Negotiating constraints & assumed formats, there is a risk in maintaining a relationship to systematised form. Alluding to a standardised body though simultaneously leaving something unsaid. Conforming or co-operating, giving concrete points of correlation to link with other panels, the patterns of other designers, to place a textile to a body, without ironing-out its ambiguous potential was a way of exploring the potential in this hypothetical craft. Functional details were transformed in reference to traditional embroidery embellishment codes and decorative embellishments were given functionality.
felt sense  
falling apart, drawing together 
uneasy juxtapositions 
future craft from the past 
layered 
happy geometries

collapse and flatten  
blurring codes, exploring 3d led surface design and an imagined high-low modularity

residue  
emergent craft based problems

excess precision and specificity - how to balance idiosyncracy with the systematised? 
the perimeter - what is in, what is out? 
dodging prescriptive relationship to the body - how to bring surface design in relation to isolated points of a hypothetical body whilst leaving much unsaid? 
negotiating inherited codes - how to deal with the shaping issue (pattern cutting) in a surface design space? 
falling apart - where is the balance between ‘held together’ and ‘coming undone’? 
decorative <> functional - how decorative can a functional detail be before it becomes useless? how functional can a decorative element become before it loses its affect?

does mass produced blended textile fray beautifully?

how to allow tapes to hang beautifully

how to define the perimeter?

which body? which system/systematised body?

how to negotiate darts, sleeveheads and other pattern cutting technicalities in a surface design space?

antifragile 3.0 making

scale of imagery, scale of body

constrain print/embroidery to specific bodice? or run over?

Figure 3.3 Collapse and Flatten
antifragile making

sample #70 / collapse and flatten

sub-group collapse and flatten
material 65/35 polyester cotton blend shirt, silk remnants
thread metallised nylon embroidery thread
technique digital embroidery / lacing
location digital embroidery at a factory in district 12, digital design and garment construction at studio
rhythm high-low tech modular, blending codes, fast-slow construction
**sub-group** collapse & flatten

**material** 35/65 polyester cotton, sourced from Ba Chieu market in HCMC

**thread** recycled PET, industrial sewing thread

**tape** silk remnant, bias cut, machined & bagged out with a needle

**technique** sublimation print / digitally embroidery / cutwork / lacing / pattern cutting

**location** sublimation printed at a factory in district 12, digitally embroidered at my home studio, pattern cutting segment taken from a locally tailored garment

**rhythm** hand-machine imagery, hand-machine construction, mindfulness and care in digital to establish the same quality in sample

---

**Figure 3.5 Sample #55**

- **Inspiration**
  - door detail and breeze block

- **Print**
  - ink on paper

- **Collapsing Codes**
  - negotiating dart value

- **Sub-Group**
  - collapse & flatten
**antifragile making**

**sample #49 / collapse & flatten**

---

**sub-group** collapse & flatten

**material** 35/65 polyester cotton, sourced from cho ba chieu market in hcmc

**thread** recycled PET, industrial sewing thread

**tape** silk remnant, bias cut, machined & bagged out with a needle, frayed

**technique** digitally embroidery / cutwork / lacing / text as fray check and garment block delineation

**location** digitally printed at factory in district 12, embroidered and laced at my home studio

**rhythm** fast-slow imagery, hand-machine construction, mindfulness and care inserted in digital.

---

**inspiration**

alley in district 4

---

**blending codes**

architectural detail as functional-decorative garment detail

---

**Figure 3.6 Sample #49**
ANTIFRAGILE MAKING
sampling 3d led surface design

translating architectural detail w.d.emb, creating fray
duplex sublimation printing of men's shirt panels sourced from mar
applying arch. detail to side seam to allow lacing, customisation
eyear arch. lacing prototypes - d.emb on sub printed shirt pa

digitised embroidery design for tape
playing w. studio danced tape and eyelets

digitising, editing stitch type and direction (pursuing idea of kymdan mattress cover as base emb for sub print)
mending a tear w.d.
digitised bodice

drawings, digitising, editing stitch type and direction (pursuing idea of kymdan mattress cover as base emb for sub print)
taking cues from local silk embroidery in digitisation work

local flora - moth orchids, ginger lillies, gladiolus
to bodice (to d.emb in white r.poly, resist print)

Figure 3.2 3D Led Surface Design
3.4.4 Aestheticised Temporality

These samples collapsed craft based signifiers of effort and nostalgia through mark making to convey a visual narrative and felt sense of the local context. The city is a hybrid space of frenetic activity and dust-dense jammed weight, synthetically lifeless and vibrantly decomposing, omo-scented benevolent brightness and desolate, choking wretchedness. These felt truths spoke to my evolving understanding of the nature of pollution and a realisation of the kind of futures we likely face. An antifragile approach took these contradictions as creative inspiration.

I treated an image of cheap plastic flowers with the care generally reserved for silk shading of lotus flowers, meticulously picking out detail and areas of emphasis without irony. I ran automated machine embroidery over carefully hand embroidered accents to approach the patinated intricacy found in unlikely surfaces and facades. I layered fast and slow techniques to speak to the messy, contradictory strata I encountered in the local context. Through sampling I imagined a manifestation of sustainable fashion that valued local truths over greenwashing and escapist, revisionist fantasies of material purity.

These samples explored hand embellishment of ‘fast imagery’ by accenting attention and delineating areas of focus.
felt sense

layering
jammed-weight
cheap-rich
messy, contaminated beauty
fast materials held in slow densities

collapse craft based signifiers, create new associations

aestheticise temporality

emergent craft based problems

are techniques only able to speak to the time they take?
can a fast technique speak to a slow process? can a slow process speak to a phenomenon derived from speed-based systems?
lifeless and aggressively enduring - how to translate a sense of this density?
fast things last an eternity - what does that the lifeless eternity feel and look like? can we ever enjoy it?
50/50 poly cotton is a dream print substrate, could this be an element of an upcycled textile garment system?
can i translate the complex pollution of HCMC into something apparently ephemeral?
how to embed the hybrid natural/synthetic accretive, layering of time into a textile?
how to construct and indicate value and preciousness where it is largely absent?
sub-group aestheticised temporality
material 30/70 polyester cotton men’s shirt, sourced from cho ba chieu market in hcmc
thread vintage cotton embroidery thread
technique digital print / chemical etch / hand embroidery
location printed at a factory in district 12, embroidered and etched in studio
fragment collapse craft signifiers of effort and nostalgia, convey a sense of the local context, meticulous-automated visualisation and mark making, layering
sub-group aestheticised temporality
material 30/70 polyester cotton men’s shirt, sourced from cho ba chieu market in hcmc
thread metallised rayon and polyester embroidery threads
technique digital print / digital embroidery / hand embroidery
location printed at a factory in district 12, embroidered in studio
fragment collapse craft signifiers of effort and nostalgia, convery a sense of the local context, meticulous-automated visualisation and mark making, layering

ANTIFRAGILE

3.0 ANTIFRAGILE MAKING
These samples imagined a textile that through its impossible making process was a testament to a wholly crafted value via care over any assumed material value. At the same time, these samples are uniquely shaped by the affordances and constraints of specific materials and techniques. These samples sought to actively place careful awareness back into machine mediated making by intentionally inserting key moments of risk into making phases typically characterised by speed, seriality and disconnection.

Risk was designed into being by floating hand made ribbon embroidery on soluble backing over a substrate. Digital design was used as a space to bring together these layers with a third ‘locking’ element which would only work with correct, precise placement. The samples placed the risk of hand embroidery and machine embroidery into a new, meaningful contrast and relationship — questioning the assumed ‘workmanship of risk’ in each through crafted actions and taking advantage of fragmented decision making and risk. These samples took inspiration from the technical virtuosity of needlepoint lace and reimagined or imagined anew an elevated craft that might exist in a city of hybridised making by innovating simply through what is, that looks to tradition as a liberating inspiration rather than a set of fixed rules.
Crafted control
contriving care, embedding risk

Felt sense
floating, permanently fixed
falling off, stuck on
random specificity
procedural intricacy

Crafted Control

Risk
intricacy and specificity

Emergent craft based problems
how to combine techniques and materials in new ways to create a new language?
how to bring risk into relationship with digital design and industrial machines?
what is the right scale/size for laser cut tape?
how to arrange baste laser cut tape so that it follows a pattern, can be locked into a configuration, but also so that it will hang loose from the surface?
how to balance locked/hanging tape in the digital?
how to align hand embroidered elements with mechanised making actions?
what can be achieved through a contrived pause?
what can be locked into relationship? what do these relationships speak to?
how to draw and digitise locked details so that they function to lock tape embroidery in place without overpowering the whole sample?
Figure 3.11 Sample #10

**sub-group** crafted control

**material** 35/65 polyester cotton men’s shirt, sourced from cho ba chieu market

**technique** digital print / scanned and scaled in digital / cutwork in digital / laser cutwork over digitally printed panel

**location** digital print at a factory in district 12, laser cut at a factory in district 7

**rhythm** embed pause and variable rhythm, float idea of wholly crafted value via care in relationship to machines of automated production

**digital cutwork** preparing a digitally printed panel for laser cutwork

**antifragile making**

**alignment**

**inspiration** plastic security guard chairs
sub-group crafted control
material 35/65 polyester cotton men’s shirt, sourced from cho ba chieu market
 technique laser cut tape / ribbon embroidery (hand) / digital embroidery
 location laser cut at a factory in district 7, hand and digital embroidery in studio
 rhythm embed pause and variable rhythm, float idea of wholly crafted value via care in relationship to machines of automated production
3.5 FRAGMENT

Fragment
• a small part broken off or separated from something.
late Middle English: from French, or from Latin fragmentum
from frangere ‘to break’.


3.5.1 Fragments — Purely Out of Place

Antifragile crafted commitment to a stance — I will use and improvise around what I find. I will make do. Though it can be painful to observe and reflect upon, plastic and synthetics are an integral part of my immediate material culture and that of my local context. I will not deny or run from the reality of complicity as much as I will not blindly perpetuate the unabated, unaltered use of harmful materials. I will find the aesthetic value in the materials which surround me, will uncover the constraints and affordances of these materials.

Sampling skimmed over the cultural caché of seemingly opposed fibre types and diametrically opposed making processes by placing them into the context of a nuanced narrative. The minituae of the practice formed its own language and materials based lexicon that indirectly spoke to transgressed boundaries, dislocation and disconnection. Oxidised nylon, the crisp-fuzziness of photographic-image printed poly cotton, toxic-neon fake flowers, the gaps between threads in industrially woven polyester and the crunch of the acrylic tape are examples of internalised felt impressions which drove the crafting of surface design interventions and inspired material provocations.
3.5.2 Mark place

Global fashion and textile systems fragment materials - impurity and contamination characterize our reality. Craft based interventions creatively hybridized materiality and aestheticized endemic pollution to bring craft in relation to 'real life'. Sampling with fragments, I actively contend with the messy and chaotic as a creative provocation. Hybrid material experiments I explored with fragments are as follows:

- Lock or lace opposing materials together
- Use embedded resists to make contrasting material properties visible
- Explore new strategies for making patchwork
- Layered procedural complexity over a surface to reveal material qualities of a textile
- Employed the synthetic as a language to disrupt traditional craft signifiers
- Bond waste materials together

I elaborate on these further in the subsections Disrupt homogeneity and Crafting Cohesion to follow.
3.5.3 Disrupt Homogeneity

These samples creatively confront assumed value judgements around synthetic textiles by treating blended textile waste with care. Mass produced blended textile was approached with curiosity, as if its material characteristics were worth exploring and extending.

These samples explored traditional craft-based surface manipulations integrated with methods of digital fabrication. Synthetic samples were subjected to numerous experiments with local machines and substances to reveal the material language latent in this ubiquitous, bland material. Intensive craft-based textile manipulations and techniques were explored to re-enchant fast materials.
felt sense
fast-slow local lace
delicate polyester
err精密
the shape of what remains

draw, trace, accent

draw with needlepoint embroidery

drawing with laser cut tape

interlink by hand, design in digital

link, bridge, join
lace as structure, join
digital lace

link entirely by hand

hand embroidery

designed in digital, link by machine

slow digital (hand in digital)
monomaterial

hand in digital drawing
poetic line, synthetic thread

print

etch

perspective broderie anglaise
garment panel

residue
how to create a balanced lace that holds together?
how to balance preservation of drawn detail with enough functional joints?
where is the line between integrity and instability? how few joining stitches do I need to keep a drawn embroidery together through substrate dissolution?
can detailed hand-drawn digital lace be used to lock materials to a substrate?
what size tape will hold up to needlepoint embroidery whilst still appearing intricate?
how thin can poly-cotton be sliced by laser?
which balustrade configurations translate well as lace?
can ‘digital’ lace be reconfigured as a strengthening, a reinforcement?
what would local lace look like?
what is already lacy in HCMC? which lacy elements can be reinterpreted?
how to dodge lace clichés and make a new high-low lace language with local materials?

3.0 ANTIFRAGILE MAKING

Figure 3.13 Disrupt Homogeneity
**sub-group** disrupt homogeneity

**material** 30%/70 polyester cotton men's shirt, sourced from cho ba chieu market in hcmc

**thread** polyester sewing thread

**technique** needlepoint tape lace embroidery / laser cut tape

**location** laser cut at a factory in district 7, embroidered in studio

**fragment** extending material by exploiting constrants and affordances, investing and aestheticising an excess of care in low grade material, evoke laciness in local urban environment

---

**stitched structure**
exploring needlepoint lace construction

**sketching across mediums**
drawing in and out of digital design space

**laser tape**
quick means of transforming textile waste into embellishment material
**sub-group** disrupt homogeneity

**material** 30/70 polyester cotton men’s shirt, sourced from cho ba chieu market in hcmc

**thread** rayon embroidery thread

**technique** digital print based on hand-made print / hand painted chemical etch based on life drawing / hand embroidery of accents and as fray check/stabiliser

**location** digitally printed at factory in district 12, embroidered and etched in studio

**fragment** extending material by exploiting constraints and affordances, investing and aestheticising an excess of care in low grade material, evoke accretive-decaying sense in local urban environment
sub-group disrupt homogeneity
material waterproof polyester windbreaker, mylar balloons, real indigo
thread organic cotton thread
technique bonding / digital embroidery / plant-based vat dyeing
location digital embroidery at a factory in tan binh district, bonded and dyed in studio
fragment material provocation via juxtaposition, idiosyncratic value in relationship
3.5.4 Crafting Cohesion

These samples are composed of fragments drawn together by meandering lines, that took form through a piercing and threading with a precision aligned to the poetic. The affect which shaped the drawn line of an embellishment was given primacy. The strategy of prioritizing the poetic was carried over into the functional reality of constructing or resurrecting a greater whole from dissonant fragments.

Characterized not only by the poetic but by uneasy relationship and unstable cohesion, these samples speak to the violence and fragility that naturally coexist in our material and making realities. These samples creatively approached a common issue in craft whereby idiosyncratic preciousness can constitute an uncomfortable over-proximity, an awkward excess. Violently, precisely locking fraying, torn scraps into a new semi-stable cohesion is a way of balancing nostalgic idiosyncrasy with a modicum of tech based innovation. Within these samples fragments remain fragments. These samples are not neated, and have no finished edges.

Sampling looked into the acts of repairing and recontextualising through surface design interventions for upcycled textile. Narrative cohesion in fragmented hybrid materiality was a way of speaking to disorder and the risk in allowing the systemless. Sampling explored means of bringing craft values in relationship to ubiquitous, low value materials to recontextualise into relation to a system that relies on exclusivity.
emergent craft based problems

which scale and density of linework will function to hold fragments together?
which stitch type give the best cohesion, the best translation of affect?
how to design for digital bespoke mending?
can digital patchwork embroidery be serialised?
for x-stitch embroidered patchwork tapes - how to approach joins?
text as tape - what scale is appropriate to the balance of a composite sample whilst still retaining legibility?
does hybrid material embroidery patchwork invite or even necessitate monomaterial fragments?
antifragile making
sample #61 / crafting cohesion

sub-group crafting cohesion
material silk remnants
technique patchwork / digital embroidery
location digital print at a factory in district 12, laser cut at a factory in district 7
fragment precious remnants, unresolved, precision aligned to the poetically erring, decoration as structure and cohesion, violence and fragility
sub-group crafting cohesion
material polyester cotton blend shirt yokes of varying size and composition
thread metallised nylon embroidery thread
technique digital embroidery / patchwork
location digital embroidery at a factory in tan binh district
fragment repairing and recontextualising, unstable cohesion
3.6 ANALYSIS

Examining the greater process of sampling revealed some enduring preoccupations and weighted issues for further consideration. These preoccupations are the elements of practice with latent potential, what I referred to in my sampling process diagrams as ‘residue’. These preoccupations are both the craft based problems which lingered through sampling and the opportunities which could potentially lead to insights into practice in future. I have identified 3 main areas - (i) risk, (ii) purity and (iii) binaries and boundaries, which I will go into below before concluding this chapter.

3.6.1 Risk (i)

Sampling created, tested and reflected upon certain conditions and means to creatively work with risk. Risk for this practice phase emerged through the design of procedural complexity and translation of affect. It was in balancing intricacy with functional economy, embedding narrative whilst considering serialisation and approximating an equilibrium between idiosyncracy and the systematized that risk was encountered. Confronting and creatively negotiating the tensions between such contradictory elements was core to this practice phase, as evidenced particularly through the set of samples exploring Crafted Control. The strategy of intentionally creating the conditions for tension and risk raised numerous questions, issues and opportunities with latent potential for consideration in future. Surface design interventions in this project phase relied upon arbitration in the digital and across automated processes to enact the inserting of literal pause or allowing for the inclusion of anachronistic/antiquated making or atypical materials. As was found through sampling, procedural automation increases the risk that narrative and affect will be lost in translation, but this is a gamble we accept to bring our craft in relation to current reality and life-as-it-is. By designing for the insertion of procedural complexities that cannot simply be automated, we can directly experience how fraught with risk and awareness intensive technologically mediated creation is, how vigilant we must be that we do not lose our narrative.

3.6.2 Purity (ii)

A set of material and technical possibilities emerged from the experimentation discussed in this chapter. As was outlined, this approach to making invited material thinking and approaches to making specific to a chaotic local material culture. These samples elicited a matrix of material and technical applications for surface design, suggesting a specific tacit knowledge related to upcycling and incorporating the discarded. This matrix demonstrated in concrete terms what can and can not be done, and was as much function and as it was aesthetic. It suggested creative strategies for incorporating and synthesising diverse materials and techniques, effectively narrativising and harmonising waste.
In addition the approach provided a structure within which to sort, order, organise, mark and claim those materials and techniques that had fallen out of any system of management and value creation. It also allowed the practice to begin to talk about the synthetic with and through the synthetic, in relation to the organic and that which composes and decays.

Creatively incorporating diverse fibre types invited equanimity and empathy with the ostensibly impure. The practice assigned an alternative value to these materials. An antifragile approach fostered curiosity with all materials. Practice found ways to link decontextualised materials into new relationships. Materials were not black or white, not a problem to be solved. This cultivated empathy was not only creatively enriching but it also made sustainability something real, a tangible element to balance and harmonise within a network of craft-based micro decision making. Ironically, the chaos of waste was predictable and stable, working with blended synthetic textile led to a certain material appreciation and specific tacit knowledge.

In working with and making reference to the chaotic abundance of the synthetic in a local context, the practice considered what is synthetic in a greater material culture. Placing polyester up against silk, naturally dyed against industrially dyed, mass produced textile panel, hand rendered drawings of real blooms against artificial flowers was a way of talking about a transgression of cherished boundaries. Transgression was a directly felt experience and an integral part of a making process. The research made space for reflection upon how we define the impure and inauthentic.

3.6.3 Binaries and Boundaries (iii)

Much of the aesthetic language of Antifragile came from a response to the properties of synthetics. These properties emerged through relationship. The organic and inorganic have their own languages, becoming apparent via interaction. Binaries and boundaries may be cultural constructs but they are also materials based realities. Sorting by material type makes sense in the context of a surface textile design practice since the assumed cultural meanings of each material are related to their material properties. The practice of ordering according to an alternative sourcing strategy and antifragile making practice provided a means to question, test and to elucidate such connections and/or assumptions. Uncovering constraints and tendencies in the material provided a language through which to express a sense of time and place and to capture new associations and potential value. The latent, creative potential in craft-based sampling was carried forward to the next practice phase Speculations on future practice, which I will expand upon in Chapter 4.

Waste is chaotic not only because it has yet to be sorted but because it cannot be sorted. Material binaries arise once you want to sort and work/do something with the material. The concepts of technical or biological nutrients (McDonough & Braungart, 2002) make sense in a meta context but more detailed information is required in the context of surface design for textiles. Materials rarely conform neatly
to two camps in the messy reality of the local context. Focusing on poly-cotton blend textile, I worked directly with diametrically opposed materials inextricably bound together. Each fibre takes different dyes, different temperatures, alters and adapts either in the presence of chemicals and machines or enzymes and plants yet they are bound together. Non-linear craft-based problem solving revealed the characteristics of these seemingly opposed fibre types by placing them into the context of a nuanced narrative. The minutiae of the practice formed a language which was used to talk about transgressed boundaries, dislocation and disconnection. Felt impressions both informed and emerged from processes of crafting surface design interventions.

3.7 CONCLUSION

An antifragile approach to making invited material thinking specific to a chaotic local material culture and allowed a set of material and technical possibilities to emerge from sampling. These samples elicited a matrix of material and technical applications for surface design, suggesting a specific tacit knowledge related to upcycling and incorporating the discarded. This matrix demonstrated in concrete terms what can and can not be done, and was as much function and as it was aesthetic. It suggested creative strategies for incorporating and synthesising diverse materials and techniques, effectively narrativising and harmonising waste. In addition the approach provided a structure within which to sort, order, organise, mark and claim those materials and techniques that had fallen out of any system of management and value creation. This sorting and ordering was in itself an important act of value creation and recontextualisation and already alluded to a different reality for fashion and textile making. It also allowed the practice to begin to talk about the synthetic with and through the synthetic, in relation to the organic and that which composes and decays.

The fragments and rhythms of my practice are interconnected and entangled. Materials dictated technique, and technique can dictate material choices. I work with what is available and what is at hand. I can’t be too precious, I often need to improvise. Aesthetics emerged through what the material suggested.

An antifragile practice provides an opportunity for sustainable fashion to embrace the chaos associated with the mass production and consumption of the fashion and textiles sector. Essential to developing such a practice is a need to engage and work with the ostensible chaos of your own local context.
For an antifragile practice the following need to come together:

- Find your own fragments – engage with the material and techniques that are available to you locally.
- Find your own rhythms – engage with the temporal and local particulars available to you locally.
- Entangle the fragments and rhythms of your practice through your own form of crafted control.
- Question your practice, your methods, and the choices you make. Develop techniques like mapping and tagging to assist.
- Embrace the journey - it’s not easy and will be messy.
- Be responsive, creative and opportunistic.
4.0 SPECULATIONS ON FUTURE PRACTICE

This chapter considers speculations on future practice through two distinct creative projects: Saigon Shirt and Ao 3.

This final phase placed antifragile making into the gravity of an imperfect local making context by exploring bespoke industrial prototyping. In exploring craft interventions and the insertion of crafted control I examined the translation and embedding of craft values and felt sense across diverse material and making realities that spanned digital, artisanal, automated and industrial textile and garment production systems.

These interventions and explorations allowed the material thinking developed in the previous practice phase to persist in more resolved designed objects. These craft based prototypes sought to positively disrupt established textile and garment production with new processes and materials and suggest alternative making realities.

Through this practice phase I test the validity of employing craft based prototyping to make surface design for fashion textile in an antifragile way. This phase sought to reveal the validity of an approach that intentionally places creative practice in direct relationship to ostensible chaos and considers the idea that creatively contriving embedded risk renders our making processes and craft objects more meaningful, thought provoking and intriguing.
4.0.1 Prototyping Antifragility

**Shifting Sample to Prototype: applying craft-based language to new making contexts and value systems**

The final research phase explored antifragility in practice by prototyping bespoke industrial\(^5\) artefacts. Antifragility was embedded in these projects by intentionally holding creative practice in relationship to the ostensibly chaotic whilst cultivating the subjectively specific and intricately meaningful.

The practice of reflective writing and documentation throughout the sampling process as discussed in detail in Chapter 3 was essential in capturing mistakes to understand more about risk. It was this reflective methodology which helped keep practice open to serendipity, and enabled the practice to mine the idiosyncratic from the ostensible mess, this approach was carried forward from sampling to prototyping. An individual aesthetic is the holy grail for a textile designer, thus the risk of allowing the personal and idiosyncratic across mediums that would otherwise iron out the creases is vital. The making strategies put forward through the research suggest approaches that make this a reality in concrete terms, as I will elaborate on in this chapter.

I will show how I approached problem solving around the craft-centric non-linear objective of bringing my own felt impressions into the digital, across diverse making scenarios and material lexicons and into the violence of automated production. I will discuss how craft-based prototyping enabled the translation of felt impressions and how craft interventions and crafted control approached the issue of establishing and maintaining a narrative thread in traditionally craft-hostile contexts. The prototyping protocol I adopted for both projects as I considered future practice scenarios is outlined in the Figure 4.2 — “A Prototyping Protocol for Designing Craft-Craft-Interventions into digital production”. The diagram shows the centrality of craft interventions and crafted control to my prototyping practice, and illustrates how these design actions functioned in the greater context of the research.

\(^5\) bespoke industrial refers to my use of industrial textile machinery towards the creation of unique, one-off pieces of textile/fashion garment. digital fabrication and distributed networks of maker-spaces or in the case of HCMC - SMEs, mean that laser cutting machines, digital textile printers, embroidery machines and other industrial machinery can be used to create individual textiles across a variety of different locations.
due to the financialisation of fashion and globalization of f&t production, staging system & its workflow might be defined as follows: idea conception derived from trend/ big data, digital design in isolation, textile as abstract consideration, manufacture offline, sales and marketing separate, ethics are extraneous, product remains an abstract entity.

what is wrong with this reality? what are the most pressing issues stemming from these issues by other researchers/practitioners?

how to do things differently?

research & reflect on local context - how does this global reality manifest locally?

mind mapping - how can i get at these issues through my making practice? combine intuition with solid planning

hypothesis as process and artefact explore an as-yet-unexplored future scenario allow a question to persist in the material

suspend disbelief stop making sense be accountable to externalities confront reality’s rules audit mindset

does the new reality suggested by the process & its artefacts make any sense? can the processes be sustained? can they be implemented in a local context?

can these processes be ‘systematised’? are they easily communicable?

can the processes be different, if you didn’t consider yourself powerless and hadn’t given up, what would you do?

how do the artefacts stand up to everyday wear and standard care?

what has been done to address these issues by other researchers/practitioners? how to do things differently?

research & reflect on local context - how does this global reality manifest locally?

photograph, cut, paste compile juxtapose hold, handle, play with, place - a meaningful, palpable touch

interuptions craft interventions hypothesis as process and artefact

do anything you can any way you can, to get at what the new reality might feel like note, document, write, record

mind mapping - how can i get at these issues through my making practice? combine intuition with solid planning

hypothesis as process and artefact explore an as-yet-unexplored future scenario allow a question to persist in the material

suspend disbelief stop making sense be accountable to externalities confront reality’s rules audit mindset

does the new reality suggested by the process & its artefacts make any sense? can the processes be sustained? can they be implemented in a local context?

can these processes be ‘systematised’? are they easily communicable?

can the processes be different, if you didn’t consider yourself powerless and hadn’t given up, what would you do?

how do the artefacts stand up to everyday wear and standard care?

what has been done to address these issues by other researchers/practitioners? how to do things differently?

research & reflect on local context - how does this global reality manifest locally?

photograph, cut, paste compile juxtapose hold, handle, play with, place - a meaningful, palpable touch

interuptions craft interventions hypothesis as process and artefact

do anything you can any way you can, to get at what the new reality might feel like note, document, write, record

mind mapping - how can i get at these issues through my making practice? combine intuition with solid planning

hypothesis as process and artefact explore an as-yet-unexplored future scenario allow a question to persist in the material

suspend disbelief stop making sense be accountable to externalities confront reality’s rules audit mindset

does the new reality suggested by the process & its artefacts make any sense? can the processes be sustained? can they be implemented in a local context?

can these processes be ‘systematised’? are they easily communicable?

can the processes be different, if you didn’t consider yourself powerless and hadn’t given up, what would you do?

how do the artefacts stand up to everyday wear and standard care?
4.0.2 Moving Emotion

The local context was the inspiration and grounding for this practice phase and the sampling phase which preceded it. Sampling sought to activate material thinking, to bring out the language inherent in locally sourced materials and to visualise felt impressions through an internalised understanding of these materials. Prototyping in this phase sought to design production processes that would allow for the translation of these impressions and affects into resolved artefacts. Craft-based prototyping was employed to extend and embed what had previously been internalised and embodied, and to dodge linear problem-solving towards predefined outcomes. Ultimately craft based prototyping was used to translate a felt sense of time and place, preserving the circuitous, the undulating, the messy and undecidable through translation into new contexts.

Each project responded to a discrete set of felt impressions. I have outlined some key examples of qualities that emerged through intimacy with material and the local context. I show how these qualities were translated into process and artefact through craft based prototyping in Figure 4.2.

I will elaborate on how the process of embedding the undefinable and nebulous in crafted objects involved unique, atypical approaches to problem solving which were highly subjective and specific. I provide an examination of these approaches for each project in the subsections Saigon Shirt and Ao3 to follow.
4.0 SPECULATIONS ON FUTURE PRACTICE

ANTIF RAGILE

felt sense
visualisation/approximation/distillation
problem solving around translation
embedded affect

falling apart, drawing together
shape of uncut textile remnants draped on the stand
lacing & eyelets
trace & retrace organic, messy lines
perimeter and eyelet placement in digital
create precision around the poetic, meandering line
resist print

irony, pathos & pollution - regarding transgressions
process fake flower image as an extreme
trace & retrace 'organic', messy lines
irony, pathos & pollution - regarding transgressions
process print as (toxic) dye
sparse embroidery - reduce stitch density and width, as light and as little as possible
process and distill 'raw' perspective

violence & fragility
juxtapose materials and processes as is
justapose digital with hand embroidery
preserve perspective
collapse elements

jammed <-> floating outsider stance
justapose digital with hand embroidery
preserve perspective
justapose digital with hand embroidery
preserve perspective

capture many perspectives
process and distill 'raw' perspective
create precision around the poetic, meandering line
resist print

spare embroidery - reduce stitch density and width, as light and as little as possible
process fake flower image as an extreme
trace & retrace organic, messy lines
justapose digital with hand embroidery
preserve perspective
collapse elements

capture many perspectives
process and distill 'raw' perspective
create precision around the poetic, meandering line
resist print
4.1 SAIGON SHIRT

Saigon Shirt arose from a collaboration with Melbourne based independent fashion label Chorus. The collaboration initiated an individualised approach to textile design, enabling a small scale investigation of the scalability of digital design for upcycling within a semi-industrial manufacturing context, taking advantage of the unique opportunity for bespoke production present in the small to medium enterprises (SMEs) and artisan groups in Ho Chi Minh City (HCMC). Exploring the practical application of a locally relevant iteration of sustainability best practice, the project put design and surface treatment of upcycled textiles towards a market facing reality. The project made space for and derived value from the cooperative relationship not only between textile and fashion designer but also with small scale local factories, technicians and artisans.
**Saigon Shirt**

*Prototype as marketplace*

*a speculation on future practice*

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**Inspiration**

Modernist building facades of HCMC

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**Material**

35/65 polyester cotton men’s shirt, sourced from Cho Ba Chieu market

**Thread**

Coats cotton embroidery thread

**Technique**

Digital embroidery / hand cut work / upcycling

**Location**

Digital embroidery at a factory in Tan Phu district, cutwork at a studio in District 4

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**Digital Design**

Collapsing elements, digitising for embroidery, tessellation spanning L & R bodice panels

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**Sampling brought forward from antifragile making phase**

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**Serialised**

Speculating on bespoke industrial making

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**‘Ao Sida’**

Second-hand clothing market

Cho Hoang Hoa Tham
4.1.1 From Sample to Prototype

The collaboration on Saigon Shirt required shifting of experimental, small format sampling into the prototyping of a market-oriented textile product.

Both prototype and product, the project tested and provided concrete feedback on a simple approach — recontextualise and shift the market value of synthetic blend post-consumer textile waste by investing it with a meaningful local narrative. A local narrative was based on my own subjective personal experience of a messy city in a mad rush to develop. My creative response was in large part the creation of upcycled ‘perspective broderie anglaise’ garment panels. The process of prototyping a creative response in craft-based language was a means of translating of affect into artefact.

As was shown in Figure 4.2, the felt sense to which this project responded and drew inspiration from was that of a certain contradictory ‘jammed - floating’ quality in the local urban space of HCMC. In addition, as I pointed out, I also responded to my own outsider status whereby my perspective is that of looking in, looking up, from outside. Where problem solving for strategic design may follow a ‘design to..’ imperative involving the importation of sustainability rules, craft-based prototyping for this project was more concerned with the translation of personally felt qualities into material and artefact, and ensuring that the design of making processes allowed for a ‘skillful’ translation. Problem solving for this project was thus highly idiosyncratic, as I will explain.

4.1.2 Craft based problem solving

Prototyping as a methodology emerges from what are essentially unruly, disorganised ‘messy’ processes that rather than test existing market values are a ‘space, place and medium where value is negotiated and exchanged, they invite new value to be created.

(Schrage, 2016, p. 67)

The messy processes of crafting a hypothesis employed for this project involved;

• Sketching both on paper and in the digital design space as a looping, dipping in and out of fast and slow visualisations
• Extensive use of digital photography and the creation of a bank of images documenting the ‘lacy’ in the built environment
• Reliance on the digital for pattern generation and consideration of design permutations to assist decision making
• Iterative sampling on found textile
• Bringing upcycled textile in relation to digital surface design, industrial machinery and systematised textile finishing processes

In the digital design phase, problem solving was focussed around conveying
a sense of perspective then subsequently creatively reconfiguring this sense of perspective and that of looking in from outside into a collapsed, greater whole. As was outlined in the introduction to my methodology, sketching played a vital role and was extensively employed as a problem solving tool which I broadly define for my practice as encompassing:

- taking and annotating screenshots,
- tracing by hand in digital
- creating pattern permutations based on algorithms in design software
- printing and drawing on top of photocopies
- tracing from scanned photocopies in the digital workspace
- stitching, hand embroidery
- iterative sampling (stitching out cropped elements with digital embroidery)

Sketching was ‘messy’ in that it looped somewhat erratically in and out of the digital workspace. Sketching was not medium or process specific but was linked by the act of drawing — drawing together, tracing emphasis, shifting balance or indicating boundaries. As I mentioned previously, sketching was also not defined in relation to any particular speed. At times the velocity of the digital was dizzying and solipsistic. At other times this speed was a distinct asset, particularly in approximating the design of an intricate placement embroidery. Likewise, moving sketches to textile for hand stitching or to paper to be pinned to a stand was a much faster way of working towards embedding the intangible and maintaining a felt, narrative thread. Rhythms were blurred through these messy processes.

Working in the digital allowed for the translation of a raw subjective experience. The integrated flexibility of a digital workspace (Harrod, 2007) enabled a singular experience of time and place to span uninterrupted from street to textile scrap. The digital workspace acted as a thread linking the capture of images, their distillation, their collapse into one another, their tesselation, digitisation and stitching out. This left the perspective and translated experience of looking up at many streetscapes in a hurry relatively ‘raw’. In addition, the ‘endless editing capacity’ (Harrod, 2007) of the digital enabled me to visually explore and stitch out numerous design permutations prior to committing to a final design. The resultant process and artefacts bear the character of the digital, the mediated and assisted creative practice and experience. By crafting a personal perspective into the social context of a worn garment it was possible to share a felt sense of time and place.

Through the making of Saigon Shirt I found that commercial realities invite systematisation, that scaling up invites and necessitates standardisation. Early problem solving for the projects related to a chaos of over-abundant choice, thus initial decision making pooled around committing to commonalities. Design decisions around such limits involved restriction of colour to white only, cropping to a garment block, only grading to 2 sizes and limiting the production run. Ultimately this allowed production to scale up, and arguably made space for surface design to err towards visual complication.

Upcycled textile was pivotal in a number of ways for this project: as the shape of an unpicked panel, as a papery floating layer and as a mark-making substrate per the discussion on sketching above. Essentially upcycling for this project involved
redefining and recontextualising textile waste such that it became part of a cluster of specific design decisions rather than a random, incidental element. Specificity around the upcycled textile selected for the project were aspects such as textile composition, colour, texture and (unpicked) panel shape. The specifics of the textile flowed into a raft of design decisions ranging from embroidery thread choice, garment shape, range size, the level of embellishment detail and other interrelated specifics which anchored textile waste at the core of the prototype. One of the key design decision for this project to triangulate from the act of upcycling towards a collaborative fashion garment related to the act of cropping.

Cropping to a garment block is a necessary aspect of collaboration towards a commercial fashion product, however it was also a necessary aspect of digital design for surface embellishment on upcycled textile and of bringing upcycled textile in relation to industrial machinery. I cropped and was aware of the act of cropping in unpicking front and back bodice, when defining the outer limit of a surface design, when basting the textile to stabiliser on a digital embroidery bed. The perimeter became a point of tension and interest. While the final decision making around cropping for this project was ultimately driven by commercial realities, these tensions and the opportunities they suggested persisted and were explored in the exhibition piece Ao3. A further discussion around The Perimeter can be found in the Analysis section of this chapter to follow.
AO3 is a bespoke, industrially upcycled textile piece created for the Slow Fashion Lab Exhibition, curated by Jenny Underwood. As part of the Fast Fashion Exhibition which toured through major cities globally throughout 2017, Slow Fashion Lab brought together and considered creative practices that critically engage with the problematic aspects of a fashion industry out of control.

AO3 is comprised of three upcycled textile panels, all of which were found in the same box of scraps at a weaving facility in Ho Chi Minh City. Laser cutting, digital embroidery, digital print and hand embroidery were used as upcycling strategies to recontextualise pre-consumer textile waste in a way which retained existing material narrative and allowed for the specific materiality of each to direct the surface design approach. The making of AO3 practically explored creative strategies to cultivate empathy - inserting crafted control into digital, automated and industrial textile and garment production systems and disrupting traditional practices with new processes and materials. Through the practice, I incorporated and aesthetically resolved two diametrically opposed textile and thread types within a single garment.

AO3 reflects an art context, allowing for the staging of a material provocation. An experiment in imperfect making — AO3 represents a localised iteration of sustainability, a literal world away from the edicts and platitudes of first world corporate environmentalism. The work sought to aestheticise binaries inherent in exploring a sustainability practice inevitably complicit in unsustainable practices. The making of a one-off piece using industrial machinery and unique one-off textile raised questions about the nature of an artistic practice situated in conditions antithetical to mindful creative acts. Navigating material chaos of excess and pollution, the piece explored means of crafting textiles which speak to contemporary production realities and reflect the complexity of making responsible choices in imperfect circumstances. The creative approach adopted for this project was antifragile in that it considered the found chaos of convoluted making and materiality found in the local context in terms of its creative value. The project sought to explore these distinctly divided arenas for what they are, to mine these vacuums for value and to accept what is found ‘as is’.
AO3

**Material Thread**
- Recycled polyester thread / Coats cotton embroidery thread

**Technique**
- Draping / Laser cutting / Digital embroidery / Digital print / Hand embroidery / Hand cut work

**Location**
- Digital embroidery at a factory in Tan Phu District, cutwork at a studio in District 4

**Inspiration**
- Modernist building facades of HCMC
- Nguyen dynasty 'Ao Linh'

**Staining**
- Resist print to digitally embroidered panel

**Front**
- 'Theu rang' embroidery with upcycled taffeta threads

**Back**
- Laser cut, digitally embroidered, resist digitally printed upcycled polyester

**Digital Design**
- Precisely capturing an arrangement 'as is'

**Remnants**
- End of roll and damaged woven silk and imitation silk (synthetic)
4.2.1 From Sample to Prototype

Translating felt sense and material thinking into new contexts

Several ephemeral and nebulous qualities inspired and provoked the creative problem solving for this project, as illustrated in the diagram Figure 4.2. Some key aspects which inspired & moved the project came from the pathos that comes with pollution - a sense of coming apart, an uncomfortable over-proximity, an incongruous interlacing and an awareness of violence & fragility.

Based upon the unique textile based lexicon instigated and evolved through the sampling phase, this project picked up several suggestive techniques which were further developed through prototyping activities for this project. These techniques became the tools with which to enable the embedding of felt sense.

Through prototyping it was possible to float aspects of complex questions in material and making contexts to derive embedded feedback. Creating prototypes allowed space to loosen rigidity inherited from entrenched textile design systems (Schrage, 2015), imagine and speculate on future potential marketplaces and find out where a hypothesis may sit in relation to local sourcing and production realities through making. Craft-based prototyping provided a means to move forward in an atmosphere of trepidation, doubt and uncertainty. The act of questioning and stepping away from the known drove the ‘progress’.

4.2.2 Craft based problem solving

Problem solving for this project was ‘messy‘ in that an overlap can be found within the techniques employed to embed felt sense, and at times the techniques were employed to retain affect emergent in the piece as it evolved. Problem solving was empathetic, flexible and responsive without a fixed, predetermined outcome.

As I show in the diagram Figure 4.2, I approached the embedding of felt sense from several angles, thus the problem solving for this and the previous project were non-linear and emergent in nature. Making space for “as is”, in addition to the sketching techniques I describe in the previous Saigon Shirt subsection, I explored the following creative problem solving acts of constraining & allowing:

- Draping uncut, found textile panels on the stand
- Refining steil embroidery and cutwork (based on perspective broderie anglaise brought forward from the Saigon Shirt project) to become eyelets
- Developing decorative tapes and other functional pieces with a view to lacing and threading panels together and to the body
- Creating a hybridised resist embroidery-print
- Laser to cut eyelets and panel perimeters
- Pulling apart textile remnants to reintroduce again as embroidery thread by hand
- Allowing or constraining fray, adopting fray/clean edges as a language
Constraining and allowing informed and shaped the project as a whole, taking form through myriad micro decision making moments, defined in relation to this core dynamic. Deciding where something should start and where should it end was informed by the materials based lexicon and unexplored potential that emerged in previous practice phases. These decisions were made in consideration of a suite of other interrelated materials-based decisions in relationship.

As mentioned, a common thread running through the craft-centric impulse of these technical actions was that of leaving something ‘as is’. ‘As is’ spoke to the material constraints and affordances of polyester, the diaphanous erring beauty of silk, the violence of the machine, the capacity for extreme intricacy and delicacy in hand embroidery, the shapes that end-of-roll remnants create when pinned to the stand. ‘As is’ in a broader sense was also the pollution I saw and felt everywhere.

A key example of non-linear, idiosyncratic problem solving for the project can be found in my approach to laser cut polyester. Laser cut polyester registered personally as problematic. It catches on other textiles. It appears unresolved. It is linked to the horrific smell of burning plastic — an olfactory boundary object. Its excessively crisp edge is a clunky contrast with the crafted finish of digitally embroidered eyelets. This is a subjective truth of practice, and constituted an element of craft-based problem solving which contributed to an emergent visual language. In this case, I chose to address the awkwardness of laser cut holes by lacing unfinished silk tape through laser cut eyelets.

To solve problems around the embedding of a sense of coming apart, I drew upon techniques of draping, embroidery, fraying and lacing. I explored constraining the garment at particular points as a way of suggesting a coming apart, not only at that particular seam but in the rest of the garment which largely remained unfixed.

I constrained a colour-dense digital resist print of synthetic flowers to the organically erring perimeter of an hand drawn placement embroidery. The act of creating space for the resist print was not so much about exploring a technical innovation in and of itself but to speak about an uncomfortable over-proximity and a irreversible staining. Absorption and resistance are constrained in this piece.

Lacing synthetic to natural is a way to speak to a greater incongruous interlacing in our material cultures and to challenge a dominant practice in sustainability for fashion and textiles. This decision was, however, not quite so pointed. I chose to lace incongruous materials together not only because this material commingling is a reality I experience and I wish to attest to its truth through my creative practice but for the simple reason that I found these textiles next to one another in a cardboard box, just like this. I accepted this arrangement ‘as is’.

In revealing any of these qualities we invariably also find its opposite. Ao3 revealed, creatively employed and aestheticised these binaries.
4.2.3 Crafted Control

Through craft-based prototyping, I imagined a future in which the ideological divide between an artisan painstakingly practicing traditional hand craft and a technician as passive steward of automated, care-less material through-put was blurred. Through alternative making strategies and atypical materials I was able to consider the question - what if a technician had the mindset of an artisan? How might surface design provoke such a situation?

The moment of control in hand embroidery is a specific, finite performance of tacit knowledge enacted moment to moment. By contrast, the decision making moment is fragmented in the case of digital design and digital embroidery. This fragmentation can be a chaotic threat to a practice of crafting nuance and felt impression since a schism can easily damage a narrative thread. However, by cultivating awareness of what is and creatively embracing the chaotic reality of this fragmentation, it is possible to exploit the nature of automated production to contrive risk where it has been removed. Designing for the insertion of crafted control at key moments is a way of pre-emptively mediating the autonomy of the machine. As was the case when prototyping Ao3, crafted control allowed for the insertion of atypical materials and facilitated the inclusion of novel surface embellishment processes. For this practice phase, control extends from the moment the textile stitches out back into the digital, with key moments of control spanning time and medium. Crafted control was a means to embed affect in artefacts created through the use of digitised and automated processes and of retaining craft values in a craft-hostile context.

Drawing upon two key examples from the prototyping of Ao3, I show how crafted control was used to embed craft values in diagram Figure 4.5. As is illustrated, the fragmenting tendency of the digital and automated is taken up as a creative provocation. In order to translate a felt sense of time and place into an artefact, instead of a steady moment-to-moment care and devotion as we find in traditional hand embroidery, we have to specifically contrive the details of moments of care and awareness and insert these events into the design of a prototype. Per the diagram, key moments of crafted control can be seen to have been inserted and managed from both ends of a making process - at the digital design phase and at the factory while creating the embellishments and alterations. Care was designed into the prototype such that acts of devoting careful attention were embedded in numerous interrelated making events.

Adopting this strategy in the prototyping of Ao3 placed human eyes, hands and awareness of a nuanced materials-based narrative into the process as intermediary. By designing complexities that cannot simply be automated and intentionally placing them amidst risk-averse making scenarios such as those of mass production and digital automation, we can begin to talk about our complicated relationship with our technologies and materials and contemplate how challenging it is to write and hold onto our own narrative.
**Ao3: crafting control**

inserting pause, embedding affect

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**digital design space**

- **surface**
  - traditional (hand) - separate metiers, separate techniques, separate materials
  - contemporary (tech mediated) - fractured > blended, hybridised

- **structure**

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**key moments of crafted control**

(pause, interruption)

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**digital space**

- integration of print, laser, hand & digital embroidery
- scale
- alignment
- assigning thread type

**factory**

- stitching out & resist sublimation print
- laser cutting, panel alignment
- oversize garment panel alignment across more than one machine
- alignment of hand embroidered panel on digital embroidery bed
4.3 ANALYSIS

4.3.1 Piercing & threading

Materials coalesce with technique and technician in self-same bubbles.

Stitching out digital embroidery on reclaimed silk panels was, while mediated by machines, a felt experience.

A factory of digital embroidery machines evokes gunfire, a cacophony of trains, a swarm of mechanical wasps — the frenzied piercing punches through you. Silk’s varied gentle ephemerality is anathema to this experience. Throughout the practice I made successive adjustments in digital with the kinaesthetic memory of the violence of the machine, the fragility of silk. The aim was to do as little as possible, inject some small impression of violence whilst leaving the erring, floaty beauty of the silk intact. Through making I found a way of preserving a subjective visual language that speaks to a personal experience of place, pollution and material in which both violence and sensitivity are present.

Hand embroiderers need digital-machine like precision for ‘theu rang’ (literally, teeth embroidery). The hand embroiderers I worked with respect digital work though understand that what they do requires different skills, which it would appear many no longer have the patience to cultivate. There is a lot of scope to translate the honed skills of hand embroiderers into new contexts. Their unique tacit understanding of how to creatively manipulate fibre types and textile surfaces through mark making, turning nuance to their benefit, is worthy of respect, cultivation and preservation.

Prototyping of A03 tested a translation of the tacit knowledge of the skilled embroiderer into a new context by crafting embellishments for new, hybrid means and material expressions — asking how can we maintain lightness when everything around feels loud and heavy.

An antifragile approach that is curious and aware can pierce into knots of making and understanding, allowing new values to be laced through. An antifragile approach opens creative practices to innovation by challenging dogmatic delineations of technique and material.

4.3.2 The periphery

This research phase brought about a unique approach to creating bespoke upcycled textile which through its responsiveness and flexibility expanded a definition of what fits inside and what lays outside.

The importance of the periphery arose in the form of an obstacle when cropping to a block and was subsequently intentionally retained as a creative provocation and preoccupation. As the periphery became an increasing point of focus the decorative
potential in functional joins became evident and the ability to clearly delineate
that which will give structure and link with other panels was opened up. By paying
attention to and intentionally placing emphasis on the perimeter, making the points
where panels join and transform into one garment or another a feature or an accept,
I considered new ways of making that drew on existing codes of pattern, garment
construction and surface design. The possibility to make textiles and garment panels
differently in future was imagined through these experiments.

4.3.3 Intricacy and Specificity

Through practice I gradually developed increasingly specific, embodied ideas
about how to engage with and create with certain tools and materials. Since the
research set out to approach and contend with chaos, these tools and materials did
not fit neatly into a single, hermetically sealed category, and the subsequent craft
emerging from their synthesis involved new visual language and new processes of
internalisation and embodiment. In concrete terms this meant considering what
it was I didn’t quite like about laser cut eyelets, what drew me to the violence of
the machine, how attraction transformed when I placed my own piece of precious
reclaimed silk under it, how dizzying it felt to work in digital without break, how
heavy and impossibly slow my eyes felt hours after straining to see the exact gap
between threads. Material and tool extended into one another.

Thus this was not a matter of designing an object based on an abstract idea,
going through a series of iterations and approximations of realizing a ‘perfect’ form
based on what was in mind. The process was rather about entering into a messy
relationship with materials and tools and composing a materials-based narrative
where intricacy and specificity rather than rules and dogma suggested a path out
of chaos. It was in this way that the practice was able to embed craft values into
process and artefact. Even in the mess and the noise, the meanings and creatively
constructed associations were clear. Through intricacy and specificity alternative
notions of value and context emerged, in direct relationship to the particularities of a
locally situated making practice.
4.4 CONCLUSION

In this chapter I have speculated on future practice by unpacking and examining an antifragile approach to craft interventions and crafted control for bespoke industrial upcycling. I demonstrated how through craft interventions and crafted control I was able to embed risk in digital design and industrial making and to translate craft values and felt affect into crafted artefacts. I discussed how bringing creative practice in relationship to the ostensibly chaotic was strengthening and enriching and resulted in the creation of unique textile design for bespoke garments.

The market context of Saigon Shirt enabled the practical exploration of an alternative not-yet making scenario through prototyping. Through a small scale investigation of the scalability of digital design for upcycling within a semi-industrial manufacturing context, the practice anchored textile waste at the core of a market-facing prototype. Prototyping for this project revealed the kinds of design decisions that face sustainable textile designers and suggested the potential in a craft of bespoke industrial making.

The art context of Ao3 created space to float unresolved tensions and propose provocative materials based impressions with which to comment on pollution, commingled materiality and compromised making. Furthermore, this context enabled the questioning of a definition of sustainability for fashion and textiles, and put forward an alternative.

By placing craft at the core of a practice committed to facing chaos I found that we can create the conditions to do the right thing.
4.0 Speculations on Future Practice
5.0 CONCLUSION

5.0.1 OVERVIEW

Antifragile tested the idea that creative practice can benefit from being placed in proximity to the ostensibly chaotic — mess and apparent disorder. This stance effectively necessitated the creation of something out of nothing — no synthesised making context, no local precedent, no pre-existing value. The research parameters at the foundation of this Antifragile approach forced creative practice to commit to crafting alternative making contexts and material values.

Taking material-process hunches forward into more resolved textile design hypotheses allowed for exploration of intangible values via specificity and suggested new ways of working. In negotiating each concrete instantiation of a nebulous idea I refined my concept of Antifragility and elucidated some technically specific ideas on how we may craft our commitment to higher values in craft-hostile conditions.
5.1 COMMITMENT

“In a sense, the ethical stance consists in asking the question, “Who are you?,” and continuing to ask the question without any expectation of a full or final answer.”

(Butler, 2005, p. 43)

Commitment is crafted.

Through my research I found that it is through craft that we offer our commitment.

Antifragile was primarily a stance of commitment. The antifragile stance I adopted committed to stay with the trouble (Haraway, 2016), to acknowledge and explore contingency, to adopt a local leanness in terms of material, technique and technology. Textile design in this context was articulated through, and thus committed to, the specifics of local material sourcing, augmented around available techniques and technologies. An antifragile stance not only accepted these local limits but embraced them as an invaluable creative provocation, grounding and authentication. An antifragile stance created the conditions to innovate around core sustainability meta issues of speed, technological mediation, material excess and the meaninglessness of un-reflexive simulation. I committed to integrating mess into my creative practice and found it not only a worthwhile provocation but a flexible and adaptable approach which held up through a degree of integration with existing fashion and textile making systems and formalized critical inquiry.
5.1.1 Making contexts are crafted

Antifragile committed to establishing a making context that mined authenticity in hybridity. In a sense, an antifragile approach is an antidote to tech-driven market-aligned design, whereby in blindly adopting ever-increasing speed and externally modulated integration we accept what technology delivers as the only relevant limit. Processes of giving form to the nebulous and raw, the placeless and unresolved, emerge on the path-less-followed. Pre-defined algorithms in our design software, machines of production and systems of dissemination deceptively place us on a path that leads to a disconnected barrenness we know all too well. Quick! More! is not always faster or a better idea. Intense and intimate technological mediation is an unavoidable reality for most of us. In a way we have to allow ourselves to acknowledge and claim our own self-inflicted harm in order to come back to who we are. We continuously lose ourselves and our way. When did I lose the feeling?

If we are to engage with tightly integrated systems of technologically advanced mass-control, how can we, as creatives, do so mindfully? I found that empathy with a tendency to harden and shut off, and the awareness of when you have done so does not arise from prompting, reading, imploiring. Rather it comes from that moment when you make the same mistakes and catch yourself doing so. A fundamentalist retreat into revisionist making will do nothing to address this error in mindfulness, it will just confine creative practice to training wheels. The research thus invited complicity, as practice was not positioned to judge automated, mass production but to construct and place a specific idea of craft in service of creatives who choose to work in the digital, to work with machines, or who choose to combine techniques and synthesise their making processes with their hands. This is not to propose techno-fixes but simply to approach life as it is lived.

This practice found making rhythms to be variable and balanced. I found that unrelenting mono-speeds were a path to material homogeneity and technical sterility. Yet conversely I also found that that perversely protracted making that longed to revive a dead-time with each plodding step was also disconnected. Go too fast and you find your process and artifacts erring towards poetic aridity, then must waste time in revisions and retrospectively reconsidering how to embed a feeling you were too busy to notice you had lost. Go too slow and you suffer under the weight of a stifling ideology, missing a felt sense of the tempo of this fleeting time.

Through practice I discovered that a hybrid speed in line with how we as individuals dip in and out of tech-mediated scenarios can also be applied to making processes. Hybridity is our quotidian reality, this can be reflected in our designed objects when we internalise the materials we use and embody the making processes we have on hand. It is through craft-based techniques of sketching, sampling and prototyping that I uncovered and committed to these truths. Limits for this practice were what I could feel and attend to, were speeds I could manage without losing a felt sense and narrative thread, which incidentally also included going too slow.

HCMC traffic is a helpful metaphor here - road trains with drivers on ice and cyclists wobbling under the blaring sun in their non las are both somehow hazardlessy extreme. A certain velocity is the nature of our time. To bring the research in relation to an image of HCMC traffic, Antifragile often adopted a
motorbike’s convenient lean speed though developed habits of stopping the engine, walking or pedaling around the creative intent of maintaining and embedding a feeling of place. I had to move into the actual speed of the processes I was working with to express through them — they became embodied in practice. The embroidery factory was a violent, mechanical wasps nest, its hundreds of manic needles horrifically piercing, an impression that usually settled into a rhythmic, modulated jarring and jolting towards the inevitable. Hand embroidery evoked a precision that corresponded to an aching strain behind my eyes and a patience that registered as dense, radiating heat in heavy bones. It was through a piercing felt sense of each opposing process that I was able to design interventions to interlace these contexts and pull them closer together. It was through the creative, intentional cultivation of variable speeds in practice and their embedding in artifacts that Antifragile crafted its authentically hybrid context.

The research explored a strategy of designing risk and ambiguity back into industrial making, designing empathy back into the synthetic. This was done through a number of surface design interventions conceived to insert crafted control back into digital and industrial making contexts. These surface design interventions allowed for making to be hybridised, not only in terms of speed as discussed above but also in terms of technique and material. Designing for crafted control allowed practice to intentionally and methodically embed craft-values into craft-hostile conditions, materials and making environments. This making strategy enabled diverse materials to be brought into relationship to one another and made a practice of the act of locking, linking, lacing, bonding, floating and delineating using a combination of digital/industrial and traditional/artisanal embellishment techniques. Similarly, this approach allowed me to pick up fragmented codes and fractured technique to explore in new configurations. I was able to look to the past but cut ties with tradition. The codes of garment construction, pattern cutting and surface embellishment were drawn into a single, digitally mediated space. The functional became decorative, embellishment gave structure. Prototyping in this way synthesised the disparate into a singular process and unique artefact, allowing the chaotic to be recontextualised and harmonised in a new whole. Hybridised making created space for a practice of crafting control to explore the insertion of pause and risk and to serialise the translation of idiosyncracy across digital and automated production.

Craft-based prototyping related directly and tangibly to how people actually create embellishment and surface treatment in the local context, and was used to creatively suggest alternative configurations within existing making protocols. Prototyping enabled me to propose alternative values and processes through practice, not in a perfect making environment but in this particular local context. Designing complex surface embellishment processes around synthetics, particularly discarded synthetics, increases their value significantly as I demonstrated through Saigon Shirt and Ao3. However it was not only the value of the materials themselves that shifted but the value of the making processes and contexts themselves which also shifted. Craft-based prototyping proposed new values where there was previously a vacuum, provided concrete evidence of what these values were and in its existence suggested a new hybrid context in which these values may be relevant.

Synthetic & natural, hand & machine are ‘naturally’ sequestered off in bubbles, not only material but also making clusters. In the local context I encountered and
worked with either the hand embroidery clique or the digital embroidery bros. There was either polyester and machines or cotton/silk and hands. There were batches or there was bespoke. There is no exchange of technique or wisdom between these bubbles. Making bubbles can become fragile ‘safe’ zones, resistant to change. The practice linked these bubbles and imagined a possible future in which mutually beneficial exchange could create the conditions for creative innovation.

Within the context of HCMC’s SMEs, changes temporarily instigated for the purposes of prototyping suggested dramatic shifts towards Antifragile making. Through craft-based prototyping I successfully instigated numerous perversions of local standard practice. I got textile waste onto digital embroidery beds as a serialized row in an actionable workflow, drew threads pulled from a discarded taffeta weave sample through a satin chiffon off-cut to create delicate hand embroidery, I resist sublimation printed an image of a local bridal dress window display onto digitally embroidered recycled polyester thread and explored countless other practical deviations. To have talked about, sketched or wrote about any of these things in isolation would have been completely futile for many reasons. The approach could only have been crafted and made as I went along. I proved the creative potential of devalued and discarded materials through my making practice, working with borrowed staff and equipment in an innovation and contemporary-craft-hostile context. Antifragile’s processes and artefacts speak for the higher ideas and values they stand for. I would thus argue that through Antifragile I demonstrated the potential of craft based prototyping to provoke meaningful change towards creative innovation around sustainability at a grassroots level.
Through my research I found that it is through craft that we construct and communicate material value.

Arguably the most threatening aspect of synthetics arises through how we have configured its use. In spite of plastic’s hellish longevity, it is disposable. I would assert that it is our own stance towards plastic that is destructive. We use synthetics to sequester matter in neat parcels, to impart super-natural functions where natural isn’t quite extraordinary enough for our aspirations, then shift it far away once its usefulness and novelty is spent. Thus I would contend that mainstream, matter-confined discussions around the un-sustainability of this material do not come close to touching on what is harmful in our relationship with the synthetic — our thinking that we are separate and that separation is an option.

Waste is chaotic not only because it has yet to be sorted but because it cannot be sorted. Organic & non-organic commingling is the same unavoidable reality in a waste textile and materials context as it is the wider world. Outside of corporate recycling or laboratory settings, cleanly separating blended textiles is almost impossible. Material binaries arise once you want to sort and work with the material. Designing around the inclusion of silk and ‘fake silk’ made it simpler to confine a discussion to two seemingly opposed materials — not in an abstract or conceptual sense but in the way of making. Practice revealed unique constraints and affordances, the robustness and fragility of each material. I found that petrochemical products require more petrochemical byproducts to adapt, shape or finish them. Like filter bubbles on social media, the fake coalesces and grows in hermetically sealed bubbles. Through practice I found that the synthetic has a dominating tendency greater than the sum of its parts.

An antifragile stance internalized the synthetic and the inextricably blended as an ao dai\textsuperscript{16} seamstress develops and refines a tacit knowledge of silk. Excess, refuse and the systemless were set as material limits, then these material limits were explored as a natural curiosity. Non-linear craft-based problem solving revealed the characteristics and cultural caché of these seemingly opposed fibre types by placing them into the context of a nuanced narrative. The minutiae of the practice formed a language which was used to talk about transgressed boundaries, dislocation and disconnection.

Polyester and polyester blends have unique constraints and affordances which can be employed to speak to the nature of our cultures in a way that only synthetics can. There is quite a lot to say, to be said with and through the synthetic as I explored through Antifragile. Internalising and extending the material conditions of synthetics and blends is the only way to arrive at true contrast with the purity we seek. Without simulation we do not come to know the original. In suspending judgement and giving ourselves over to immersion in materials we may consider foreign to our own constitution we have the opportunity to craft a kind of control back over these alien fragments. We can understand, shape, link and integrate them in stories of how we see ourselves, each other and our world. Practice found ways to link decontextualised materials into new relationships. Materials were not black

\textsuperscript{16} An ao dai is a form of traditional Vietnamese dress, it literally translates as ‘long shirt’ and is traditionally made of silk. Many tailors specialise in making this type of garment only, much like a suit tailor.
or white, not a problem to be solved. As was demonstrated through the research this approach throws up many possibilities and more questions, rather than answers and definitive ways forward. We can only ever have hybridity, and hence our practice must exist in relationship with degrees of uncertainty.

However, there is value in maintaining space for the undecidable. Synthetics are valuable creative materials for craftspeople, their distinctive lexicon affords much scope for embedding a stance that is at once in service and non-judgmental yet also a clarion critical perspective from within. Placing polyester up against silk, naturally dyed against industrially dyed, hand rendered drawings of real blooms against artificial flowers is a way of talking about a transgression of cherished boundaries. Transgression was a directly felt experience and an integral part of a making process.

Through making I found that degrees of uncertainty and the complexity of risk were not specific to technique or material. Risk for this making practice related to the subjective value something has in the context of a greater narrative. Laser cutting and embroidering the last piece of reclaimed polyester organza was as risky as running embroidery on a piece of hand embroidered silk. They had been invested with meaning beyond and unrelated to that assigned by mainstream cultural association or strategic sustainability rules.

Antifragile crafted a precious-synthetic-based applied art lexicon and used this language to embed critique on a culture terrified of its own tendencies. I would argue that it was in this way that the research explored the crafting of values, as I developed and reflected upon through the three stages of my practice. Antifragile suggests an alternative, craft-centric interpretation of sustainability for textile design.

The approach I explored through Antifragile may be useful for other creative practitioners. It may grow into a way of making that could empower others working in similarly chaotic making conditions for potential future markets or critical artistic-research scenarios. Importantly, this approach encourages individuals to examine their own assumptions and values, how they make and the parameters they set.
5.2 FINAL REFLECTIONS

In bringing creative practice in proximity to material and semantic disorder by designing with and around the mass produced, discarded and devalued, the research engaged with sustainability on its own terms. Antifragile floated and tested a hypothesis embedded in practice — that creative practice can benefit from being placed in proximity to the ostensibly chaotic. Antifragile explored the ways in which textile design practice may draw upon its messy context to create evocative objects responsibly. The project took up the impure and inauthentic as creative raw material and as a grounded manifestation of the kind of chaos that sustainability for fashion and textiles seeks to address.

An antifragile approach considered how creative practice may innovate around chaotic making and materials and provided a vehicle to consider alternative commitments in relation to the field of sustainability for fashion and textiles.

Replacing strategic design decision making with tinkering, irreverent play and imperfect non-linear problem solving put creative practice forward as an exemplary vehicle to face and contend with the ‘out-of-place’. Surface design interventions and material provocations were explored as tangible means of engaging with the ostensibly chaotic in the material and making conditions of Ho Chi Minh City (HCMC). This approach helped to navigate complexities implicit in balancing the responsible and the evocative and to keep practicing, to stay with the mess. An antifragile approach - curious and stripped of knee-jerk value judgements and associations - can pierce into congealed knots of making and understanding, allowing new values to be laced through. Creatively entangling fragmented rhythms and rhythmic fragmentations, Antifragile allowed for a landscape of messy felt impressions and nebulous energies, crafting new contexts and values predicated on care and attention.

The research explored means to craft-back control and preserve the risk and creative dimension of complex, interrelated design decisions. Antifragile staged an interregnum, questioning and testing ways of crafting commitment on an alternate path to a desirable destination — a context where we are creatively enriched when we do the right thing.

I have found that there is no perfect way.
We can only draw together the undecidable and implacable in the fragments and rhythms of practice, then make them endure, give them space.
5.0 CONCLUSION
6.0 REFERENCES


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An Antifragile Making Manifesto

May we be antifragile in our assertion to be as messy as we are clear and precise. May we protect undecidability and implacability in ourselves and in our material companions. May our creative acts reject neo-liberal eco-slogans and the imperative to justify our use of resources to corporate green-fashion fonctionnaires. May we reject the sartorial equivalent of google-translate word salad in our wardrobes. May we continually creatively provoke ourselves using whatever we can, however we can and especially with those technologies we are intimate with. May we constantly define and redefine craft in motion. May we defend craft from from the powerful and ethically bankrupt, the ideologically regressive and desperate. May we reject illusory, escapist fantasies and too-neat ideologies. May we reject design to save the world, instead celebrate craft to live with it and love it as-is. May we do the right thing.
A gentle spring evening arrives  
Airily, unclouded by worldly dust.  
Three times, the bell toll echoes like a wave.  
We see heaven upside-down in sad puddles.
Love's vast sea can not be emptied.
And spring of grace flow easily everywhere.
Where is nirvana?
Nirvana is here, nine times out of ten