Designing fashion

An exploration of practitioner research within the university environment

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Abstract

The belief that practitioner knowledge is tacit and cannot be communicated through the traditional methods of academic writing and journal publication is a problem for the growing number of fashion researchers utilising practice-led methodologies. The main reason for this is that, until recently, the visibility of a discipline has been predominantly defined by academic publications in the field. One solution has been for researchers to adopt research methodology that utilises reflective practice to draw out practitioner knowledge and attempt to convert this knowledge to an explicit form. Alternatively, non-traditional research outputs are now considered equivalent to published research within areas such as art and design. However, a critical mapping of fashion research reveals that practice-led research in fashion is not yet adequately represented by either form of research outcome. This thesis proposes that continuing to focus on the differences between practice-led research and other fashion research, a dychotomic view of practitioner knowledge as either tacit or explicit, and an upward trend in process-driven methodology, are limiting the ability for practitioners to contribute to the continuing development of fashion as a discipline. The aim of this thesis is to develop a progressive approach to practice-led research methodology to enable practitioner knowledge of fashion to become more accessible, transferable and relevant to the emerging methodology of fashion as a material culture that connects two different ideas of the fashion system as either material or immaterial.

A quantitative and qualitative mapping of fashion research, based on journal publications, nontraditional research outputs and an analysis of practice-led research exegeses, determines the current state of fashion as an emerging discipline. The mapping reveals that dominant methodologies for existing practice-led research are design methodologies. The results from this mapping inform an exploration of the potential for object or artefacts to encapsulate fashion knowledge through the method of object analysis as an object-based methodology used within other areas of fashion research. The results of this analysis enable the development of two models for practice-led fashion research. The first is a model of practitioner knowledge and theorises tacit knowledge as a hybrid space existing as a relationship between the different types of knowledge that exist in fashion practice. The second is a model of practitioner fashion research that incorporates existing design methodology but also responds to emerging fashion theory and methodology. Both models extend current understanding of fashion practice and contribute to developing the most effective strategy for communicating practitioner knowledge of fashion within the university environment.

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List of abbreviations

ARC	Australian Research Council
ASE	Academic Search Elite
BATMC	Bath Fashion Museum/Museum of Costume
ERA	Excellence in Research Australia
FofR	field of research
HCCMAS	Hampshire County Council Museum and Service
HCI	human computer interaction
NTRO	non-traditional research output
OECD	Organisation for Economic Cooperation and Development
PBRF	Practice Based Research Fund
PM	Powerhouse Museum
QUT	Queensland University of Technology
R&D	research and experimental development
RAE	Research Assessment Exercise
REF	Research Excellence Framework
RMIT	Royal Melbourne Institute of Technology
UK	United Kingdom
USA	United States of America

- UQ University of Queensland
- UTS University of Technology Sydney

Glossary of key terms

academic knowledge: Knowledge that exists within the traditional environment of the university, generally expressed in explicit forms of writing and publication.

creative practice: The action and process of developing a creative work that includes an artwork or a designed object within a professional environment.

creative practitioner: One who utilises creative practice within a professional environment.

creative production: Practice-led research that is focused on producing a creative work to enable an individual to have a better understanding of their own creative practice rather than other types of practice-led research.

expert knowledge: Knowledge that is on a deeper level as a result of the personal experiences of the individual who possesses such knowledge.

explicit knowledge: Knowledge that is physically recorded and able to be transferred, the most common form of which, within the university environment, is written text.

fashion industry: An international industrial system that extends from intellectual understandings of fashion as a human behaviour, a condition of culture, a characteristic of ethnicity, a history of dress, a system of non-written language and a practice of designing, making, manufacturing, marketing and selling fashion garments and accessories.

fashion: The tacit or immaterial elements of fashion; that is, what makes something fashionable, or of fashionable design, that has yet to be effectively described or defined beyond these definitions.

fashion research: Any type of research related to fashion or the fashion industry.

fashion researcher: A researcher whose research is related to fashion or the fashion industry.

methodology: A system of methods or processes that are used within a particular context; this can be confused with research methodology but a design methodology, for example, is a model of a design process.

object-based methodology: Methodology that focuses on the object as a site of recorded knowledge.

practice-led methodology: Methodology that focuses on the action of creative practice as the main method of research.

practice-led research: Research that utilises creative practice as the main method of research and presents the results of this practice as the research outcome.

practitioner knowledge: Knowledge of creative practice that has a main characteristic of involving first-hand experience. This is similar to explicit knowledge but involves action and personal experience of practice. Practitioner knowledge could be explained as expert knowledge of practice but can also be knowledge of practice at an amateur level.

practitioner research: Research that utilises creative practice as the main method of inquiry.

practitioner research methodology: Methodology that is suited to the purpose of practitioner research.

practitioner researcher: A practitioner who utilises the methods of practitioner research; a practitioner can also be one who practices within a professional capacity alone.

research methodology: A methodology, as a system of methods, used within a particular academic discipline as a research process or an overarching approach.

tacit knowledge: Knowledge that by definition cannot be told.

technical knowledge: Knowledge that is focused on how to perform a technical operation, such as construct a pattern for a particular type of collar or cuff, or the steps involved in stitching a seam. Within the fashion industry this knowledge is concerned with procedure and extends to how to digitise a pattern or how to use Adobe IllustratorTM.

Statement of Original Authorship

The work contained in this thesis has not been previously submitted to meet requirements for an award at this or any other higher education institution. To the best of my knowledge and belief, the thesis contains no material previously published or written by another person except where due reference is made.

QUT Verified Signature

Signature:

/

Date:

13th October, 2014

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Chapter One: Introduction

ractitioner knowledge of fashion has been defined as 'tacit' knowledge (Aspers, 2006; Entwistle, 2009; Kemp, 2007; Kirke & Vionnet, 1998; Weller, 2008). Hence this knowledge can be neither communicated nor disseminated through traditional academic publications. This thesis proposes that, to find appropriate methods for disseminating practitioner knowledge of fashion, the determination of the type or types of knowledge that exists in practice is pivotal. In Australia, New Zealand and the United Kingdom traditional academic research is communicated and disseminated through publications whose quality, quantity and impact are evaluated through a peer assessment system. The Excellence in Research Australia (ERA) scheme managed by the Australian Research Council (ARC) (ARC, 2008a, 2008b, 2009, 2011a, 2011b, 2011c, 2011d, 2012) is one such system alongside similar initiatives such as the Research Excellence Framework (REF) in the United Kingdom and the Practice Based Research Fund (PBRF) in New Zealand. New requirements for presenting nontraditional research outcomes will become mandatory for the next round of ERA quality assessment to be held in 2015. The option for non-traditional research outputs (NTROs) to be assessed through peer review and more detailed criteria for presenting practice-led research for peer assessment will affect the assessment of practitioner research. This effectively means that non-traditional research outcomes are now considered equivalent to traditional forms of publications for the purposes of research assessment. A potential problem exists for practiceled research in fashion if practitioner knowledge is tacit knowledge and publications are not the best way of communicating research findings. Therefore this thesis responds to the questions: Is practitioner knowledge in fashion tacit knowledge? And what is the most effective method to communicate practitioner knowledge for the purposes of disseminating practice-led fashion research? In response, current understandings of practitioner knowledge and practiceled research methodology need to be examined to determine the extent of tacit knowledge involved in fashion design practice.

The appropriateness of publications as a way of disseminating practice-led research has been the topic of much debate within the creative disciplines. Melrose (2005b) and Carter (1984, p.297) suggest that publication is a practice that many academics within the creative disciplines consider to be in opposition to artistic development and is not the most appropriate method for communicating practitioner research outcomes. Haseman and Mafe (2009) maintain that academic writing is not ideally suited as a means of disseminating the tacit knowledge of performance. Bye (2010) also identifies the problem for researchers in textiles and fashion as a problem of practitioner knowledge as tacit knowledge (Bye, 2010, p.205). However, Haseman and Mafe (2009), Bye (2010) and Melrose (2005a) all agree that one solution is for researchers to focus on developing methods that enable tacit knowledge of practice to be made explicit and discuss the urgency for practitioners to increase their impact by engaging with the practice of academic writing and publication.

Cross (2006; 1982), Scrivener (2000), Frayling (1993), Schön (1983) and Polanyi (1966/2009c) propose that practitioner knowledge is predominantly tacit knowledge, and by definition 'cannot be put into words' (Polanyi, 1966/2009c, p.4). Niedderer (2007a) discusses the implications of categorising practitioner knowledge in this way, in that it cannot be transferred through published research in peer-reviewed journals using 'the conventional language-based means of research' (Niedderer, 2007a, p.1). However, Friedman (2003) argues that tacit knowledge is overstated in support of a mistaken argument that 'practice is research' (p.153) and that the main protagonists of tacit knowledge, including Nigel Cross (1993, 1995), Donald Schön (1983) and Michael Polanyi (1966/2009c), have been incorrectly cited in a way that 'reflects a surface acquaintance with the concept of tacit knowledge' (p.154). The argument for developing publications, in the form of academic journal articles, is that it has the

advantage of offering researchers a standardised format and established methods of peer assessment prior to submission for evaluation by ERA. Alternatively, the medium of written text may not provide the best option for communicating the type of knowledge that exists in practice. In either case, it is clear that the view of practitioner knowledge as tacit knowledge, combined with the question of to publish or not to publish, is central to developing a critical mass for practice-led research in fashion.

In response, this thesis challenges an assumption that practitioner knowledge of fashion is predominantly tacit knowledge and, although correctly acknowledged as an integral part of design practice, is inappropriate as the driver of practitioner research in fashion. On the contrary, there are three main factors affecting the logical development of practitioner research in fashion: practitioner researchers' own acceptance of tacit knowledge claims; using inappropriate research methodology in the 'academicizing' (Biggs & Büchler, 2007, p.63) of fashion research; and what I describe as an 'incomplete paradigm shift' between the technical and art colleges of the early twentieth century and the university system (circa 1990). By 'incomplete paradigm shift' I propose that an administrative move of a technical, skill-based educational model to the university environment has put in motion an associated intellectual shift, from teaching the technical aspects of fashion, such as design process and construction methods, to developing intellectual research through practice in line with other areas of both fashion and design. Ken Friedman (2003) describes this space as:

... a moment in the evolution of every field or discipline when central intellectual issues come into focus and the field and the discipline on which it rests shift from a rough, ambiguous territory to an arena of reasoned inquiry. At such a time, scholars, scientists, researchers, and their students begin to focus articulate attention on such issues as design methods, methodology (the comparative study of methods), philosophy of science and related issues in the metanarrative through which a research field takes shape. (Friedman, 2003, p.507)

There is an opportunity for practitioner researchers to contribute to this developmental phase by offering practitioner perspectives. This thesis aims to engage with this possibility by providing a means for disseminating practitioner fashion research findings through appropriate formats of 'publication' thus contributing to fashion knowledge.

Background

Since the late 1960s, fashion research has grown from a state of relative obscurity — having evolved as a secondary area of investigation in fields such as art, history, psychology and the social sciences — and continues to develop as an area of serious inquiry, through critical discourse and the publication of dedicated academic journals. Practice-led fashion research, first emerging through arts practice in the late 1970s, has not demonstrated the same progress as more traditional research in terms of developing a presence within the university environment. Despite gaining some recognition in traditional academic platforms, such as international conferences and symposia, academics within this area of fashion research are taking longer to make the transition from research that is discussed with academic peers and research that is formally published and disseminated to a wider audience than their counterparts in areas of costume and dress history and fashion studies. The practice of borrowing methodology from other disciplines as a method of 'academicizing' (Biggs & Büchler, 2007, p.63) fashion knowledge and thereby gaining acceptance within the academic community has caused, and will continue to cause, problems for practitioner researchers in fashion. An important developmental stage for fashion design research has been bypassed by practitioner researchers relying on this mechanism — the stage where problems of knowledge and language are negotiated and resolved. Both language and communication remain an issue for the emerging discipline, and these problems are linked to a lack of consensus around what

constitutes practitioner knowledge in fashion; that is, knowledge of fashion in relation to the practice of design.¹

The role of methodology in forming and refining academic understandings of fashion practice is the focus of the first part of this thesis. The use of research methodology from existing disciplines such as humanities and visual arts is theorised as a means used to elevate fashion within the academic arena, from a professional endeavour previously taught within the trade school, polytechnic and art school environment. This is in line with existing theory surrounding the use of methodology for this purpose in other domains, including fashion theory (Tseëlon, 2001), core design disciplines such as architecture, engineering and industrial design (Cross, 2011), and the early 'professional' disciplines (Schön, 1983). The administrative and conceptual move to the university is proposed as a catalyst for a paradigm shift between skillsbased training and the development of fashion as an area of intellectual inquiry.

The second part of this thesis explores the types of practitioner knowledge that exist in fashion objects utilising the method of object analysis. The hypothesis is that objects of fashion practice, including the outcomes from professional design or design research, have the potential to embody and transfer knowledge for the purposes of practitioner research. This is relevant, as the examination of existing fashion objects is not an explicitly stated practice within dominant practice-led methodological approaches but is shown to have advantages for practice-led research in the future. The discussion considers the advantages and disadvantages of these methodological approaches within the context of the continuing development of fashion as a discipline. The incorporation of the object as an explicit part of practice-led research methodology for fashion offers a greater opportunity for the outcomes of past practice-led research projects to be included in future studies — to act more effectively as 'published'

¹ A major problem for the emerging discipline of fashion is a lack of consensus surrounding language and terminology. For the purposes of clarity, a glossary of terms used in this thesis is included.

outcomes as well as research outcomes in their own right. My research proposes that the paradigm shift for fashion from skill-based training to an area of intellectual inquiry, incorporating practitioner perspectives, is in progress rather than completed. The path between non-researcher and researcher is not direct, and what is required is a rethinking of the most effective practice-led research methodologies with an aim to increasing the visibility of practitioner research outcomes.

Fashion within the university environment

The question 'What is Fashion?' has been a topic of research for over a century, with writers including Simmel (1904/2003) and Barthes (1968/1983) making significant contributions to the debate, and new definitions are constantly emerging as a result of ongoing fashion research. The way in which we interact with clothing, or lack of clothing, the nature of imitation, the psychology of 'fitting in' and the rigour of societal constraints all respond to this central question. Entwistle (2003) identifies that existing theories of the fashion system are characterised as either concerned with consumption or production. Lillethun (2007) describes five approaches to fashion based on her reading of existing fashion theory, but similarly identifies that the idea of fashion is either involved with fashion as culture (consumption) or as an industry (production). Riello (2011) describes a developing methodology of fashion as either immaterial (consumption) or material (production). However, Griffiths (2000) identifies that existing theory surrounding fashion has developed independently of practitioner perspective and is therefore informed by the paradigm of its authors: costume and dress historians, art and design theorists, fashion curators or fashion historians, who are academic experts in the area of fashion. As a fashion designer, I understand fashion within the context of the fashion industry, where fashion knowledge is based on gut instinct and connoisseurship and, from the practitioner perspective, is understood through participation within a community of industry

experts and participants in what has become known as a community of practice (Lave & Wenger, 1991). This is an explanation for why the theory of tacit knowledge in fashion has so much currency for fashion practitioners. The explanation of knowledge as being inexplicable most closely replicates the understanding of fashion from the experience of practice within the fashion industry. For the purposes of this study, and in respect of existing definitions of fashion, the term 'fashion' is used as an inclusive term to describe both the material and immaterial ideas of fashion as a system. The physical outcomes of design practice are referred to as fashion objects or artefacts; the practice of designing and making fashion objects or artefacts is referred to as fashion design. The material culture of fashion addresses an emerging theory and methodology of fashion as a material culture that exists as either material or immaterial, based on Riello's (2011) definition. This material culture draws on methodologies from the history of dress and costume, and interdisciplinary methods from fashion studies that position fashion as a cultural phenomenon. For clarity, practice-led fashion research is the main topic of this thesis and is often compared with 'other fashion research'. The term will be used to encompass all research related to fashion including (but not limited to) historical, technological, scientific and theoretical research, and research in fashion that does not include the practices of fashion design. This includes research that has developed within the disciplines of business and economics, such as fashion business, fashion marketing and fashion branding.

Fashion has not developed as a traditional academic discipline in the definitive sense of a school of accepted practices of thought and behaviour. 'Fashion studies' is defined by its interdisciplinary nature, having developed from within diverse disciplines. The development of fashion education within the university, following its origin within the trade schools and technical colleges of the late nineteenth and early twentieth centuries, is proposed as a cause of specific problems that are discussed in this thesis from the practitioner's perspective. These are identified as the lack of an authoritative body to act as a disciplinary hierarchy or professional

association and to form consensus on common language and terminology for fashion research; a disconnection between theory and practice within fashion education that has developed in line with practices within the fashion industry that separate design from production, and the resulting separation between the practitioner researcher and other fashion research within the context of fashion as an emerging discipline. These problems will become critical as academics in fashion who are practitioners attempt to find their place as researchers and are encouraged, or in some cases required, to demonstrate an increasing level of engagement with academic research practices.² The establishment of fashion as an interdisciplinary area of inquiry has been accompanied by the opportunity for methodological diversity due to the adoption of a myriad of methodological approaches. However, this has also been the source of much criticism for the discipline. Academic knowledge of fashion has been informed by diverse disciplines, including the humanities, social sciences and visual arts, without significant input from practitioner researchers in fashion. The goal for practitioner researchers in fashion should be to contribute to the development of fashion knowledge *through* practitioner research — in the form of 'research through research' (Frayling, 1993, p.5) — rather than continuing to perpetuate approaches that are drawn from wide-ranging disciplinary contexts to the exclusion of existing fashion theory and methodology.

In addition to the unconventional development of early fashion research, the amalgamation of fashion education from trade and technical colleges into the university system was also problematic for first-wave fashion researchers during the 1960s — academics who had emerged from among art historians, curators and art theorists — who did not necessarily possess personal experience of design practice gained through industry. However, there were established practitioners within the university, visual artists and architects, who had set the

² At the time of writing, some universities in Australia and New Zealand are moving to link performance in research assessment exercises with conditions that inform collective bargaining or offering ongoing contracts that link this performance with remuneration.

foundations for practice-led arts research and gained legitimacy through the use of transparent and rigorous methodology and establishing theoretical and contextual frameworks relevant to practice-led research. The *practice* focus of these existing arts practitioner researchers was considered more akin to the practice of fashion design than the *fashion* aspect of design practice that was informal and becoming explained as tacit knowledge by researchers within the design disciplines, most notably Frayling (1993) and Schön (1983). The framing of fashion practitioners as equivalent to arts practitioners, for the purposes of academic research, has had positive and negative consequences for practice-led fashion research.

Fashion design is becoming more strongly aligned with industrial design, graphic design and product design, resulting in the trend of practice-led fashion research as *design* research. However, these areas of research are experimenting with definitions of design as a process — including current models such as 'design thinking' (Cross, 2011). Although relevant to developing process for effective design practice, these models do not engage with the theoretical or methodological approaches that accommodate the *fashion* aspect of design practice in fashion. The process model is criticised here as too focused on design *methods*, in the same way that design researchers have been criticised for becoming 'fixated' on research methodologies, rather than the ontological and epistemological aspects of design. Understanding the state of practitioner research in fashion is a critical step in determining why practitioners are under-represented in emerging fashion discourse surrounding fashion as a material culture and the development of fashion as a discipline.

Part of the reason that practitioners are not represented in fashion is due to the dominance of publication as the main method of sharing research outcomes. Establishing journals specific to particular research interests is the most effective means of developing research and provides a platform for discussion and debate of disciplinary contexts and definitions. Skjold (2008) and Tseëlon (2001) both cite, as a critical issue for fashion, a lack of stewardship, in the form of a

single representative body representing fashion researchers, including practitioner researchers, that could reach consensus regarding the validity of various definitions of fashion. Existing definitions explain fashion in relation to objects, or groups of objects, or manners of wearing objects, but do not include reference to the *design* of fashion objects, which would appear to be, at present, a part of neither fashion as consumption or production, nor fashion as a material culture. The disassociation of fashion as existing independently from fashion artefacts — and the global manufacturing and associated industries of fashion — is problematic for practitioner researchers. Definitions such as those that appear in *Fashion Theory* (the foremost academic journal on the subject) remain aligned with fashion as a culture, the fashioned body and the intellectual aspects, such as psychology, sociology, economic and historical evolution of fashion as a phenomenon. For example:

The term 'fashion' in English, or 'la mode' in French, stands out from other words such as clothes, garment, attire, garb, apparel and costume, which are often referred to in relation to fashion (Kawamura, 2005, p.3).

In these terms, fashion is immaterial when compared with the material objects that are central to developing a material culture of fashion. However, not all garments, objects, accessories, clothing and so on can be described as *fashionable*. In fashion practice, fashionable garments, objects, accessories and clothing are held to represent tangible forms of fashion and these can be collectively referred to as fashion objects. Schön (1983) discusses the ability for expert practitioners to make decisions around good quality by being able to identify something not right or 'bad' in design terms rather than being able to specify why the design is not good. This is argued as the basis for determining an item of clothing from a fashion object from the practitioner's perspective.

The etymology of the word 'fashion' provides the basis for the most suitable definition for practitioner researchers in fashion, as designers and makers of fashion objects. Schon (1983,

p.78) and Cross (2006) both define design as inextricably connected to the action of making. The term 'fashion' is derived from the original Latin *facio* or *factio* meaning to make or do (Kawamura, 2005, p.3). For the purposes of this research, the term 'fashion design practice' refers to the action of creating fashion objects (designing and making fashion garments or accessories) and should be considered a reference to professional practice where the term 'research' is not included. That is, 'fashion design practice' refers to professional, industry practice, and 'practitioner research' refers to this practice used as a research method within the university environment. The term 'fashion' is also used to refer to the intangible, the *gut instinct, connoisseurship* and participation that take place within the context of an international fashion industry. These definitions do not exclude existing academic definitions of fashion as discussed here and in more detail in Chapter Five.

The confusion around practitioner research in fashion is argued as symptomatic of an incomplete paradigm shift resulting from the migration of fashion education from the technical college and art school to the university environment during the mid to late twentieth century. The conceptual separation between fashion practice and fashion theory is evident in the separation of practice-led research and other fashion research and should be of serious concern for all fashion researchers. Palmer (1997) identifies that formal education in fashion is most commonly within schools of design rather than offered as a 'purely academic program, and, when it is, is most likely to be an elective course within an art history program' (Palmer, 1997, p.298). Similarly, the development of practitioner research in fashion has leaned towards design practice, due to its reliance on research methodologies from the design disciplines, rather than draw on existing fashion research as a driver. The view of design as a process that focuses on individual design practice does not directly interact with existing methods that draw on the material culture of fashion to inform research contexts and form the foundation of fashion research.

Seago & Dunne (1999) characterise the practice of encouraging the use of 'academically acceptable and supervisable research topics with methodologies culled from established academic disciplines' (Seago & Dunne, 1999, p.12) as 'methodological intimidation' (p.12) in their discussion of design research and training in Australia. The practice of using research methodology from other disciplines has been the main method of academicising practitioner research but has also been used to respond to criticisms of practitioner research, including a lack of research rigour and transparency (Biggs & Büchler, 2007). The main issues arising from this move of art and design disciplines to the university are identified in the work of scholars such as Schön (1983) and Biggs and Büchler (2007), but have yet to be examined in relation to practitioner research in fashion. Adopting methodology from the humanities and social science has most likely been responsible for downgrading the making of garments as skill (belonging in technical colleges and industry) and elevating design as conceptual and intellectual, and therefore more akin to the academic paradigm. The technical college focused on *how to* design fashion through skills-based practice, rather than through discussion of the theoretical or conceptual questions surrounding *fashion*.

The meaning of the term 'design' is also open to confusion that may be associated with a rethinking of design as a conceptual and intellectual practice separate from the skills associated with design. Here the term 'design' does not mean to 'draw' something or to 'think up' an 'idea' for something new. Design literally means to create a plan for the look and function of something new in order to work out its structure and allow production or replication (*Collins English Dictionary*, 2006). In this sense, and for the purposes of this thesis, design is the process of creating new fashion objects. The method of designing includes concept development, sketching, technical experiments, pattern cutting and construction. To reiterate, the idea of design as separate to the process of making has no basis in history and is a by-product of the separation of design from production that has occurred with the globalisation of the fashion

industry. The model of off-shore manufacturing in the fashion industry within Australia and New Zealand has been replicated within the system of fashion education. The emphasis of fashion education has moved away from teaching the technical aspects of fashion to focusing on developing conceptual fashion design. The separation appears to be extending to fashion research paradigms that are currently separated by technical aspects of research, such as research methods, rather than being unified by common research interests. For the purposes here, within the context of practitioner research in fashion within the university environment, the designer is able to create a plan for something new so that it may be replicated, produced or reproduced within the professional world of fashion. Outside of the university, fashion has always been a business; the couture fashion houses have designed fashion products that could be reproduced for profit. This separation of designer from maker, having no historical basis or tradition, is argued as a significant contributor to unsustainable practices within the professional environment, and current problems of defining fashion within the academic environment.

The dichotomy between fashion design as a practical skill and fashion as an intellectual endeavour, or as existing 'in the mind', is characteristic of the university environment but has little relevance to the professional world of the fashion industry (Griffiths, 2000). The role of the technical and art college in preparing students for the fashion industry, and thus supply a suitably qualified creative workforce, has become the responsibility of the university by default rather than by design. In other words, the expectation was that migrating to the university would elevate areas such as fashion but there was no consideration for how the move would affect the remit of the university — historically focused on the pursuit of fundamental knowledge, often described as communicable knowledge for the sake of knowledge building (Archer, 1995, p.6). The rhetoric from the differing paradigms of fashion knowledge as skills-based tacit knowledge, and fashion knowledge as intellectual, has evolved in conjunction with a lack of

alignment between academic definitions of fashion and design, and professional understandings of fashion. Tacit understandings of fashion have been developed through participation within the fashion industry (industry experience) or, in the case of a student's understanding, through collaborative projects between the university and industry experts. This disconnection between the theoretical and practical aspects of fashion results in a lack of consensus around terminology and language and has had a direct effect on the development of appropriate research methods that are related to the methods of professional practice and industry.

A negotiated space that defines fashion studies from the perspective of both theory and practice, and accommodates and acknowledges both areas of expertise, is a crucial step for practitioner researchers in fashion to find their place within the academic environment. The practice of trying to fit practitioner research in fashion into methodological models from disciplines such as art — where practitioner research has developed alongside theoretical and historical research — has been one strategy. However, this approach has limited results. A more logical approach is to follow the strategy of repurposing the methods of professional practice to develop appropriate language and protocols for practitioner researchers within the university environment (Haseman & Mafe, 2009, p.224). In this case, appropriate research methodology for practitioner researchers in *fashion* must be developed. The following section provides a brief description of how this will be achieved in this project.

Research design and methodology

Existing research in art and design has improved research quality through the development of the ontology and epistemology of practice within the university environment, particularly within the areas of professional practice, visual arts and design. A literature review has been used to identify a current gap in knowledge surrounding the link between practice-led research methodologies in fashion, tacit knowledge claims and a lack of publications authored by practitioner researchers in the area of fashion. Scholars such as Collins (2010), Cross (2006), Gray and Mallins (2004), Polanyi (1966/2009c), Schön (1983), Sennett (2009), and Sullivan (2005) provide a conceptual framework for this study.³ Using this framework, a connection is established between tacit knowledge claims, inappropriate research methodology and the lack of visibility of practitioner research in fashion. A more detailed description of practitioner research in fashion is gained by exploring the types of knowledge and methods of knowledge transfer that exist within the university environment in comparison with traditional understandings of fashion within the industry through three methods:

- A qualitative and quantitative mapping of research within the emerging discipline of fashion establishes the visibility of fashion research within the university environment. This mapping is based on ERA guidelines (ARC 2008a, 2008b, 2011a, 2011c) as discussed in Chapter Two.
- 2. An examination of the method of object analysis reveals the types of practitioner knowledge encapsulated in fashion objects alongside other types of fashion knowledge. The potential for fashion objects to form an explicit method of recording and transferring fashion knowledge and the usefulness of the method of object analysis for practitioner research in fashion is explored using this method.
- Reflective practice is used in an innovative way as a reflection-in-and-on practice of other designers (rather than self-reflective practice) to explore the ability of the fashion object to encapsulate and transfer fashion knowledge related to designing and making

³ The majority of this material may appear well worn; however, in terms of practitioner research in fashion, these texts remain the main resources for practitioner researchers and are the most cited references for studies of methodology within art and design, despite more recent publications within journals. The choice to examine this older material is made on this basis.

fashion objects (practitioner knowledge) both within the university environment and the fashion industry.

This provides a brief overview of key methods that have been utilised for this study. I have taken an approach where the methodology is discussed in more detail as a part of each chapter rather than dedicating a separate chapter entitled 'Methodology'.

Positioning statement

The research focus is practitioner research in fashion as an area of academic inquiry and, as a researcher, I position myself as an 'expert spectator' (Melrose, 2005b, p.1). I acknowledge that lived experience, including past professional and research practice, enables a researcher to adopt a position of authority in relation to their expert knowledge of the subject at hand namely, the field of their own practice — as seen through the lens of an experienced fashion designer and an academic researcher. In many cases I draw on this expert knowledge and take a position of authority in relation to methods and processes pertaining to the fashion industry and academic research practices, including fashion design, construction, manufacturing and production, which I refer to as the design and make of fashion, or fashioning objects. The extent of my experience as a professional designer and design manager is within an Australian context, while my experience as a researcher is international. My experience in terms of fashion education is similarly confined to an Australian and New Zealand context; however, participation in national and international conferences has extended this knowledge to a wider perspective through various research presentations, by taking part in peer review panels and informal discussions with international colleagues from many universities in Europe, the United States of America (USA) and the United Kingdom (UK).

This research first began to take form as a normal part of my Bachelor of Art & Design — Honours program at Auckland University of Technology (2008) when, in combination with the development of some of my early research projects, I sensed a bias against practitioner research from academics with a background in more established disciplines. There appeared to be some respect and reputation for fashion academics who were involved in research that dealt with curatorial studies, fashion history or fashion theory; however, research that could be called fashion practice, in this sense referring to research that was completed as a creative output (objects or artefacts) accompanied by an exegesis, was somehow inferior. This is an observation that is supported by many academics who write on this specific aspect of academic life and is discussed within this thesis.

It was my observation surrounding this inequality between traditional research and practiceled research that first prompted me to question how practitioner research in fashion is different from any other research. This question has also been raised by more experienced scholars and forms a part of this thesis by operating as a baseline question to inform the pathways that this research has taken. In other words, it will be a frame from which to search for answers to the various questions that have arisen throughout the life of this study. In response, I began to read examples of practice-led research theses in art and design, focusing on those completed in part by practice, as a way of beginning to understand this difference.⁴ These exegeses seemed to be written in a specialist language, one that I was unfamiliar with, that consisted of unfamiliar terms and jargon used to describe research paradigms and methodological approaches. The focus of the written part (the exegesis) on the research context and methodology was not effectively communicated to me, at that time primarily a practitioner (as opposed to a practitioner researcher). This lack of communication was detrimental to the effective communication of the *significance* of the research project and in relating *how* a practitioner might benefit from having read the research undertaken. My recollection is that, although a

⁴ I cannot be specific about all of the exegeses that I read at this time. I recall that they included recent student work from the Bachelor of Art & Design (Hons) program and the Master of Art & Design program at Auckland University of Technology. These exegeses were from Graphic Design and Visual Arts.

specific research question was articulated, most of these exegeses did not focus on how the research practice had contributed to any potential solutions but focused on justifying the rigour and validity of the methodology adopted for the study and a review of the literature surrounding a particular theoretical context. In other words, theorising practice as a means of 'scientificating' the research, as noted critics of fashion research have suggested (Skjold, 2008; Tseëlon, 2001).

This attempt to understand the problems, from the perspective of a practitioner researcher, led me to a series of other questions. These questions have sometimes informed some of the decisions I have made regarding the directions my research has taken and include: Who am I as a researcher? Where do I fit in terms of the research environment within my area of expertise? And how does this area of research compare to the wider research environment? The research process has helped to identify and examine further questions such as: How are fashion researchers different from other researchers? What are the main issues being faced by contemporary researchers in fashion? And can these differences be used to exploit different ways of looking at existing research problems? These problems seemed to be rooted in a lack of formalised understanding of what constitutes fashion knowledge and the best ways to communicate this knowledge. The general consensus was that designers could just *tell* if fashion worked or not, that we could *read* intentions from fashion collections as other academics might read books. This was accompanied by rhetoric surrounding the role of *gut instinct* and *connoisseurship* involved in practitioner researcher within art and design, which formed a basis for many of these informal discussions.

Further investigation led to the discovery of an ongoing academic debate surrounding what I refer to as *tacit knowledge claims* among practitioner researchers, namely that knowledge in fashion (and other creative fields) is tacit and cannot be made explicit. This seemed to be compounded by a bias against existing research methodology, with an emerging group of

practitioner researchers finding that existing methodologies and paradigms from other disciplines in the humanities seemed unsuitable for the type of research they were interested in. As a consequence, almost every new project seemed to require invention, and explanation of and justification for the use of a different methodology rather than focus on the original research question related to fashion. I also observed that the focus of the first few months of postgraduate studies habitually involves completion of coursework, including an essay on research methods. This is usually geared towards methods for the more established disciplines such as visual arts — where student numbers are more pronounced — than niche areas such as practitioner research in fashion.⁵ The problems caused by assuming that methodologies that are most suited to one type of practice are automatically transferrable to another type of practice are ongoing and may prove insurmountable. This is the central focus of this research and a potential consideration for the future development of practice-led research.

A possible solution to the problem of determining more appropriate methodologies involves the relationship between what is knowable in fashion design practice (ontology), what are the ways in which we can 'know' fashion (epistemology) and use of this knowledge to determine the most effective methods for acquiring and transferring new knowledge within the academic environment. The starting point is to acknowledge that practitioner research in fashion is still evolving. Existing practitioner researchers have evolved from the technical college and art school; as a result, practitioners are often excluded from definitions of fashion and discussions surrounding fashion research within the academic environment, and in some cases are considered unable to participate in traditional academic research such that it would be like expecting real researchers, those who are theorists, 'to sew a book' (Valerie Steele as cited in Skjold, 2008, p.81).

⁵ This balance may be changing as more fashion students in Australia and New Zealand are taking up honours by research programs to gain parity with four-year degree programs in the United Kingdom.

The mapping of research publications, which forms a part of the quantitative and qualitative mapping of fashion research, supports the statement that fashion has existed within the university environment independently of the practice of fashion design and without consideration that the designed objects of fashion are of interest to practitioner researchers beyond their value as historical objects.⁶ The connection between the different ways in which fashion design practice has made its entrance onto the academic stage has affected the current state of the area of research. This area of research is currently in a strange space where methodology does not directly relate to fashion design practice, despite being practice-led research methodology, because the methods of practice have not been developed from within the fashion industry and adopted for research through an evolutionary process. Instead, the connection to fashion as an industry has arisen through the theory of fashion as a system of production. A solution to this problem is that a different way of thinking about research methodology for practitioner research in *fashion* will lead to intellectual growth and an increase in the type of critical discussion and debate characteristic of the university environment.

Thesis structure

This chapter outlines some of the critical issues currently facing practitioner research in fashion and explains the context of my research question in relation to my own perspective as a practitioner researcher. My aim is to communicate my aspirations to become a *fashion* design researcher who is able to contribute to emerging theory and methodology of fashion as a material culture and discourse surrounding fashion as an emerging discipline. Chapter Two is based on a critical review of the existing literature that focuses on disciplinary perspectives of the emerging discipline of fashion. The aim is to establish the development of practice-led

⁶ By this I mean that the historical objects of fashion are not examined in a structured way from the perspective of practitioner knowledge. The analysis is weak and lacking structure in its current usage through contextual review.

fashion research in relation to other fashion research, practice-led research and academic research traditions. The historical development of fashion studies, criticisms of fashion research and the hierarchy of knowledge within the university are examined to contextualise the argument for an increase in academic publications for practice-led fashion research. The practice of adopting research methodologies from other disciplines alongside the move of design education from the technical college and art school to the university environment is proposed as the foundation for claims that the type of knowledge that exists in fashion is tacit knowledge. These claims are considered alongside theories and methodologies of practice that have informed practice-led research in fashion. Chapter Three presents the outcomes of a quantitative and qualitative mapping of the discipline of fashion using the measure of research publications alongside non-traditional research outcomes. An analysis of exegeses from practice-led fashion projects establishes the dominance of design methodologies within fashion practice. The aim of this chapter is to ascertain the main areas of existing fashion research and to compare the visibility of practitioner research with other types of fashion research. Chapter Four presents the results of an examination of the method of object analysis applied to fashion objects from within museum collections. The aim is to explore the possibilities for practitioner knowledge to exist beyond the tacit-explicit binary and explore the potential of fashion objects to record, store and disseminate practitioner knowledge. This has relevance to developing methods for the outcomes of research practice to be presented in a format that enables them to be 'published' in a manner that is on par with journal articles in terms of making practitioner knowledge communicable and accessible to other researchers.

Chapter Five directly addresses the research question: Is practitioner knowledge of fashion tacit knowledge and how can this type of knowledge be most effectively communicated for the purposes of communicating research findings? In this chapter I discuss my models of practitioner knowledge and a practice-led research methodology for fashion design that

combines the theories and methodologies of fashion with existing models based on design research methodologies. My theoretical and methodological work demonstrates that there are other types of practitioner knowledge. I theorise that 'tacit' knowledge of practice exists in a space between tacit and explicit knowledge and is dependent on its relationship between different types of knowledge within practice rather than existing on one side of a tacit–explicit knowledge binary. These models are proposed as the main outcome of this research. The potential of combining object analysis and reflective practice as a more object-based approach for practitioner research is proposed as a progressive approach towards connecting practice-led fashion research and other fashion research. Chapter Six discusses the possible implications for practitioner research based on the research findings and proposes areas for future research for fashion as an emerging discipline.

Conclusion

The key outcome of this research has been to formulate a model of practitioner knowledge to refute the claim that the majority of this knowledge is tacit and therefore cannot be made explicit (Polanyi, 1966/2009c; Schön, 1983). This thesis argues that the lack of representation for practitioner research in fashion is indicative of theoretical and methodological uncertainty that is a result of defining practitioner knowledge as tacit knowledge. This is the most important contemporary issue for practitioner researchers in fashion and should also be seen as a significant barrier to full disciplinary status for fashion as a whole. An argument is made that there is a direct relationship between the difficulties faced by practitioner researchers in fashion, and similar areas of design, in understanding the research landscape and academic practices that appeared to be the norm for researchers from other disciplines (de Freitas, 2002; Skjold, 2008) and the inappropriateness of existing research methodology for practitioner research in fashion. This relationship is shown to have resulted from a lack of formalisation of

fashion knowledge, and industry methods of knowledge transfer, which migrated to the academic world alongside fashion education. Accepted methodological models are polarised and focus on practice-led research in place of more traditional methods, and perpetuate the knowledge binary of practitioner knowledge as either tacit or explicit. Adoption of either practice-led or traditional methods of communicating research outcomes is not proving effective for practitioners in terms of disseminating practitioner research or developing discourse within fashion that includes practitioner perspectives.

Chapter Two: Fashion Research

ractitioner researchers within the disciplines of art and design have been criticised as lacking critical theory in relation to their research. Forlizzi, Zimmerman, & Stolterman (2009) explain that developing theory in design research is difficult, as design researchers often 'fail to document and produce theory that researchers and designers can apply in future research and practice' (p.2). One of the advantages of practice-led research is that findings are more likely to be applied to future practice, following a cycle of 'practice – theory – practice' (Wood, 2000, p.45), than traditional academic hypothesis or theory models. The use of innovative methods to disseminate research findings is characteristic of practice-led methodologies, and part of the value of this type of research, but is also a possible reason that an increase in journal publications has been argued as a strategy to improve the reach of research findings. Without detracting from these benefits, this thesis proposes that communicating practitioner research perspectives in a way that is as accessible as 'published' research outcomes has relevance to the developing discipline of fashion. For this reason it is vital that researchers who engage in practitioner research, otherwise accepted as a legitimate method of inquiry within the academy, are able to participate in the practice of publication that includes academic writing and presenting non-traditional research outcomes in a format that adequately communicates practitioner research.

The distinction of practitioner research from any other type of research perpetuates the belief that there *is* a difference beyond research methods. For new researchers entering academia following a career in the fashion industry, the problem is compounded. The 'right' methods of conducting practice-led research are less clearly stated for practitioners than those who have had an undergraduate education in academic disciplines such as history, economics, business, art or social science. The differentiation of fashion researchers as practitioners and nonpractitioners centres on the differences between the diverse approaches and methods utilised by each type of researcher. This division is causing an ongoing identity crisis for the emerging discipline as one group is experienced and trained in academic methods and practices, while the other has the understanding of fashion as a professional practice and no formal training in research methods. The gap between industry understandings of fashion and academic understandings of fashion as 'a kind of intellectual endeavour' (Valerie Steele in Skjold, 2008, p.80) mirrors the current differences between the practitioner researcher and non-practitioner researcher. Closing this gap, and considering the future role of the practitioner within the university, is an important aspect of developing fashion as a discipline within its own right.

A review of relevant literature surrounding practice-led research confirms an upward trend in the development of systematic design and research methodologies and a generally accepted claim that practitioner knowledge is largely tacit knowledge. The aim of this chapter is to provide a landscape of fashion research as an emerging discipline by reviewing its development alongside the main theory surrounding practice-led research methodologies and contexts. This chapter contributes to the central question of this thesis by providing a clearer view of how the theory of practitioner knowledge as tacit knowledge has become dominant within practice-led research, current discourse that impacts on practitioner research and the consequences of defining practitioner knowledge as tacit knowledge within fashion. The first part of the chapter deals with the beginning of fashion within the university and the differing relationship between methods of knowledge transfer in this environment compared with that in the fashion industry. The second part examines fashion as interdisciplinary research and the position of practitioners within the emerging discipline. An overreliance on research methodology in demonstrating academic-ness (Biggs & Büchler, 2007; Melles, 2010; Tseëlon, 2001; Seago & Dunne, 1999) and the generally accepted premise that knowledge in art and design is largely tacit knowledge are identified as two key issues. The types of knowledge relevant to practitioner researchers in

fashion are shown to be different from those of the non-practitioner and are discussed in relation to existing practice-led research methodologies for fashion researchers.

Fashion education

Fashion research is relatively new in comparison with more established disciplines, such as science and the humanities. Fashion has developed as interdisciplinary rather than as a result of an evolutionary process from within an existing discipline, and fashion practice has roots in the technical colleges, arts and crafts guilds and art colleges rather than in traditional university disciplines. Apart from arts and crafts guilds and atelier apprentice-master vocational training systems, institutional education in fashion and design has existed, for the most part, for approximately 100 years. In the UK, examples include the London College of Fashion, established as Shoreditch Technical Girls Institute in 1906 (a technical college); and Central Saint Martins (London), established through a merger between the art school Saint Martins College (1854) and Central School of Arts and Crafts (1896). The London College of Fashion and Central Saint Martins were later incorporated into The London Institute in 1986 and finally became part of the University of Arts London in 2004. Similarly, in the United States, Parsons, part of The New School (New York), established as The Chase School in 1896 and, in Australia, Emily McPherson College of Domestic Economy (Emily Mac) was established in Melbourne in 1906. In the United Kingdom, and similarly in Australia, a restructuring of the universities that took place in the early 1990s is acknowledged as the beginning of art and design education in the university environment (Biggs & Büchler, 2007, p.62). The right for the London College of Fashion and Central Saint Martins to grant university degrees (as opposed to art college awards) was not endowed by the British Government until 1993. In Australia, the first university degrees in fashion were not awarded until Emily Mac was

incorporated into the Royal Melbourne Institute of Technology (RMIT) in 1979, which gained university status in 1992.

The transition of art and design education from the art school and technical college model to the university in the United Kingdom (Further and Higher Education Act 1992, 2000), combined with the first Research Assessment Exercise (RAE) in 2001, put in motion a series of adaptive measures as members of each 'academic tribe' (Becher, 1989) attempted to acclimatise to the new conditions. On the one hand, artists and designers who understood knowledge as a combination of creative and technical skill were faced with learning the systems and languages of the university in order to function. On the other, those who understood knowledge as disciplinary (Archer, 1979) and academic (Scott, 2004; Usher, 2002) accepted the role of judging the quality of practitioner research based on traditional academic measures. This move was a catalyst for researchers in art and design to achieve parity within the university system. The bias towards knowledge generated within the traditional university as superior to professional and technical knowledge arose from arguments surrounding the separation of the university from the professions at the beginning of the twentieth century. Most notably, Thorstein Veblen, among others, posited professional knowledge as arising from the 'lower and professional schools' and being of a different 'kind' (as cited in Schön, 1983, p.36). This new environment required some re-evaluation of long-held canonical ideas and the appropriateness of this new type of scholarship.

Merging these areas of learning into one system was instigated as a result of government restructuring and reclassification of higher education. As Melles (2010) explains:

In response to a range of agendas, the late 1980s and early 1990s saw the binary higher education system in Australia (and the UK) restructured with institutes of technology and colleges of advanced education (CAE) joining the university sector. (Melles, 2010, p.757)

The move changed higher education funding and instigated a standard framework aimed at demonstrating international parity for degree qualifications. The inadvertent result was a demarcation between professional practice and research under one system, rather than a smooth integration of the two disparate learning approaches. Shattock (2010) argues that this merger was not voluntary and was instead an effect of the emergence of education as a marketable commodity rather than an ideological change between skills-based education and a traditional university education that is more theory focused. This 'forced migration' of institutions also resulted in the transfer of professional and technical knowledge domains to the university, where Scott argues that 'all other forms of knowledge, including practitioner knowledge, are considered to be inferior or mistaken versions' (Scott, 2004, p.44). This had serious consequences for practitioner researchers. Some were positive; for example, the introduction of different methods and ways of thinking developed a better understanding of design practice and has led to new questions surrounding practice. Other consequences, such as a demarcation between theory and practice, are still problematic for practitioner researchers. The debate surrounding practitioner versus researcher has been a catalyst for an examination of how practitioner knowledge is constructed and exists between the professional arena and the university.

The separation of practice-led research from other types of research is not limited to fashion. To ensure equity in funding models, for example, it is necessary for practice-based research to be 'less ambiguously or opportunistically defined in order to determine what this type of research entails and to regulate its development in a productive manner' (Biggs & Büchler, 2007, p.63). This leads to the premise that any attempt to define practice-led research must 'attend to and observe conventional research criteria' (2007, p.64). In other words, practice-based research can no longer be considered a particular category of research and instead should demonstrate quality in the same way as any other type of academic research. As St.Pierre and

Rouston (2006) put it, this has meant that 'qualitative researchers, who have for a number of years enjoyed the freedom to just do their work, are now experiencing intrusions from the government and other powerful groups [such as funding bodies]' (p.678). An attempt has been made to define the criteria for determining quality in practice-based research in the creative and cultural industries based on examination of criteria for academic research quality in general. Biggs and Büchler (2008) argue this criteria indicates 'that research must be disseminated, in order that it contributes to knowledge accumulation' and that the dissemination of the work 'demonstrates, through the possibility of a comparison, whether or not the work is original' (Biggs & Büchler, 2008, p.16). Miller (2008) proposes the importance of the role of disseminating research ethics, stating: '[these ethics] involved communicating one's personal findings with 'universal intent' and subjecting these findings to the scrutiny of others' (Miller, 2008, p.939). While reform has occurred in practitioner research methodology, the ethics of research also need to be revisited in respect of 'universal intent' given the wide range of disparate research that has been developed through the university.

Fashion as a discipline

Becher (1989) argues that the contemporary understanding of academic disciplines is that they are the building blocks of the university, where individual academics form alliances, or 'tribes' based on shared backgrounds and interests and organised by differences that define natural boundaries between one discipline and other disciplines. Krishnan (2009) agrees the description 'academic discipline', in more recent times, '... has also become a technical term for the organisation of learning and the systematic production of new knowledge'. However, Krishnan also proposes that a discipline is constructed through 'a process of limiting the freedom of individuals and as a way of constraining discourses' (2009, p.9). A traditional

academic discipline finds its beginning by emerging as a shared area of interest among a subset of academics within a particular field. Over a period of time, and by developing scholarship around this interest, a new discipline is developed. Although fashion is developing through interdisciplinary research, several aspects can be used to characterise disciplinary status that have relevance for the examination of fashion as an emerging discipline within its own right.

Table 2.1 Characteristics of an academic discipline (Krishnan, 2009, p.10)

1.	disciplines have a particular object of research (e.g. law, society, politics), though the object of research may be shared with another discipline;
2.	disciplines have a body of accumulated specialist knowledge referring to their object of research, which is specific to them and not generally shared with another discipline;
3.	disciplines have theories and concepts that can organise the accumulated specialist knowledge effectively;
4.	disciplines use specific terminologies or a specific technical language adjusted to their research object;
5.	disciplines have developed specific research methods according to their specific research requirements; and maybe most crucially;
6.	disciplines must have some institutional manifestation in the form of subjects taught at universities or colleges, respective academic departments and professional associations connected to it.

Krishnan's (2009) summary of the characteristics shared by academic disciplines (Table 2.1), drawing on the work of Foucault (1991 as cited in Krishnan, 2009, p.8) and Becher (1994; 1981) among others, is used here to provide the basis for positioning fashion on the spectrum between research interest and academic discipline. Demonstrating all of these characteristics is not a formal requirement of disciplinary status but a majority of these characteristics are required for a field of study to be considered a discipline within its own right. The indicators proposed by Krishnan (2009) have been chosen as they do not limit the definitions of

disciplinary status to the traditional silo approach originally developed within the sciences, given that fashion is continuing to develop as an interdisciplinary area of scholarship.

An academic discipline can develop in several ways but in the case of fashion, as distinct from textiles or history, the first stage in developing as a discipline has taken the form of a shared research interest of academics within these fields (Entwistle, 2000; Palmer, 1997; Taylor, 1998). There is also a developing body of accumulated specialist knowledge in the area of fashion as a result of the development of academic journals dedicated to the topic, but fashion knowledge is limited at present because practitioner perspectives of fashion are still developing in terms of publication. Therefore, fashion theories and concepts that form the basis for accumulating knowledge of fashion can appear limited to non-practitioner researcher perspectives.⁷ This can be seen as a barrier to the development of full disciplinary status if practitioner research aspires to become a part of existing fashion research. A disconnection between practice-led research and other fashion research has also contributed to the problem of defining and using specific terminologies and specific technical language for fashion research. Krishnan's (2009) explanation of the development of disciplines around the specific 'subjects taught at universities or colleges, respective academic departments and professional associations' would suggest that fashion should develop around the design of fashion and textiles, as well as the interdisciplinary aspect of fashion research that is currently dominant. This is not yet reflected in existing fashion research, where the practitioner is virtually invisible. Following Krishnan's (2009) recommendations for indicators of a discipline, practitioner researchers in fashion have also demonstrated a cohesive approach to forming 'specific research methods according to their specific research requirements' (Krishnan, 2009, p.10)

⁷ There are researchers in fashion who are practitioners however, their research is not within the scope of practitioner research as defined within this thesis. A false perception can be that fashion theory is limited to non-practitioners rather than limited to non-practitioner research at present, although this is beginning to change.

based on a survey of methodology used in the twenty-five practice-led fashion research projects listed in Appendix 1. An analysis of this data is presented in the section 'Separation of theory and practice', in this chapter.

Academic knowledge

Schon (1983) introduces practitioners to the existence of 'a hierarchy of kinds of knowledge within the university' (Schön, 1983, p.37) in line with McGuirk (2011) and Delanty (2001), who both argue the hierarchical structure of disciplinary knowledge and Bourdieu's (2000) discussion of the 'academic aristocracy' (as cited in Delanty, 2001, p.25). As discussed earlier in this chapter, there is an idea that practitioner knowledge is *lower* than other types of knowledge within academia. This is central to a continuing disconnection between theory and practice within the university, which mirrors the disconnection between practice-led fashion research and other research. A re-examination of the century-long debate surrounding the hierarchy of academic knowledge reveals a tendency to focus on identifying differences between existing academic research and new forms of research as they emerge. This is relevant to practice-led research, where the main arguments, on both sides, are based on the different type of knowledge sought by practitioners and question the quality of the methods of acquiring this knowledge. The main problem for early practitioner researchers, exploring their professional practice within the newness of academic inquiry, has been that the methods of determining research quality are those of the traditional university. Schön (1983) identifies that practitioners have 'had to accept the positivist epistemology of practice which was now built into the very tissue of the universities ... [and] the fundamental division of labour' between research and practice (Schön, 1983, p.36) rather than developing different methods of understanding practice as an *integral part* of research. The traditional measures of evaluation have been formulated within a paradigm of explicit knowledge. As a protagonist on the side of professional (practitioner) knowledge, Schön explains 'most of the knowledge essential to research practice is not what the research university calls fundamental knowledge' (Schon, 1995, p.28). Rigorous methodology has traditionally been the determining indicator of quality research within the scientific disciplines. This is likely to continue for as long as traditional academic research is seen as based on rigorous and transparent methodology, while practice-led research is based on tacit knowledge and embedded in 'messy' research problems (Sullivan, 2006a, p.1467) involving practice-led solutions. Archer (1995) raises a valid point, identifying that knowledge at the top of the university hierarchy is explicit and research is assessed on the basis of the use of transferable, transparent and rigorous methodologies. This is changing, as discussed in Chapter Five, but limiting definitions of practitioner knowledge to tacit knowledge is challenging for practitioners.

The mechanisms for achieving disciplinary status within the university, based on Krishnan's (2009) findings, are largely reliant on the method of publishing findings in academic journals dedicated to the discipline. Of the six indicators used to characterise academic disciplines shown in Table 2.1, the significance of the academic journal cannot be underestimated in terms of developing a 'body of accumulated specialist knowledge' (Krishnan, 2009, p.10). As with any discipline, Bye (2010) agrees that fashion is characterised by published research in the field (Bye, 2010, p.210). One of the earliest examples of an academic journal related to fashion as an industry is the *Textile Research Journal*. Founded in 1930, the journal has a scientific focus on 'the dissemination of fundamental, theoretical and applied scientific knowledge in materials, chemistry, manufacture and system sciences related to fibers, fibrous assemblies and textiles' (Sage Publications, 2011). *Textile History* followed in 1968, with an intention to publish academic papers from history researchers interested in economics, the journal also encouraged written submissions from those interested in art and design (Jenkins, 1968, p.10).

early fashion-related journals and this would have resulted in an association between research methodologies and academic rigour within early fashion research. Authors of fashion articles from within art and design may have attempted to emulate the academic practices of textiles researchers who, armed with the structure and norms of a scientific method, were responsible for conducting the peer review of papers submitted for publication in the journal.

The opportunities for practitioner researchers in fashion to publish were slower to emerge but played a vital role in forming intellectual understandings of fashion. Fashion Theory: the journal of dress, body and culture (Fashion Theory), one of the earliest academic journals dedicated to fashion research, launched its first issue in 1997. Fashion Theory discusses fashion as immaterial, a 'cultural construction' (Steele, 1997, p.1) and related to the dressed body. This is important in the consideration of fashion as a discipline because it demonstrates that early fashion academics shared the understanding of fashion as it relates to the environmental, economic, cultural and psychological state of a society but did not engage with the *practices* of fashion design or the fashion industry from the perspectives of designing and making fashion objects. The material aspects of fashion, clothing and accessories were not included in this shared interest in fashion but it should be identified that they were also not excluded. Published papers are *seen* to be limited to interpretations and theories of fashion from this theoretical viewpoint. Fashion Theory has been criticised for having never (between 1997 and 2000) 'featured an article written by a designer, nor indeed by anyone with an active role within the fashion industry' (Griffiths, 2000, p.72). In this sense, the editors of the journal have been falsely, and perhaps prematurely, accused of failing to publish practitioner research, where this could be equally due to a lack of submission by practitioners to the journal. Practice-led research in fashion developed much later than mainstream fashion research and was developed through post-graduate education of fashion practitioners, within disciplinary boundaries in

areas such as visual arts and design, rather than as a specific research interest for researchers from within other disciplines.

The limited representation for practitioner research in Fashion Theory was a catalyst for the development of another journal, Fashion Practice: the journal of design, creative process & industry (Bloomsbury Publishing), launched in 2009 and dedicated to publishing papers authored by practitioners or those relevant to the business of fashion. As Editor Sandy Black explains in the inaugural issue, the 'diverse remit opens a new space between existing publications, and especially aims to give voice to those who might previously have felt excluded from academic debate' (Black in Black & Delong, 2009, pp.5-8). However, a survey of the papers published in the first volume of the journal (2009) suggests that despite these aims, the editors had some difficulty including papers authored by fashion practitioners. Many papers remain focused on the immaterial, including a paper entitled 'Chelsea on 5th Avenue: Hypermasculinity and Gay Clone Culture in the Retail Brand Practices of Abercrombie & Fitch' (Hancock, 2009), while others focus on the business of fashion, but no paper deals with fashion design from the perspective of the practitioner. Bye (2010), Niedderer (2007) and Carter (1984) similarly claim that practitioner researchers have been slow to make the transition from their research practice to academic writing and publication (Bye, 2010, p.208; Carter, 1984, p.297; Niedderer, 2007, p.11). This is a problem that is being addressed through postgraduate programs in fashion, where doctoral and masters students are expected to have their research published during their candidature. There have not been any studies to determine to what extent these publications focus on research that is directly related to practice-led research outcomes as opposed to theoretical and contextual perspectives of fashion that are more suited to traditional formats of 'publication' within the existing landscape. Further analysis of the contents pages of Fashion Practice (2009–2013) that are included as Appendix 2 supports Griffiths' (2000) claims that a disproportionate number of researchers who are

practicing designers or makers of fashion garments write academic papers about their research practice. This would suggest that practitioner researchers are left with the choice between improving their skills in academic writing or developing ways of engaging with 'publication' that can overcome the current separation of practitioner perspective from other fashion theory and methodology.

Researchers who bring the methodology of their own disciplines to fashion are well represented in terms of publication compared with practitioner researchers. This is evidenced by publications that focus on fashion research from fine arts, humanities or business management perspectives as areas where researchers would have previous experience in research practices and methodologies from their research training and experience. This is characteristic of similar areas of interdisciplinary inquiry, such as Women's Studies (Pryse, 2000), which evolved from commonalities of knowledge seeking behaviour (research focus) rather than association through methodological coherence. Non-practitioner research in fashion has emerged in a similar way on the basis of an intellectual interest in fashion resulting in an interdisciplinary area of inquiry (McNeil, 2010, p.105). However, practitioner research in fashion has yet to participate in the wider research community, who are charging themselves with defining the emerging discipline of fashion, as described by McNeil (2010), who reports on The Future of Fashion Studies conference held at Warwick, UK, on 30 April 2009. The only mention of fashion research that may involve practice is:

A current interest in the museum as the locus for exploring the nature of the creative industries and for cultural diplomacy also offers opportunities to extend research questions beyond the usual remit of fashion history and theory and to embrace issues of practice and globalisation. (McNeil, 2010, p.108)

While the museum offers opportunities for researchers to engage with practice, more opportunities for research exist in the areas of practice and globalisation through action-based,

industry-focused, practice-led fashion research. At the time of writing, practitioner research in fashion remains best described as insignificant, largely due to its invisibility within the developing academic community of fashion researchers, not because it is of lesser quality or relevance. The lack of research articles authored by fashion practitioners also has consequences for the development of fashion as a discipline that includes practice-led *fashion* research.

Fashion as interdisciplinary research

Ian Griffiths — as an internationally known designer for Max MaraTM and accomplished academic — eloquently explains a problem for students of fashion within the academy:

Students of fashion, so frequently labelled as shallow and frivolous, are required to be polyglots, able to inform their understanding from texts using the language and ideas of anthropology, social, cultural, economic and art history, literature, sociology, psychoanalysis, psychology, semiotics, structuralism, Marxism, feminism and others. (Griffiths, 2000, p.74)

The evolution of fashion as an interdisciplinary area of inquiry is not random, considering the tenet of disciplinary status as an area of inquiry unified by common methodology (Buker, 2003, p.73; Krishnan, 2009, p.10) or as a group of researchers who utilise an accepted set of methods of research within a general topic of study (van den Besselaar & Heimeriks, 2001). Methodological differences are also used to identify and highlight disciplinary boundaries and existing dichotomies in conceptual frameworks (Becher, 1989, p.38). Ongoing rhetoric surrounding research methodologies can be the result of a lack of connection between the methods of research and epistemology within a discipline. While emerging researchers focus on proving their worthiness, hoping to gain acceptance for their research through the methodological paradigms of the other disciplines within the university environment, the emerging discipline of fashion is struggling to take the form and structure necessary for its own inner coherence as an area of research concerned with both practitioner and non-practitioner perspectives of fashion. This is discussed in more detail in Chapter Five.

Macfarlane (2006) argues that there are significant future opportunities for interdisciplinary research, particularly in disciplines where research is being potentially restricted by a silodriven approach. Fashion research can be described as an interdisciplinary endeavour that involves historical, economic, cultural and technological aspects of fashion: as object (existing garments and accessories), as economic commodity (manufacturing and consumption of fashion garments and accessories), as interaction (the dressed body) and practice (the aspects of designing and making fashion). Practitioner research in fashion can be defined by the differing nature of inquiry, in other words by the methods of research, rather than being conceptually isolated from other forms of research in the field. The lack of representation of practitioner researchers in terms of academic publications can also be attributed to a difference in methodological approach rather than as a difference of conceptual and theoretical frameworks beyond the addition of creative production as a research topic. The interdisciplinary nature of fashion offers an opportunity for researchers to cross traditional research boundaries as a result of a diverse methodological approach rather than the development of a uniform research methodology. However, practice-led research in fashion is also able to cross disciplinary boundaries as a result of its shared practice-led design methodology. A shared problem of unclear disciplinary boundaries has left the design disciplines more open to criticism based on traditional criteria that may not be relevant to the different types of knowledge within practitioner design research. The development and description of similar emergent disciplines appears to have been centred on common areas of interest rather than a more traditional silo approach. As Gasparski and Strzaliecki (1990) explained: 'The science of design [should be] understood, just like the science of science, as a federation of sub-disciplines having design as the subject of their cognitive interests' (as cited in Cross, 2006, p.99). Similar interdisciplinarity exists in other emergent disciplines such as

material culture studies, as identified by Prown (1980) and discussed by Küchler and Miller (2005, pp.2–3).

Researchers from a wide range of disciplines are able to engage in rich, multidisciplinary fashion research as a result of fashion's development on the boundaries of art history, history of costume and dress, cultural studies, and art and design theory. This also means that fashion can be marginalised and considered to be inferior to research in other disciplines as a result of the same theoretical and methodological diversity. Practice-led researchers in *fashion* also have to consider the problems of *design* research. An ongoing dichotomy between practice and theory has been exacerbated by the lack of institutions to provide a cohesive authority for the discipline: in other words, the lack of an 'old school' of established law, custom or practice, a situation that Cross explains as hindering the development of design as a discipline:

Design must have its own inner coherence, in the ways that science and humanities do, if it is to be established in comparable intellectual and educational terms. But the world of design has been badly served by its intellectual leaders, who have failed to develop their subject in its own terms. Too often, they have been seduced by the lure of *Wissenchaft* [scientific knowledge], and turned away from the law of *Technik* [technology]; they have ... defected to the cultures of scientific and scholarly enquiry, instead of developing the culture of designerly enquiry. (Cross, 2006, p.6)

Practitioner researchers in fashion, interested in *fashion design* practice, have had to develop their research without the benefit of disciplinary theory and methodology from either *fashion* or *design* disciplines where these authoritative bodies do not yet exist.

Fashion knowledge

The difference between fashion and other disciplines, in terms of research publications, could be attributed to differences in traditional methods of recording and transferring knowledge in these disciplines. Practitioner knowledge of fashion is related to craft knowledge that has been privileged and protected by guilds. This knowledge has historically been kept secret for commercial reasons and, similarly, the methods of designers and dressmakers have been well guarded as trade secrets to give a designer or dressmaker a competitive advantage. The practice of keeping practitioner knowledge secret has been characteristic of the haute couture system in particular, to protect business from the threat of copyists and to protect the specialist knowledge of the couturier. An example can be found in the case of the 'Delphos Gown' designed by Mariano Fortuny, who developed a distinct design aesthetic through the method of pleating and subsequent methods of construction used to create his signature style (Finn, 2008b, p.14). Although Fortuny is often applauded for patenting the Delphos Gown, the method of pleating was never revealed as a part of either of two separate patents that protect his design, and this knowledge remains the topic of speculation (Kearney, 1992). As well as being kept secret, technical knowledge of fashion has also been passed down from master to apprentice (for example in the craft of tailoring) for centuries (Sennett, 2009; Tarrant, 1994). Teaching these skills in trade colleges, instead of under the umbrella of the traditional system of indenture, resulted in the emergence of the first writings on the practice of fashion, namely textbooks for use in the education of students. These texts provide instructions for performing basic operations and are beginners' guides to the basic principles of pattern cutting or garment construction. The method is explained, accompanied with many illustrations; however, the ability to explain advanced craftsmanship is beyond the remit of written text and this may be a key reason why practitioner knowledge is theorised as tacit knowledge.

The existence of tacit knowledge is generally accepted by practitioner researchers but also within the wider academic community. Scholars such as Michael Polanyi (1966/2009c), Donald Schön (1983), Carol Gray and Julian Malins (2004), Chris Rust (2004), Graeme Sullivan (2005), Richard Sennett (2009) and Harry Collins (2010) have discussed the role of tacit knowledge in communicating creative knowledge within both academic and professional

environments. Polanyi theorised tacit knowledge as arising from skilled practice at a time when all knowledge within the university was considered explicit and recordable, to propose a simple definition of this knowledge that 'cannot be told' (1966/2009c, p.4). Collins (2010) identifies that discussions surrounding tacit knowledge are unable to go beyond a surface level and 'the existing literature on tacit knowledge is less than clear' (Collins, 2010, p.ix). The majority of authors writing on tacit knowledge within art and design identify the foundations of tacit knowledge as knowledge that 'cannot be told' or involved with 'knowing how' but do 'not reflect the breadth of ideas explored by Polanyi in forming his theories of tacit or personal knowledge' (Rust, 2004, p.71). Sennett (2009) provides the most easily related account of tacit knowledge, with a persuasive and articulate style of language but, by definition, this knowledge remains inexplicable.

Joanne Entwistle (2009) writes specifically on fashion knowledge, building on existing literature around tacit knowledge to define what she refers to as *tacit aesthetic knowledge*, summarising this type of knowledge as 'an embodied knowledge; worn on the body of those who calculate it and "travelling" with them along global networks' (p.129). Specifically, Entwistle identifies that tacit aesthetic knowledge in fashion is not only knowledge that cannot easily be explained but also as knowledge that 'is simultaneously globally circulating and locally situated in particular cities by being worn on [fashion] buyers' bodies' (2009, p.145). The cities to which Entwistle refers are Milan, Paris, London and New York, all of which have informed international fashion through traditional fashion week showings. Entwistle's discussion of tacit aesthetic knowledge in fashion, focused on the experiential facets of the 'habitus' (which exists as a part of a global fashion society), has increased significance in developing theories of fashion knowledge. Although the theory of tacit aesthetic knowledge does not directly relate to the practice of designing fashion, it can also be related to design. The relevance for practitioner knowledge in fashion is to provide a starting point for discussing

methods of *transferring* this tacit aesthetic knowledge, which could arise from an examination of practice in consideration of theories of tacit aesthetic fashion knowledge.

Sally Weller (2007) theorises fashion knowledge as a form of 'viscous knowledge' and describes this knowledge both as 'largely tacit' and among other forms of 'expert knowledge' (p.42). As a part of her study of knowledge flow within the fashion industry, within the context of a globalised manufacturing model, Weller creates a descriptive framework of fashion knowledge that has moved beyond fashion design as being solely aesthetic knowledge about fashion trends. Weller's (2007) framework describes fashion knowledge as taking the form of localised dress practices, cultural capital and institutionalised fashion existing as trade secrets or regulated by intellectual property rights. Extending Enwistle's theory of fashion existing as a practice of wearing, Weller (2007) proposes that fashion is both space-less and displaced, existing as image in mass media or existing as the 'semiotic content of material objects' (p.45) embedded through design into garment objects themselves. Although the study emerged within the disciplines of economics and geography, the attempt to categorise fashion knowledge, particularly design knowledge, provides a starting point from the perspective of the practitioner. The theory of fashion knowledge existing within a garment object is important to this study as the method of object analysis provides a framework for examining, and rendering explicit, knowledge from an object.

The theory of design knowledge as a tacit form of knowledge embedded in artefact is one supported from within the wider discipline of design. Cross identifies this relationship claiming that '... design knowledge resides in *products* themselves: in the forms and materials and finishes which embody design attributes' and comments, 'We would be foolish to overlook this informal product knowledge simply because it has not been made explicit yet — that is a task for design research' (Cross, 2006, p.101). Sullivan also relates to the idea that knowledge can be encapsulated in the art object or artefact, '... artists think in a medium, and particular

dispositions and habits of mind help individuals give form to meaning during the process of making' (2005, p.125). The concept that knowledge can be encapsulated in object may sound obvious in the context of research degrees that permit the submission of practice outcomes in place of a wholly written thesis. However, knowledge that remains embedded in object, without language to draw out research findings and an understanding of the type of knowledge that can be encapsulated in object, severely restricts the ability of the researcher to promote findings beyond the object examination process.

Tacit knowledge is more often discussed in terms of how this knowledge is transferred rather than what constitutes tacit knowledge. Collins' (2010) research specifically addresses the question of what tacit knowledge is, seeking to identify the barriers that prevent this knowledge from being made explicit. The significance of how knowledge in fashion has been traditionally transferred is often considered as an example of the dominance of tacit knowledge involved in the practice of skilled craftspeople (Sennett, 2009). There can be little doubt that this is a valid and significant observation regarding tacit knowledge and supports the argument that there may be other methods of recording and transferring this type of knowledge. The technical colleges, such as the London College of Fashion and Parsons New School, were originally established to support apprenticeship training with some formal education (the apprentice training was largely practical). The pedagogy centred on demonstration of hands-on skills, and assessment was on the basis of a student's ability to complete a technical task, such as cutting and garment construction techniques. In this respect the traditional model of fashion education, where knowledge was considered either tacit or explicit, suggests that representing this technical knowledge in an explicit format, such as a textbook, was considered more complex. The method of writing and recording technical knowledge within fashion was not the most effective method to transfer this type of knowledge. The use of demonstration combined with extended experimental practice was a far more effective method of knowledge transfer within

the context of the apprenticeship system, as demonstrated by the length of time that this type of training retained relevance. In relation to contemporary methods, the 'one-to-few' style of the teaching method may no longer be as much of a limitation, given the advancements that have been made in communication technology in the meantime. The growth of online learning resources utilising video demonstrations is an indication that transferring this type of knowledge is no longer dependent on these limitations.

The understanding of fashion knowledge as technical knowledge can also be connected to the traditional methods of transferring knowledge within fashion. The role of 'fashion designer' is a lesser known entity, having emerged recently in terms of the history of clothing and dress (Kawamura, 2004). The methods of knowledge transfer, which allow the design to develop, remain mysterious but involve a combination of history, theory and context alongside practice in developing a design solution. Although the process of design can provide a framework for understanding activities that take place during the development of a design, the intellectual aspects of design in fashion are only beginning to be explored. Practitioners, professionals and academics propose that fashion exists 'in the mind' (Valerie Steele as cited in Skjold, 2008; Vionnet as cited in Kirke, 2006). The lack of understanding surrounding design practice beyond proposing models for the design process is evidenced by existing publications on the topic of fashion *design* knowledge. Equivalent theory is developing in other areas of design, including architecture and industrial design. Cross suggests that design knowledge can be drawn outside of a particular discipline and be understood as a particular form of knowledge:

The underlying axiom of this discipline [design] is that there are forms of knowledge peculiar to the awareness and ability of a designer, independent of the different professional domains of design practice. Just as the other intellectual cultures in the sciences and the arts concentrate on the underlying forms of knowledge peculiar to the scientist or artist, so we must concentrate on the 'designerly' ways of knowing, thinking and acting. (Cross, 2006, p.100)

The difference between fashion design research and fashion research can be attributed to the differing nature of inquiry, namely the methods of research. The difference in the form of knowledge in design is supported by:

Archer and his RCA colleagues [who] were prepared to call it 'Design with a capital D' and to articulate it as 'the collected experience of the material culture, and the collected body of experience, skill and understanding embodied in the arts of planning, inventing, making and doing'. (Cross, 1982, p.221)

Practitioner knowledge of fashion design is more readily explained through the description of associated technical skills such as drawing, pattern cutting and garment construction. This limits the potential for fashion design research to develop theory of design aesthetics and creativity in fashion from the practitioner perspective. The idea of design as a skill set based in practice is a limiting view and one strongly connected with tacit knowledge, also generally explained as existing in craftsmanship and expert skills of making (Sennett, 2009). For practitioners in fashion to move to research with a capital 'R' (Scrivener, 2000) and to design with a capital 'D' (Cross, 1982, p.221), the view of fashion practice will need to develop within the domain of academic knowledge.

Research in this area is in a process of development and should be taking full advantage of any avenue of interest for researchers in this growing area. Cross (2006) provides an additional view, of design research falling into three main categories:

... design epistemology — study of designerly ways of knowing, design praxiology — study of the practices and processes of design [and] design phenomenology — study of the form and configuration of artefacts. (p.101)

This suggests that a reconnection between fashion theory and fashion practice, or at least developing methods of bridging this gap, is critical. A similar concept of design research is situated in action and practice, rather than in more traditional methods of communicating academic research centred on reading, writing and publication. However, Cross's taxonomy

introduces the study of design knowledge as '*designerly* ways of knowing'. This paradigm or context also suggests that there are *designerly ways of doing* (praxis) and an area of research around *designerly artefacts* (phenomenon).

Sullivan's (2005) model of visual arts thinking also has resonance with Cross's model of design thinking in proposing that knowledge of art exists as a relationship between creative process and the artefacts that result but also relates the importance of a common disciplinary context. The author explains visual arts thinking as a relationship between three aspects: thinking in a language, thinking in a medium and thinking in a setting (Sullivan, 2005).

At various times in the history of aesthetics and art education a prevailing belief was that visual arts knowing [knowledge in the discipline of visual arts] should emphasise the *process*, and at other times, the *product*. (p.124)

This equates to research method versus research outcome in current academic terminology. Sullivan relates thinking in a medium to other writers who respond to the theory of knowledge as encapsulated in object by explaining the result as 'the consequence of thought and action that is given form in the creative product' (2005, p.125). Likewise, the concept of thinking in a setting identifies the contextual nature of visual arts knowledge. However, Sullivan's terminology of thinking in a language might suggest that this area of thinking encompasses the more traditional areas of academic writing but this is not the intended meaning. He explains thinking in a language as the way in which meanings are made and that there is an existing school of thought surrounding art that is pivotal in determining (or limiting) the way in which thought *about* art develops. This is equally relevant to fashion as visual arts, where thinking is explained as 'a language of ideas and interpretations' (Sullivan, 2005, p.127) and rather than a written or spoken language it is a language of shared ideas, participation and practice. This is central to the issues discussed here as, while practitioner sattempt to develop consensus around practitioner knowledge in fashion, the ability for practitioner researchers to engage with

approaches and theories from other scholars within art and design is limited by existing methods of recording and disseminating this type of knowledge.

Knowledge within the fashion industry

Knowledge involved in the practices of designing and making fashion garments involves tacit knowledge. The pressure placed on a pencil in fashion illustration, the tension required to draw a needle and thread through different weights of cloth or the creation of a colour palette for a collection in the coming season cannot be expressed in explicit terms. In all of these trivial cases, the knowledge has historically been transferred through participation. A master could hold the hand of an apprentice and move it in the appropriate way, pressure and tension can be communicated by touch and colour selections can be developed as a result of knowledge gained through a process of osmosis. After watching dozens of colour palettes being created, the signposts to a good selection, often interpreted as gut instinct, can be made on the basis of knowledge informed by experience. Polanyi explains this in his writings on the nature of knowledge in action:

By watching the master and emulating his efforts in the presence of his example, the apprentice unconsciously picks up the rules of the art, including those which are not explicitly known to the master himself. (Polanyi, 1962/2009a, p.53)

While much of the transfer of knowledge pertaining to learning in action — transferring the skill of a master to an apprentice — is tacit, this cannot automatically be thought to be true for all knowledge in the field.

A further consideration in discussing knowledge transfer in fashion is that the creation of fashion garments is a central part of a global industry ranging from design and manufacturing to marketing and post-consumer textiles waste management. Figure 2.1 (Farrer & Fraser, 2008) provides a graphic representation of the complexity of the fashion supply chain based on a

model developed by Kim Fraser in her study of post-consumer textiles waste (Fraser, 2009). Knowledge within the industry is not limited to explicit forms and has different methods best suited to the type of knowledge being transferred. In smaller workrooms, the design team are able to communicate directly with each other, viewing rough sketches, swatches or mock-ups of garment features. With the increase in offshore manufacturing models in the 1990s, a model that is still dominant in the Australian and New Zealand industries, working with teams at a distance requires different techniques. The stages that take place in the process of designing fashion do not adequately define fashion design as a professional practice. The separation of manufacturing from design through the use of outworkers or offshore manufacturers (or both) has resulted in a change to the traditional ways of knowledge transfer in the industry that should be considered in developing theories of fashion knowledge as tacit knowledge.

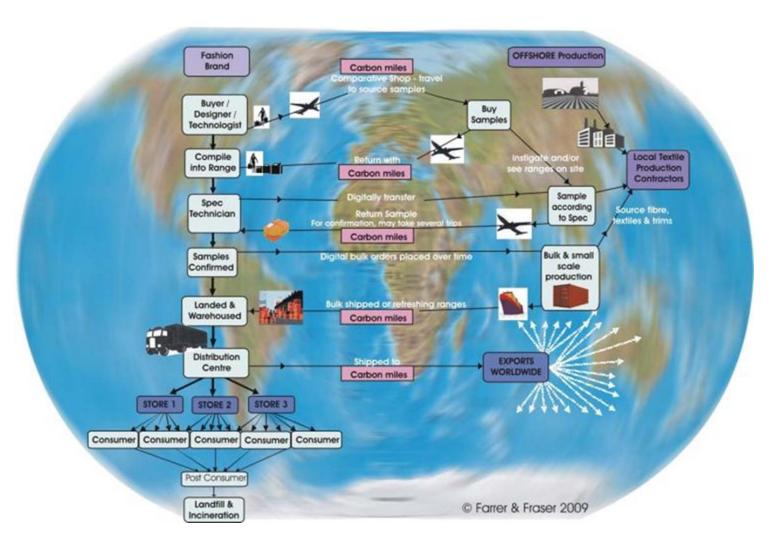


Figure 2.1 Supply chain complexity (Farrer & Fraser, 2008)

The move towards offshore manufacturing from the traditional onsite factory model has often been accompanied by a language barrier between designers and manufacturers. Additional levels of separation between these teams are introduced by the use of manufacturing agents (middlemen) on both sides. As a result, it is necessary to 'deconstruct' each garment to be produced into a series of measurements (numbers) and flat, technical drawings that do not allow for any interpretation, usually showing side, front and back views. In addition, the manufacturing process has become focused on producing product lines (mass production of multiple copies of a single unit) rather than one manufacturer producing an entire collection. The designer is often dealing with multiple suppliers for different items within a collection. The knowledge of fashion, as a collective knowledge, is no longer transferred to the manufacturer. This is a fundamental change to knowledge within the fashion industry.

To develop these 'garment maps' takes considerable effort, as the entire garment has to be designed prior to any fabric being cut, the pattern having yet to be made, and without a sample garment (prototype) to follow. This is in opposition to the more organic way a garment design is developed for small-scale manufacturing, which is a collaborative process between design and workroom staff. Mass manufacturing is a 'messy' process in which problems are invisible until they are discovered during the making of a sample. The process for designers has become highly accountable and, as a side effect, design features that are difficult to explain in two-dimensional formats, or difficult to specify in exact measurements, can be deemed too difficult and not be included in a collection. The focus has moved to producing records to transfer technical knowledge rather than the finished products themselves. The aesthetic aspects of fashion design have become standardised through methods of mass manufacturing and the *new* aspect of changes in fashion have become limited to modifications of colour, pattern and fabrication rather than being responsive to major changes in silhouette or construction methods.

The relevance of these industry changes for practitioner researchers in fashion is that regulating methods of research, placing too much importance on adhering to accepted research methodologies or focusing on the minutiae of the method may lead to difficult, interesting or exciting questions being deemed 'too hard to explain in this two-dimensional form or too difficult to specify in exact measurements'. However, more appropriate tools, designed to track and document a project in visual and text form, could make these accepted research methodologies more interactive and dynamic. The advantage would be to allow new ideas and theory to *arise from research practice*, rather than conducting research practice in a way to satisfy accepted methods as a high priority. Nancy de Freitas (2002) explains reflective practice as that which 'engage[s] the artist or designer in a critical manner with the relationship between conceptual, theoretical and practical concerns' (p.2) and recommends active documentation as 'planned and deliberate activities' (p.2) that support reflective practice. However, this documentation, while providing transparency and rigour, could also constrict the work in an unintended way, converting primary research into programmed practice.

The development of different mechanisms to capture the thoughts and insights of a researcher — to capture an image, sketch or sample as they are developing — may offer the practitioner an opportunity for a different view of their practice. The focus should be on developing methods that are conducive to theory building and academic writing and publication, rather than simply providing a transparent methodological framework. A balance between the use of methodology as a template on which to structure practitioner research, and as a means of enriching research practice, can be reached. The development and appropriate use of methods such as active documentation allow practitioner research findings to be recorded so they may be analysed. This may support researchers in drawing out the knowledge in practice and make it explicit as Haseman and Mafe (2009) suggest. The differences between business as usual (professional practice) and practitioner research is still in a process of negotiation, but the key

indicators of quality research are reliant on ascertaining the rigorousness of the research methodology rather than the relevance of the research topic to the emerging discipline. If the means of demonstrating academic rigour (methodologies) are not best suited to the type of research being undertaken and the kind of knowledge that exists in practice, the issue of appropriate methodologies for practitioner researchers in fashion will continue to divert attention from scholarly discussions surrounding knowledge and fashion as a discipline.

Adopting methodologies

The reflective practitioner: How professionals think in action (Schön, 1983) is the most significant early example of attempts to legitimise the work of practitioner researchers within the academy by demonstrating the existence of academic rigour in creative practice.

The dilemma of rigor or relevance may be dissolved if we can adopt an epistemology of practice which places technical problem solving within a broader context of reflective inquiry, shows how reflection-in-action may be rigorous in its own right, and links the art of practice in uncertainty and uniqueness to the scientists' art of research. We may thereby increase the legitimacy of reflection-in-action and encourage its broader, deeper, more rigorous use. (p.69)

The rigour of reflective practice challenges that the only paradigm for research is through the scientific method in a model of technical rationality. The methodology is based on the development of a hypothesis or research question, the investigation of this question through the objective gathering and examination of quantitative⁸ data to a resolution of truth or untruth. This is one approach but not the most appropriate method for all possible research questions or topics. Schön is passionate and opinionated in his examination of existing models of scientific research that discount any contribution that 'the professions' could make (Schön, 1983, p.36). It is worth noting that these professions included five key fields: town planning, engineering,

⁸ I do not include qualitative data here as, in the time of the model, the aim of technical rationality was to avoid the use of any type of qualitative data as it was thought to be too subjective.

architecture, management and psychotherapy, all of which have since found general acceptance in the academic world.

Schön's arguments are centred on the theory of tacit knowledge that Polanyi developed and published in 1966. Scholars interested in practitioner research often refer to Polanyi's theory by simplifying it to the phrase 'we know more than we can tell' (Polanyi, 1966/2009c, p.4). Through a series of case studies of practice within the professional world Schön proposed a model of 'reflecting-in-practice' (1983, pp.59–69) that situated the researcher as central to the research. This model has since been discussed in relation to design research methodologies, and has been adopted as a methodological approach by many practitioner researchers within art and design, including fashion. In this text, Schön also introduces and discusses some key concepts. They include the refutation of the need for objectivity and an external approach by the researcher (practitioner as researcher) and descriptions of professional practices such as 'problem framing' (contextual frameworks as opposed to literature review). These concepts have helped to define academic rigour in practitioner research and have been accepted in the disciplines of art and design. More recently, Melrose (2005a, 2005b), writing about creative practice in dance, extends this work by suggesting that there is a new breed of expert performance practitioners, expert spectators or signature practitioners, skilled at both academic norms and as practitioners, to whom she attributes a 'difference in habitus' (Melrose, 2005b, p.1). Melrose suggests that research — as theory, practice and transferability — is encapsulated in the expert performer or spectator. This can be extended to practitioner researchers in fashion where, as identified in Chapter One, knowledge transfer has been largely the result of participation that is more akin to performance than literature.

Carole Gray (1998) uses methodology to characterise four generations of practitioner researchers in the visual arts and analyses the key conditions of the evolving practice-led research environment (p.83). An analysis of the commonalities in the methods, contexts and

strategies adopted by art and design research students summarises the contribution made by each of these generations to the establishment of practitioner research within the university environment. The historical development of research for formal higher degrees in the discipline 'define[s] practice-led research, in terms of ontology, epistemology and methodology' (Gray, 1998, p.94) and enables the development of 'sensible recommendations for future students' (Gray, 1998, p.83). Gray has written extensively in this field, continuing to improve definitions and extend understandings of practitioner research in the discipline of art and design. *Visualising research: A guide to the research process in art and design* (Gray & Malins, 2004) remains a seminal text for practice-led research within the discipline.

Biggs and Büchler (2007) suggest that the current debate surrounding the question, 'What constituted research in any subject?' (p.62) has developed in response to the separation of practitioner research from other types of research within the academic environment. The academic debate surrounding research quality and rigour is 'symptomatic of a more general issue of the academicizing of knowledge' (Biggs & Büchler, 2007, p.63). This has consequences for design disciplines such as fashion, where knowledge in practice is claimed as tacit and where 'reflection-in-action [practitioner research] is not generally accepted — even by those who do it — as a legitimate field of *professional* knowing' (Schön, 1983, p.69), although now generally accepted within the academic environment as a rigourous methodology. The practices of writing and publishing are not the traditional methods of transferring this type of knowledge, which by definition is knowledge that cannot be made explicit. More detailed descriptions and definitions of the types of knowledge that exist in fashion will allow practitioner researchers to overcome this difficulty and potentially lead to a higher level of participation by practitioner researchers in publishing papers as a part of the research process.

The debate surrounding the 'academicizing' (Biggs & Büchler, 2007, p.63) of knowledge and the development of appropriate research methodologies also extends to other disciplines in design, including more technical fields such as human computer interaction (HCI), computing science, engineering and industrial design (Cross, 2006). These design disciplines have a closer relationship to science but have faced similar problems to those of early researchers in art and design, and continue to face issues similar to those faced by contemporary practitioner researchers in fashion. One of the key problems has been to avoid the practice of adopting academic culture from other disciplines to the detriment of the development of a culture unique to the emergent discipline of design.

Design practice does indeed have its own strong and appropriate intellectual culture, and that we must avoid swamping our design research with different culture imported from other sciences or the arts. This does not mean that we have to completely ignore these other cultures ... they have much stronger histories of enquiry, scholarship and research than we have in design. We need to draw upon these ... where appropriate ... to be able to demonstrate that standards of rigour in our intellectual culture at best match those of others. (Cross, 2006, p.100)

The parallel between these practices of emulating academic behaviour from more established disciplines such as science is not the only similarity in scholarly debates involving appropriate research methodologies for art and design. Research papers addressing the question of rigour and quality from researchers involved in areas of technological design research, such as computer engineering and industrial design, indicate that academic criticism of the disciplines have also followed a similar pattern. The 'academicizing' of tacit knowledge has proven more problematic, despite utilising research methodologies from other disciplines to gain acceptance.

The adoption of methodologies from other disciplines is not a practice isolated to fashion within the context of developing a discipline. As discussed hitherto, the practice has been well documented within the visual arts (Gray & Malins, 2004; Sullivan, 2005) and design (Cross, 2006; Schön, 1983) but is also common to areas of inquiry such as film studies and feminist studies (Pryse, 2000). In the case of practitioner research, which has developed outside of academic debate surrounding disciplinary, inter-disciplinary and 'trans' disciplinary states, the adoption of an ad hoc system of utilising various research methodologies (whichever seems most appropriate to provide the best outcomes) has meant practitioners are ill equipped to develop disciplinary lines around a uniform methodological approach. The commonality of methodological approach is a core characteristic of a discipline, as previously discussed, but the lack of strict methodological uniformity has also meant that researchers in fashion have been more willing to engage in interdisciplinary research beyond traditional disciplinary boundaries. This is evidenced by emerging research in textiles (smart wearable) and applied design research (sustainable design) where practitioners are more equipped to utilise naturalistic methods of professional practice in the form of reflective practice. The advantages of a lack of rigid methodology have also been identified, in the case of feminist theory, as providing potential opportunities for the discipline in developing 'trans' disciplinary studies (Pryse, 2000), which may also account for the success of fashion as an interdisciplinary area of inquiry. A positive aspect is that a single methodological approach has not been a defining factor in developing disciplinary boundaries for non-practitioner researchers in fashion. This offers a similar opportunity for practitioner researchers, who demonstrate a preference for action research process models and reflective practice as a dominant methodology (Appendix 1), to extend these boundaries in defining more appropriate methods for this type of research.

The success of early practitioner researchers in art and design has been attributed to the effective justification of the quality and rigour that exists in practitioner research through the adoption of academic research methods (Tseëlon, 1991). Gray (1998) marks a key turning point in the debate involving research methodology in art and design by promoting the development

of multi-method approaches to research as a solution. The emergence of practice-led research methodologies in the United Kingdom are attributed to a lack of 'really appropriate methodologies and methods for the visual arts' (p.82) and the paradigm shift that resulted from post-modern philosophies that changed the way we 'relate, communicate and generate knowledge' (p.83). This marks the shift towards the concept that the formalisation of research outcomes can be defined in different ways to satisfy the requirements of academic research for higher degrees. Although this connection is not made explicitly, an increase in the popularity of practice-led research has been attributed to external drivers, such as the RAE and the resulting REF in the United Kingdom (Biggs & Büchler, 2007). Such frameworks are used to determine the quality of research, and have become a significant factor in research design and within the academic environment.

Separation of theory and practice

Alongside the use of NTROs to address the issue of a lack of publication in areas of practitioner research, the formalisation of practice-led methods through documentation of practice is argued as a strategy that will lead to a deeper connection between theory and practice for practitioner researchers (de Freitas, 2002). This approach is representative of a new focus on process-driven models for design research such as action research (Swann, 2002) and design thinking (Cross, 2011). However, as will be discussed here, the over structuring of design practice is more likely to develop into a fixation on design methodologies, in place of current fixation on research methodologies. The lack of research publications by practitioner researchers in these fields is a more pressing issue.

Biggs and Büchler (2007) raise certain concerns within the academic community that pose problems for practitioner researchers, specifically the refutation of the idea that documentation of the process itself is enough to meet the requirement of rigor in academic research. The authors offer the example of the literature review process: in this case suggesting that the premise that 'the process was rigorous, and therefore validates the claims of the outcome' (2007, p.67) does not result in the conclusion that the outcome is rigorous. In other words, the results of a rigorous process cannot automatically be judged to be rigorous in their own right. In relation to practitioner research, this can be compared to a practitioner researcher stating that the methodology is rigorous and therefore the creative work is rigorous in research terms, a claim that appears to be dominant in the literature reviewed here. Conversely, the claim that a lack of rigorous methodology is indicative of research lacking in rigour is also well documented and has prevailed since the earliest examples of criticism of research in art and design. This is supported by the argument that, in terms of practitioner research, the method of research (practice) must demonstrate a connection between the research question (problem) and the research solution (outcome) (Biggs & Büchler, 2007). The appropriateness of the method is judged in its ability to provide the solution not in terms of its rigor as a method alone.



Figure 2.2 Fashion design 'Business as Usual' (Finn, 2008b)

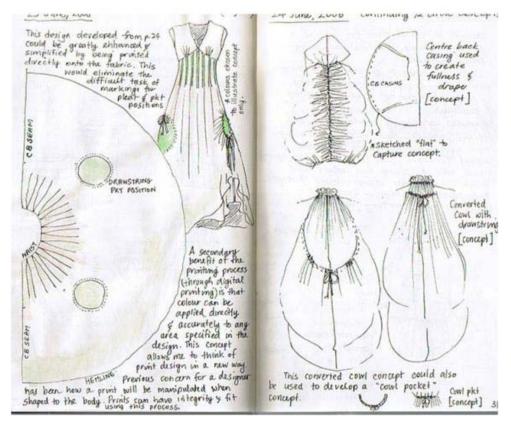


Figure 2.3 Documentation taken from a research diary (Finn, 2008a, pp.30–31)

The repurposing of professional methods for research within the university environment, through reflection-in-action (Schön, 1983, p.69) and active documentation (de Freitas, 2002), is the most realistic strategy for demonstrating critical thinking and developing theory within practitioner research but the issue of communicating research outcomes remains a problem. This type of documentation remains isolated in a physical workbook or diary format rather than in a format that enables this knowledge to be disseminated to a wider audience for the purposes of discussion and debate, such as a digital representation of the research diary as shown in Figure 2.2 and Figure 2.3. The notes that form part of the observation and reflection on the practice are easily interpreted by other researchers in their raw form but the sketches and diagrams, or vignettes, that form part of this method may also have relevance to different aspects of other practice-led research projects. The 'method' here becomes a part of the communicable findings of the research project in the same way that raw data can be useful to other research if it is collected and preserved in an appropriate way.

Biggs and Büchler (2007) also discuss the risk of creating 'fuzzy boundaries' between what research is and what can be claimed as research as a result of the emergence of practitioner research where 'practitioners concluded that the research activity that they were developing in and for their own practice could count as academic research' (p.63). As Miller argues, additional concern for qualitative researchers should be that 'SBR [scientifically based research] indicates a belief in the redemptive nature of a particular kind of scientific knowledge — not knowledge produced by qualitative inquirers, who, it is claimed, produce "too much useless work" (in St.Pierre & Roulston, 2006, p.676). The shift of design education to the university has taken place but research had not been a part of the technical and art college environment. Research has developed within the university environment but the paradigm shift from teaching practical skills to exploring fashion knowledge is still in progress. The divide exists and focusing on expert practice will not help to address the dichotomy between the technical skill of producing fashion and exploring fashion knowledge through practice.

A survey of twenty-five exegeses from practice-led fashion research projects from universities in Australia and New Zealand (Appendix 1) reveals that the dominant methodology for practitioner research in fashion is action based and best characterised as reflective practice. The exegesis should not be confused with the entire dissertation or thesis as it is intended as a contextual supporting document for a larger practice-led research outcome (Barrett, 2004). The design outcomes of these projects are not accessible and the intention is not to reduce a practiceled research project to the exegesis but to identify the primary methodologies adopted by practitioner researchers in fashion. Reflective practice was first proposed as a research methodology by Schön (1983) based on an examination of the practice of methods used by professional practitioners. It is perhaps because the methodology draws on methods that are common to professional practice, and are therefore easily understood by design practitioners, that it has been so widely adopted within fashion. A limitation of adopting reflective practice as the primary methodology is the self-reflective nature of this method, which requires researchers to be internally focused and is aimed at improving individual art or design practice and therefore lacks the ability to make this knowledge available to other researchers. In other words, 'when someone reflects-in-action, he becomes a researcher in the practice context. He is not dependent on the categories of established theory and technique, but constructs a new theory of a unique case' (Schön, 1983, p.68). This basic principle of research in practice as outlined by Schön is often overlooked in discussions of reflective practice in design projects. The focus is often on reflective practice as an appropriate methodology, sometimes extensive explanation of the method itself, and the justification of its use within the context of an individual practice-led project. This leads to a refocusing of practitioner research on the methods of research, as a research process, rather than other potential research outcomes such as object and artefact. The methodological focus has also contributed to a culture of inventing methodology and methodological fixation, as Purcell & Gero describe (1996, p.363).

The difference between submission requirements for practitioner research degrees and those of the traditional awards of the university remains an issue for areas such as design, as it has been interpreted to reflect a difference of research quality rather than a difference in method (Biggs & Buchler, 2007, 2008; Seale, 1999, 2002). The emergence of the newer disciplines of design, art and technology as areas of inquiry on the basis of research and practice was accompanied by the separation of knowledge into the two opposing categories of tacit knowledge and explicit knowledge. There had always been tension between and discussion of knowledge existing as either practical or theoretical. Kant's meaning of practical knowledge aligns with tacit in the manner of '... knowledge one has insofar as one "knows what to do" (Engstrom, 2002, p.50). The classification of knowledge as technical in the sense of 'knowing how' rather than 'knowing that' has been widely discussed in relation to tacit knowing in the sense of knowing how but being unable to articulate this knowledge. More recent examinations of tacit and

explicit knowledge within art and design usually conclude with the dominance of tacit knowledge over explicit knowledge (Polanyi, 1966/2009c, p.7), and the belief that tacit knowledge is more difficult to understand (Collins, 2010, p.7). This reflects the tension between more traditional research that relies on the former and practice-led research that privileges tacit over explicit knowledge in terms of practice and methodology. Polanyi's theory of tacit knowledge emerged in response to the weaknesses of the scientific model in failing to allow for the reliance of the researcher on professional and tacit knowledge in the form of passion and belief (Polanyi, 1966/2009c; Rust, 2004, p.71). The theory of tacit knowledge was of particular interest to the emergent practitioner researcher who was able to draw similarities between the type of knowledge that exists in professional practice (beyond the university) and academic practice within (as scientific inquiry). A key aspect of the theory was the inability of this type of knowledge to be made explicit — a polemic argument for an emergent discipline with no academic history, theory or methodology — and the fundamental difference of knowledge between practitioner rasearchers.

Whatever the case may have been, the use of tacit knowledge claims to position practitioner research within a parallel academic universe, in combination with the adoption of research methodologies from other disciplines, and continues to limit the ability of practitioner researchers in fashion to fully participate in the academic community. There are problems associated with the transference of the use of research methodology from one discipline to another that extend beyond the reliance on methodology as a means of evaluating the quality of research. The method of publication has not emerged as the most effective method of knowledge transfer for fashion practitioners and there is a connection between tacit knowledge claims in art and design practice and the practice of academic writing and publication for practitioner researchers in fashion. Fashion knowledge, from the perspective of the business of fashion, is theorised as tacit by Weller (2007), Entwistle (2009) and Aspers (2006a, 2006b,

2010). However, there is no overarching theory relating to knowledge within fashion *from the perspective of the practitioner*. If there are theories specific to fashion they remain unpublished.

Researchers within visual arts, at the height of this distinct separation, identified the problem in limiting definitions of knowledge within the university system to scientific theories of knowledge. The great artistic and scientific thinkers of the renaissance have been used to provide context around discussion that argues for the continued separation of science from art. For example:

Leonardo [da Vinci] provides us with an excellent model of a 'practitioner researcher', who used visual thinking to consider a wide range of problems in fields as diverse as fluid dynamics, mechanics, anatomy, botany, ballistics, town planning, optics, and so on. His notion of art — 'arte' — meant skill, while that of science — 'scienta' — meant knowledge, and he considered both to be interdependent. (Gray & Malins, 2004, p.93)

The counter argument is that knowledge made explicit through academic writing remains transferrable only within those contexts of knowledge. The writing and recording of a mathematical equation, for example in the case of Einstein's theory of mass energy equivalence, only has relevance for those who are able to read the language of mathematics (Figure 2.4).

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Figure 2.4 Albert Einstein's workbook showing the workings behind his theory E=MC2

Repurposing research methodology from other fields and applying these methods to different research contexts can be problematic if the match is made on the surface rather than as a result of a deep examination of the methodology being proposed. The link between the developments of research methodology within any discipline — as the most rigorous means to discover the types of knowledge prevalent within that discipline — is not often profiled in discussions of the topic. Early discussion of appropriate methodology for arts practice focus on comparison of methods used in other disciplines with the methods of making art (Gray & Malins, 2004) or the practice of design within a professional setting (Schön, 1983). The deeper understanding of the relationship between methodology and knowledge domains is not articulated. It makes sense that these methodologies emerged in order to pursue this type of knowledge but it has also been observed that a particular approach can have an impact on the research outcome in cases of art and design research.

Sociologists tend to highlight the importance of social structure and the collective production. This sociological approach, as indicated, comes with a downside; there is a risk of cutting out the experience and phenomenology of artists and creative workers if the focus is too strong on social structure (Aspers, 2006a, p.754).

A problem with relying on methodologies from other disciplines, such as social science, is that these methodologies are designed to draw out aspects that are the focus of knowledge seeking *within* that discipline. As discussed, disciplinary boundaries are usually defined by methodology because common methodology is characteristic of a discipline (Krishnan, 2009).

There have been some significant developments surrounding knowledge within art and design alongside discussion of literature surrounding the place of research within the university and the wider discussion around academic elitism and hierarchical views of knowledge. A central theme is that the dominant methods used to record and communicate knowledge in professional arenas, such as design, are mainly visual. Specific methods include technical drawing, sketching and modelling (Cross, 2006, pp.92–101), where knowledge exists as a combination of tacit knowledge (Collins, 2010; Entwistle, 2009; Polanyi, 1966/2009c), experiential knowledge (Archer, 1995; de Zeeuw, 2005; Niedderer, 2007a, 2007b; Niedderer & Imani, 2009; Niedderer, Roworth-Stokes, & Rochester, 2007), professional knowledge (Cross, 2006; Schön, 1983), technical knowledge (Polanyi, 1966/2009c; Ropohl, 1997; Schön, 1983) and expert knowledge (Melrose, 2005a, 2005b; Stacey, Eckert, & Wiley, 2002). Despite the current trend in determining research quality, which promotes explicit knowledge in the form of publication as best practice, many scholars continue to focus on comparisons between early methods of recording scientific discoveries that relied on less structured methods to communicate ideas and theories. In some cases these methods included recording findings without the need for written text (Figure 2.5) and in others used a balance between image and text (Figure 2.6). Researchers are somewhat hypocritical in the separation of visual methods as inferior through the use of examples from science to support particular points of view (Gray &

Malins, 2004, p.94; Polanyi, 1966/2009c, p.21). The disconnection between scientific methods and more creative methods could be considered from the perspective of the value of reconnecting the methods of science with contemporary understanding of the separation between theory and practice as it relates to knowledge.

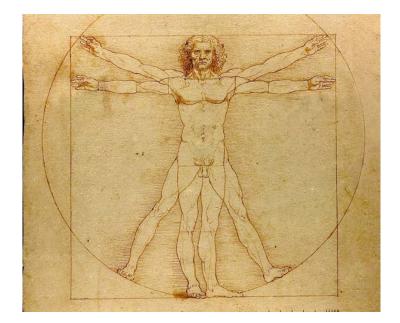


Figure 2.5 Leonard Da Vinci's sketch, referred to as 'Vitruvian Man', records and communicates an observation and theory of anatomical proportions through image alone

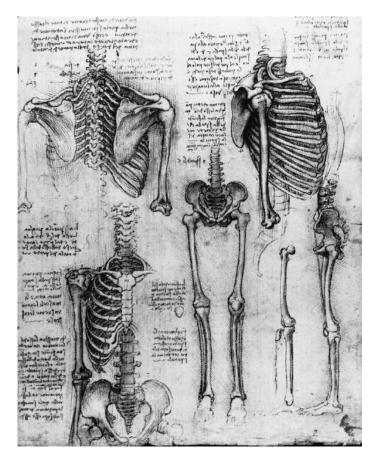


Figure 2.6 Image of Leonardo Da Vinci's Sketch Book showing his method of recording knowledge with a combination of written text and image.

As early as 1946, Polanyi (1946/1964/2009b) identifies a related problem but one that has importance for practitioner researchers in fashion:

... to produce an object by following a precise prescription is a process of manufacture and not the creation of a work of art. And likewise, to acquire new knowledge by a prescribed manipulation is to make a survey and not a discovery. (p.14)

In adopting research methodologies — on an ad hoc basis — the level of deep engagement with the type of knowledge that exists in fashion has been limited. This has led to a situation reflected in the mapping of fashion as a discipline where, although practitioners are able to navigate masters and doctorate research through practice, there is a lack of associated publication of theory developing as a result of practitioner research in fashion. To develop really appropriate methodology requires a clear understanding of knowledge within a discipline, as the two factors cannot be separated in developing quality research outcomes.

Criticism of fashion research

The criticisms of methodology within fashion are informed by the criticism of research within the sciences as lacking in sound methodological framework. Criticism is a vital role of peer review within the university and is a process that relies on evaluating the methodology employed in a particular study as a part of the assessment of the quality of the research presented for publication.⁹ The use of methodology is a very appropriate means by which to determine research quality, providing that the methodology is suitable to the research being undertaken. The acceptance of researchers within fashion has come largely as a result of the logical argument that the use of methodology within one discipline is transferred if the methodology is adopted by another discipline. The missing connection is that the context of

⁹ This is an observation based on my own experience of peer review. Each review has involved completing a comments or feedback form that asks my opinion of the research methodology.

the research, and resultant knowledge paradigm, must be comparable to warrant the effective transference of methodology from one discipline to another. Cross (2011) and Sullivan (2006b) identify that the adoption of methodology cannot be done without the adoption of the associated way of thinking within particular disciplinary boundaries. However, concepts such as tacit and practical knowledge remain the focus and the role of methodology in forming a disciplinary way of looking at a problem is understated.

Hesse-Biber (2010) explains that the appropriation of research methodology from other disciplines, without an explicit understanding of the researcher's own 'lifeworld' (Denzin as cited in Williams, 2000, p.213) can have unseen consequences: '... one might unconsciously follow the dominant paradigm of his or her discipline without a critical assessment of the values and attributes of a particular discipline's paradigmatic view' (Hesse-Biber, 2010, p.30). For practitioners, the pragmatic view is more aligned with the outside world of the fashion industry and is one that is not understood, or valued, within the university environment. This is supported by the view that 'disciplinary knowledge is superior to knowledge produced in the workplace' (Scott, 2004, p.45) as practical or technical knowledge and that:

Practitioners are required to set to one side their own considered and experience based ways of conducting themselves at work because these are partial, incomplete and subjective; by contrast they [technical rationalists] incorporate into their practice scientific knowledge that transcends the local and the particular. Practitioner knowledge is therefore considered to be inferior, incomplete, context dependent, problem solving, contingent, non-generalizable and is judged not by objective criteria but by whether it contributes to the achievement of short term goals and problems encountered in situ. (p.45)

This may seem problematic for practitioners; however, judging by the key criticisms identified by Scott, those that are negative from the perspective of the technical rationalist viewpoint (Schön, 1983, pp.21–49) may be judged otherwise from the perspective of practice. The criticism of being context dependent, for example, is emerging as a strength rather than a

weakness. The identification of the specific context enables transparency rather than a pretended generalisation of the results of a specific study (Williams, 2000).

Practice-led research projects can be described as either problem solving or creative production, where the former addresses a more academic model of research question, problem solving and possible solution (Scrivener, 2000). The creative production project is more concerned with exploration of a practitioner's own practice and findings are more likely to be tacit and embodied in the artefacts produced as a result of the research practice (Scrivener, 2000). In these cases the exegesis, otherwise used to contextualise the work within a practical or theoretical framework, provides 'the description of the creative production process' (Scrivener, 2000, p.7) and benefits from Schön's model of reflective practice (1983). The advantages of practitioner research are generally characterised as the ability for researchers who are practitioners to undertake a period of art or design practice, while considering a particular research question, and reflect on how their research has contributed to the understanding of a particular problem through practice. While all research is to some degree reflective, the art or design practitioner is thought to be more reliant on tacit knowledge in the development of the research practice and, hence, many of these findings have been argued as not able to be made explicit within the confines of the traditional platforms offered by the university. The advantages of practitioner research are weighted towards the researcher and development of an individual art or design practice, and the opportunity for different ways of engaging with research beyond a problem and solution approach (Scrivener, 2000; Hamilton & Jaaniste, 2009). The main disadvantage, and the key criticism directed towards practitioner research, is the limited ability of researchers to articulate and disseminate research findings.

Criticism of early fashion research, with its roots in the museum as costume history or dress history, was focused on the weakness of the methodologies they employed and came from established researchers who utilised the methods of social science and material culture. Prior to this, the inclusion of garment objects in museum collections was largely as a means of providing examples of particular technical processes, such as printing or weaving techniques, or as illustrators of difference, namely the 'exotic cultures' collections of the mid eighteenth century (Taylor, 1998). As recently as the 1930s, the study of costume or dress history was considered beneath the interest of curators.

Charles Gibbs-Smith (1976) confirmed that this negative policy continued into the 1930s. 'Museum officials ... regarded some artistic and allied subjects with a certain suspicion, especially the study of historic costume, which most of the staff thought of only as a sort of rather unholy byproduct [sic] of the textile industry.' This latter term gives the key to this continuing scorn. In the eyes of male museum staff, fashionable dress still only evoked notions of vulgar commerciality and valueless, ephemeral, feminine style. (Taylor, 1998, p.341)

The mid twentieth century saw the development of costume collections, in particular the expansion of the Victoria and Albert Museum collection (1950s), the establishment of The Costume Museum (1963) in the old assembly rooms in Bath Spa, United Kingdom, and The Fashion Museum at Fashion Institute of Technology (1967) in the United States of America.

The use of object-based methodologies, over more traditional methods focused on establishing evidence through written records and accounts, was a specific criticism of emergent fashion researchers. The analysis of objects, in these cases fashionable clothing, textiles and accessories from different periods, has been described as in 'the wholly descriptive "cataloguing" tradition of costume history, which typically charts in minute detail ... the addition or removal of every flounce, pleat, button or bow' (Fine & Leopold, 1993 p.93). The use of such methods to compare changes in the cut and appearance of garments from different time periods has resulted in the description of dress history as being 'hemline histories' (Breward, 1996, p.286) rather than as an area of serious academic research. Criticism of the emerging discipline is interconnected with the gender imbalance between early scholars in the field, who were

predominantly female 'and sometimes gay men' (Taylor, 1998, p.339). While acknowledging that gender has contributed to the early disparagement of fashion research, and may also have contributed to male-dominated fields (such as textiles) being privileged over newer areas of research in fashion, this research is not concerned with further investigation of possible gender issues surrounding fashion research in greater depth. Criticism of methodology is more widespread in the academy and remains an issue for contemporary researchers.

Despite the current collegiality between textiles and fashion, often associated by terms such as 'fashion and textiles', 'clothing and textiles' and 'textiles and apparel', important differences can be attributed to the way in which each emerged as an area of inquiry. Unlike fashion, the discipline of textiles developed as an area of research with scientific and technological foundations — having found its roots in the halls of history, economics and science. As a result of this, the discipline inherited more traditional academic practices than those of early fashion researchers, who developed their research ad hoc. One of the academic norms inherited by textiles researchers was the establishment of academic journals to provide a platform for scholars to publish papers describing their research and for disseminating this work to peers for discussion and debate. Criticism of appropriate methodology remains a common reason for a paper to be rejected through the peer review process: for example, 'inadequate description of the methods' (Pierson, 2004, p.1250) or 'the methodology includes serious flaws' (E. J. Sullivan, 2002, p.1). This is probably the reason behind the use of criticisms of research methodology (as lacking in transparency and rigour) as a disguise for criticism of research being undertaken by this isolated group of academic researchers. The observation that the use of adopted methodology does not automatically translate to academic publication is not being made explicitly within fashion research circles but is identified by practice-led researchers in other areas, including dance. Carter puts this idea quite directly in summarising the state of dance in education, identifying that 'research and publication lagged simply because the

education of dance faculty members had not provided sufficient academic training in research methods and writing skills' (1984, p.297). Melles' (2010) study of the research experiences of fifty design educators similarly identifies the fact that 'many had only been exposed to so-called practice-based honours and masters programs [and] meant that mainstream academic practices such as reviewing the literature, ethics, and a culture of analysis was absent for the majority' (p.759). These observations are very relevant to practitioner researchers in fashion.

Lack of critical and theoretical research contexts

The failure of research in art and design to demonstrate critical and theoretical engagement has also been a key criticism from the wider academic community. Tseëlon is one of the few authors who have published criticism specific to fashion, although it should be made clear that her examination of fashion does not specifically include practice-led research. Her paper 'Fashion research and its discontents' generalises fashion research as 'for the most part data driven and theory free' (Tseëlon, 2001, p.436) characterised by 'excessive use of the experimental method, hypothesis testing, and complex statistics with no obvious theoretical rationale for either the design or the choice of statistic' (2001, p.436). In particular, her criticism of [mis]appropriation of the scientific method has ramifications for the wider debate surrounding the appropriation of methods from other disciplines. The use of methods from more established disciplines, by practitioner researchers, reflects an attempt to obtain a similar seal of approval in respect to a 'real scientific status' (Tseëlon, 2001, p.436.) for nonpractitioner researchers in fashion and could be an issue for practitioner researchers if not consciously addressed. This forms another of the key problems for practitioner researchers in fashion. Tseëlon uses her paper to expand on what she terms 'the main disadvantages that characterise research in fashion studies' and identifies the three main criticisms of the discipline: '(1) Unfruitful appropriation of the natural science method (2) misuse of theory [and] (3) meta-theoretical confusion' (2001, p.436). Tseëlon's criticisms suggest that the

practice of adopting methods from other disciplines may extend to the adoption of theoretical contextualisation from other disciplines as a means of 'academicizing' fashion research. In terms of the debate, the paper is limited by identifying the lack of theoretical framework for fashion research, without any indication of the cause, and offering a critique of fashion research — from an authoritative viewpoint — without acknowledgment of practitioner research in fashion.¹⁰

Concerns about the existence of rigour in terms of both research methodology and the existence of critical and theoretical frameworks are not isolated to fashion research. Collins, Joseph and Bielaczyc also raise this issue in the wider field of design research, stating that it '[design research] is not aimed simply at refining practice. It should also address theoretical questions and issues if it is to be effective ... design research should always have the dual roles of refining both theory and practice' (Collins, Joseph and Bielaczyc, 2004, p.19), while it might be possible that 'some expert practitioners already theorise in a multi-dimensional, multi-schematic and multi-participant modes, rather than in writing-dominant mode' (Melrose, 2005a, p.3). This perspective extends the work of Michael Polanyi, as explained by Miller, in that 'Polanyi studied skilful performance [insisting that it is] more than a mental process; it involves the whole person' (2008, p.941). The premise that theory could exist as embodied in practice, or by association in object, is important for the emergent discipline of fashion, particularly as Tseëlon's paper was published in 2001 and to date there has been no published response to these criticisms from researchers within the discipline, either practitioners or non-practitioners.

¹⁰ Practitioner research is not acknowledged to be either included or excluded from Tseëlon's discussion of the emergent discipline of fashion research. This further supports claims that practitioner research in fashion is invisible within the wider academic community.

Conclusion

This chapter has established several critical issues for practitioner researchers in the context of fashion as an emerging academic discipline. A connection has been made between the migration of art and design from technical colleges to the university environment, the practices of adopting research methodology from other disciplines in order to 'academicize' art and design research, and ongoing criticisms of fashion research from the wider academic community. A common practice in design disciplines, having had stronger connections with the professional practices of industry, has been to emulate the practices of more established disciplines — such as science — in place of an evolutionary process whereby practitioner research methodologies would develop from the methodologies of professional practice. The limited ability of the emerging discipline to establish an 'inner coherence' (Cross, 2006, p.6) has also resulted in a lack of understanding of the type of knowledge that exists in fashion, a fixation on the development of more appropriate research methodology and reliance on tacit knowledge claims to justify a lack of academic behaviour such as journal publications authored by practitioner researchers. Contemporary methods of determining research quality using the measure of publication, and the current academic environment where research funding is increasingly linked to this measure, support the need for a study that examines these aspects of practitioner research.

In conclusion, the practice of adopting research methodologies from other disciplines has come at a cost to practitioner researchers in fashion. A lack of consensus on what constitutes fashion knowledge and different traditions of knowledge transfer within the fashion industry compared with the university environment continue to be the main issues for fashion if practitioner researchers are to be included in the continuing development of the discipline. The current situation, of fitting the research methodologies of the university to the methods, practices and traditions of professional and craft practices, continues to cause problems for practitioner researchers in fashion. The adoption of methods from other disciplines has been fundamental in laying the foundations for disciplinary status for fashion but evidence does not indicate adequate representation of practitioner knowledge or theory. Researchers within fashion whose areas of research are aligned with the methodology of an established discipline benefit from a solid knowledge base and methodological framework from which to develop research questions.

While much scholarly discussion surrounds appropriate methodology for practitioners in art and design, particularly practitioner researchers in fashion, there is a gap in articulation of the type of knowledge that exists in practice, beyond tacit knowledge claims. A clear disciplinary view of the type of practitioner knowledge that exists in fashion should be a priority for researchers in this area. Methodological innovation should occur as a result of a deeper examination of what this knowledge is, beyond the often one-dimensional descriptions of this knowledge as tacit. In the meantime, adopting practice-led methodology as a combination of research paradigm and suitability of individual methods to specific knowledge seeking and research questions would be the best approach.

Practitioner researchers in fashion are at the start of a process of defining the type of knowledge that exists in fashion practice. Existing representations of fashion industry knowledge have yet to be discussed in relation to practitioner knowledge of fashion. Developing a consensus around potentially different practitioner perspectives of fashion knowledge relies on an increased engagement by practitioner researchers with the traditional academic practices of publication as a means of scholarly debate. The limited representation of practitioner perspectives is not isolated to fashion but is common to several areas of design and has been connected to a lack of research training (Melles, 2010) that indicates willingness is not equivalent to ability. Exploring the space between tacit and explicit knowledge will involve exploring the type of knowledge encapsulated in fashion objects and design practice, and finding ways to make this knowledge accessible, transferable and relevant to the research practice of others and potentially to the global fashion industry.

Chapter Three: Publication

Inappropriate methodologies dominate the research landscape in the areas of practitioner research — and continue to contribute to on-going problems for researchers, educators and students within the art and design disciplines as a whole. The need for a clear disciplinary view is also important to the development of the emerging discipline of fashion for other reasons. The previous chapter deals with the development of fashion studies and provides a view of fashion through existing literature that discusses these issues. However, in terms of practitioner research, a review of literature is limited as it can only provide an amalgamation of various theory, thoughts and histories around this development but cannot effectively provide a more objective view of fashion as a discipline. This chapter explores the current state of fashion research through the method of a quantitative mapping of journal publications in the field. The aim is to establish a clear view of the type of research represented within this environment. This mapping also provides primary evidence that contributes to the argument of this research project.

The current state of fashion research can be compared to Barthes' methodology of defining a fashion system based on semiotic analysis in the spirit of *la théories Saussurienne*.¹¹ The metaphor of 'the endless garment' (Barthes, 1968/1983, p.42), often used in discussions of fashion, can be extended to help explain how it is necessary to similarly devise a method by which this 'endless *research* garment' could be 'cut up and divided into significant units so that they can be compared with one another and in this way reconstitute the general signification of fashion' (Barthes, 1968/1983, p.42) research. Much as Barthes asks us to 'think for the moment of the fashion magazine as a machine that makes fashion' (Barthes, 1968/1983,

¹¹ Ferdinand de Saussure is a distinguished linguistic theorist who proposed the original theories of 'semiology as a science of meaning' (Barthes, 2006b, p.11).

p.51) here the machine that makes fashion research is proposed as the academic journal. The method of dividing research into manageable units through the use of publication as a measure also provides an opportunity to identify where there may be gaps in the way in which fashion research is produced by this academic fashion machine. The importance of the academic journal in defining fashion is confirmed by this mapping. The first part of this chapter explains the role of publication in measuring research quality within academia. The methodology and findings form the main body of the chapter and the last section discusses practitioner research in relation to Barthes' fashion system as a way of understanding the relationship between methodology, practice and publication.

Methods of determining research quality

The development of rigorous academic research — despite early claims that it does not exist (Tseëlon, 2001, pp.441–442) — remains a focus for researchers in fashion. Some authors have argued that the adoption of more systematic research methodologies, in an attempt to make fashion 'more academic' (Skjold, 2008, p.11) or to 'evince a real scientific status' (Tseëlon, 2001, p.432), has been aimed at gaining acceptance for fashion in the academy, but this is not reflected in publications as the measure of research success. The changing way in which universities and individual researchers compete for public funding has necessitated the development of quantitative methods of assessing research that had previously been made by subjective (and discipline-specific) determinations (Bence & Oppenheimer, 2004; Cross, 2006, p.6). In 2008, the following definition of research was adopted by the ARC and is identical to that in an Organisation for Economic Cooperation and Development (OECD) report, commonly known as The Frascati Manual, (OECD, 2002, p.30):

Research and experimental development (R&D) comprise creative work undertaken on a systematic basis in order to increase the stock of knowledge, including knowledge of man, culture and society, and the use of this stock of knowledge to devise new applications. (Australian Research Council, 2008, p.4; OECD, 2002, p.30)

The Frascati Manual further refines this definition to categorise three types of research as: basic, applied and experimental development (OECD, 2002, p.30). This is significant for practitioner researchers, as the ARC, rather than adopt the full definitions of this OECD report, has used the more simplistic and less descriptive definition. As a result, ERA indicators developed to provide 'a valid and robust measure of identifying research quality for a discipline' (ARC, 2008b, p.4) — are focused on measures for research in less specific terms. Of the six ERA indicators of research quality (ARC, 2008b, pp.4–6), four directly relate to scholarly journal publications (Table 3.1). Although there are more recent versions of these indicators, that are discussed later in the chapter, the development of the indicators over time relies on understanding the system in place when the most recent performance figures were produced. This will establish the relationship between the assessable research outputs that involved publication over NTROs.

Summary of research quality indicators based on ERA guidelines (ARC, 2008b, pp.4-6)		
1. Ranked outlets	Journals, refereed conference presentations	
2. Citation analysis	Reliant on publication in journals, books etc.	
	which are cited by other authors	
3. Volume and activity analysis	Total research publications by type	
4. HERDC research income	Not directly reliant on publications but the	
	grant process does require a list of previous	
	publications as a part of the application	
5. Esteem	Including editorial roles A and A* ranked	
	journals, contributions to a prestigious work	
	of reference	
6. Applied	Patents and registered designs are included in	
	this category	

Table 3.1 Summary of ERA indicators (ARC, 2008b, pp.4-6)

A study to determine the research output of economics departments in Australia identified that, while 'there is no best way of ascribing cardinal measures to individuals' research output'

(Pomfret and Choon Wang, 2003, p.418) and traditional 'perception based rankings are not held in high esteem due to their subjectivity' (p.420), publications remain 'the starting point for measuring research outputs' (p.420). The practice of evaluating the quality of research by the measure of publications is not isolated to Australia. A similar study of the various methods of research evaluation across twelve different countries, including a survey of the RAE in the United Kingdom in 2001, found 'publications constituted the core of university assessment' (Guena and Martin, 2003, p.282). The success of visual arts practitioners at gaining acceptance within the academy, through the use of acceptable research methodology, has not translated to success in practitioner researchers obtaining research funding (Pomfret & Choon Wang, 2004, p.3). This is a further indication that the methods of determining quality have been exclusive of practitioner research and the assessment of the quality of research remains largely determined by the research publications attributed to scholars within that field (Australian Research Council, 2008, pp.4–6; Geuna & Martin, 2003, p.282; OECD, 2002).

Australian governments and universities traditionally follow trends in education from the United Kingdom (Bourke & Butler, 1998, p.2; Pearson, 1999, p.272; Seddon, Marshall, Campbell, & Roland, 2001, p.2). It is reasonable to assume that methods of defining and evaluating research quality within the current REF in the United Kingdom will continue to inform research assessment in Australia. Recent developments in methods of determining quality in research such as the inclusion of NTROs (Calder, 2010, p.18) and removal of journal ranking in favour of more discipline-specific determinations (Calder, 2010, p.11; ARC, 2009, 2011a) indicate a move towards developing methods to provide a more holistic view. At present, the state of fashion research continues to be defined by measuring research publications in the wake of more adequate methods. For these reasons it is important to understand the current state of research in fashion using the measure of journal publications.

Research mapping

This mapping was divided into four stages. The first stage mapped research publications that focus on fashion from a variety of disciplines and forms the interdisciplinary or external view of fashion within the academy. The second stage mapped papers from the five fashion-specific journals, as identified by the current ERA documentation (ARC, 2011b), to provide an internal view of fashion using the measure of publication. The final stage mapped fashion research from the point of view of recent developments of the ERA guidelines to more adequately accommodate non-traditional outcomes as a quality measure. Disciplinary, interdisciplinary and non-traditional outputs of fashion research reveal a lack of representation for practitioner research — a clear indication that practitioner researchers are having problems disseminating fashion research via these methods of explicit knowledge transfer.

Fashion research is a broad term used to describe a wide range of research from across disciplinary boundaries. Many individual researchers are recognised as fashion researchers from within other disciplines or specialisms, alongside those directly employed within the fashion department of a particular university. Examples include researchers who have developed research careers in fashion following research training within the schools of art history and theory and other disciplines such as business marketing and management. The previous chapter identifies some high-level categories of fashion research but essentially 'disciplines are delimited by means of journal sets' (Morillo, Bordons, & Gómez, 2003, p.1238). For this reason, the development of possible categories of fashion research is based on the ERA 2012 journal list, which identifies five journals as specific to the emerging discipline of fashion (ARC, 2011b). These journals are used to develop a subset of distinct areas of fashion research to provide a framework by which to delimit the field. The aim of this mapping is to evaluate the frequency of publications in each of these areas of research, from

researchers within fashion departments but also from a wide variety of disciplines, and to establish the landscape of fashion research using the method of assessing research publications. The mapping is grouped in five-year intervals to enable comparison between the current state of research publications in the field and the development of different areas of fashion research over time. In addition, a further mapping of non-traditional research outcomes has been used to compare the differences in publications from practitioner researchers and other research within the area. As existing methods of disseminating NTROs are limited, and the method of indexing non-traditional outputs can be most favourably described as under development, the mapping of these outputs has only been possible over the period from 2005 to 2010, demonstrating a 'snapshot view' of these outcomes for the purposes of discussing the effectiveness of publication in communicating research outcomes. The alternative would be to deem NTROs as beyond the scope of this study as there remains no effective method of indexing this type of output beyond standalone efforts by some universities, as will be discussed here.

Journal publications used for Bye's study of research publications in fashion, clothing			
and textiles (Bye, 2010)			
Journal title	Publisher		
Clothing and Textiles Research Journal	Sage		
Journal of Family and Consumer Sciences (formerly	Association for Career and		
Journal of Home Economics)	Technical Education (USA)		
Family and Consumer Sciences Research Journal	American Association of Family		
(formerly Home Economics Research Journal)	and Consumer Sciences		
* All papers published in these journals are not refereed (peer-reviewed)			

Table 3.2 Journal publications based on Bye (2010)

Elizabeth Bye (2010) uses a summary of statistics relating to research publications in discipline-specific journals to support an argument for the need for clothing and textiles researchers to increase their visibility and voice through published research. A similar approach is used here but the focus of the mapping is different. The wider study (Bye, 2010), conducted in the United States of America, examined the journals listed in Table 3.2. The study was widely focused on clothing, fashion and textiles rather than on practitioner research in fashion. The selected journals focused on clothing, textiles and design from the paradigm of home economics, including 'teaching, research and extension articles related to tailoring, general designing, special purpose clothing, machine sewing and sizing with commercial patterns' (Bye, 2010, p.210). There is little reference to the intellectual aspects of fashion and design, which would be more akin to the understanding of fashion. Despite these differences Bye (2010) found that research concerning the design of clothing, textiles and fashion was barely represented in terms of publication. A lack of definition of key terms, as an ongoing problem for the emerging discipline of fashion, limits the usefulness of Bye's data for the purposes of this study. The lack of clear consensus means that there can be different understandings and interpretation of the data depending on individual researchers' understandings of the terms used. 'Design', for example, is ambiguous if applied to a wide area of fashion, textiles and clothing as meaning the same thing.

Genre	Description	Purpose
History of dress	Research that examines fashion	To gain knowledge and develop theories of past society and culture through
	through objects from the	examination of historic fashion objects, in association with supporting design
	historical perspective (existing	documentation and existing records
	garments and accessories)	
Fashion manufacturing and	Research that examines the	To gain knowledge and develop theories of the manufacture and consumption
consumption	manufacturing and consumption	of a society to better understand and generate theories of its culture or
	of fashion garments and	economics; this includes the business and marketing of fashion.
	accessories from the	
	perspective of fashion as a	
	global industry	
Fashion as the 'dressed body'	Aspects of making and wearing	To gain knowledge of and theorise the societal, cultural, psychological and
	fashion, participating in fashion	aesthetic value of 'the dressed body' (interaction between humans and fashion
	as a cultural practice	garments and accessories)
Fashion design and	Practice of designing and	To gain knowledge and theorise the practice of designing and making fashion
construction	making fashion garments and	garments and accessories; to explore the potential of design and make in
	accessories (objects) from the	relation to the social, economic and environmental issues facing contemporary
	perspective of the practitioner	society, or in some cases, to improve a designer's individual design practice

Table 3.3 Areas of fashion research based on discipline-specific journal publications

Table 3.4 Criteria for data collection

Fashion research area (genre) ¹²	Boolean search terms based on key word searching — level 1	Boolean search terms based on key word searching — level 2
Fashion (any relationship)	fashion	
History of dress (historical)	fashion AND history	
Fashion manufacturing and consumption	fashion AND clothing	
(business, industry)	fashion AND manufacturing	
	fashion AND marketing	
	fashion AND business	
Fashion as the 'dressed body'	fashion AND art	
(cultural)		
Fashion design and construction	fashion AND design	fashion AND design AND history
(practitioner)		fashion AND design AND manufacturing

¹² The categories of fashion research are not intended to be mutually exclusive to each other but are proposed as distinct genres based on the criteria outlined here.

The method used for this mapping provides clear descriptions of key words, including 'fashion' and 'design', in an attempt to make the data less ambiguous. A set of search terms is presented in Table 3.3 to provide some structure around the method of data gathering and analysis and to enable repetition and transparency, and demonstrate research rigour. This research mapping is somewhat restricted by the methods of evaluating research quality in an Australian context, particularly by recent developments of the ERA to remove the journal ranking system and to permit the use of non-traditional research outcomes to indicate research quality. These restrictions are noted and an attempt is made to include NTROs but the focus of this mapping has been to determine the extent of fashion research from within the paradigm of published research outputs.

Fashion research

In 2011, ERA made the decision to remove the rankings system from journals, which had formerly been used to allocate a measure of prestige to individual research publications for the purposes of assessing research quality. This was a positive move for researchers in fashion as the most established journal in the discipline (*Fashion Theory*) had previously been ranked C, which in turn meant that, as the highest ranking fashion-specific journal, publications by researchers within the field were also limited to C ranking.¹³ This move provided an opportunity for more discipline-specific panels to develop a list of journals that were to be 'recognised' as scholarly peer-reviewed journals. The most recent ERA Journals List 2012 (ARC, 2011b) identifies five fashion-specific journals:

¹³ While it cannot be disputed that Fashion Theory was given a C ranking, this was widely contested by researchers in fashion who argued that this demonstrated a flaw in the journal ranking system. Their efforts will have contributed to improvements and amendments to the system for evaluation of journal rankings in Australia.

- 1. Fashion Theory: The journal of dress, body and culture (Bloomsbury Publishing)
- Fashion Practice: The journal of design, creative process and the fashion industry (Bloomsbury Publishing)
- 3. *The International Journal of Fashion Design, Technology and Education* (Taylor and Francis Publishers)
- 4. The Journal of Global Fashion Marketing (Taylor and Francis Publishers)
- 5. The Journal of Fashion Marketing and Management (Emerald Group Publishing).

The inclusion of these journals in the ERA list has an extended effect of identifying the main genres of fashion research based on the specific areas of focus for these journals. *The Journal of Global Fashion Marketing* has been excluded from this study as it is not indexed by any of the major database indexes, is not returned by internet library catalogue search engines such as <u>http://worldcat.org</u>, nor available in the library at RMIT, University of Technology Sydney (UTS) or QUT — three universities offering studio-based fashion courses in Australia. The exclusion of other fashion-specific journals, and high-quality journals that are not fashion specific is a direct result of their exclusion from the fashion-specific journals included in the ERA Journals List 2012 (ARC, 2011b). The key search terms that have been used to collect data for this mapping are based on the results of a textual analysis of the journal descriptors to inform the development of keyword search terms that were most relevant. The results of this analysis (Figure 3.1) have provided a list of key words used to define search parameters for the mapping of fashion within fashion journals. These key words formed the basis for the

development of the Boolean search terms (in Table 3.4), which have been used to query databases indices (for research publications) that relate to fashion.

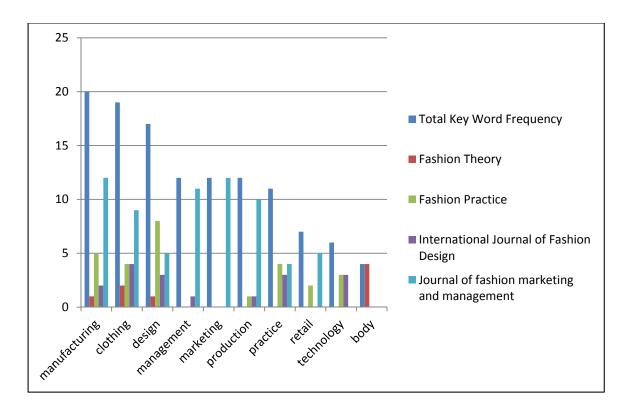


Figure 3.1 Results of textual analysis using NVivo® software

Data source

A research database index is the most reliable source from which to gather reference data for this study. At the outset, several databases were chosen as possible sources and compared with each other in order to decide the best source. The research database index Academic Search Elite (ASE) accessed via QUT Library database (via Ebsco Host) was chosen as it provides the greatest number of peer-reviewed journals in the field: 5000 compared with similar indexes such as ProQuest Research Library (2000) or Project Muse Humanities Collection (300). In addition, ASE is an index aimed at a variety of different disciplines. A second data source was chosen to allow for triangulation of data collection and analysis. The Design and Applied Arts Index (DAAI) is more specifically targeted at researchers from the creative industries, including fashion. The database indexes over 500 journals but is limited to those in the areas

of design and crafts. ¹⁴ DAAI is available via ProQuest via the QUT library website (<u>www.qut.edu.au/library</u>). The mapping has been divided into two levels in order to reflect the two main areas of representation for published fashion research as either fashion specific or from journals outside of the discipline. Level 1 mapping uses keyword searches across all disciplines, while Level 2 is limited to searching fashion-specific journals. Following this mapping of each main area, the results were tabled and compared to develop a view of fashion research from within the emerging discipline, and from beyond disciplinary boundaries to identify interdisciplinary areas of fashion research.

Fashion research represented in non-traditional formats has been delimited by the same keyword search terms applied to databases that aim to provide a searchable index for non-traditional research outcomes. As identified, the mapping of non-traditional outputs is limited by the relatively short time that has elapsed between changes to ERA guidelines that recognise these research outcomes (Calder, 2010, p.18) and has been done to provide an indication of current status of the discipline on this basis. The two main databases chosen for mapping non-traditional research outcomes are ResearchBank, the digital repository for research outputs at RMIT University, and QUT eprints (http://www.eprints.qut.edu.au). Also, UTS has developed a database, UTSePress (http://epress.lib.uts.edu.au), that includes NTROs but these are presented as published exegeses, theses or conference papers. These databases have been chosen over other digital repositories, such as University of Queensland's (UQ) eSpace portal, as while all of these databases include creative works in their research collections only RMIT, UTS and QUT offer undergraduate, postgraduate and research programs in fashion and design that are studio focused.

¹⁴ <u>http://www.csa.com/factsheets/daai-set-c.php</u> provides a clear description of the full set of topics covered by the DAAI.

Data collection

Specific criteria have been established to find published journal papers and avoid the inclusion of unpublished abstracts or conference proceedings, where research findings are not accessible, to ensure that research mapping reflects accurate and objective results. This method also ensures the exclusion of some publications (such as book reviews) that appear in scholarly journals but are not considered research publications. The peer-review process, combined with journals being indexed by reliable database indices, satisfies the requirements for quality publications as those that are both systematic and scholarly. Non-traditional database entries have also been examined to identify outputs, such as fashion shows or gallery exhibitions, to discuss their accessibility within the scope of this mapping. To determine the quantity and genre of research in fashion, and to evaluate the growth and development of published research within the area at selected points in time, all databases have been queried by key word for entries over five-year periods commencing in 1985 and ending in 2010.

The decision to collect data from a series of five-year periods from 1985 (the earliest examples of published research in fashion) to 2010 was informed by the limited number of publications in the field as a whole. A preliminary survey¹⁵ of sample publications, combined with the process of attempting a definition of fashion research, resulted in the development of a number of categories of fashion research and these form the criteria for data collection. Each category has been searched for by key words, or subject terms in the case of the DAAI, as identified in Table 3.4. These terms will remain constant for each data source. The functionality of DAAI also allowed separation of results returned by the key word 'fashion' into publication titles, revealing the significance of *Fashion Theory* in the discipline in terms of overall publications.

¹⁵ The term 'survey' is used in the sense of looking at a situation in a general manner, not in the sense of the process of conducting a survey.

The database indexes selected use different methods to index the publications they list. This has resulted in a possible variance in the method of searching that has been utilised. ASE (ASE) categorises publications by key word and allows keyword searching. The data returned is divided into journal publications, peer-reviewed journal publications and book reviews published in peer-reviewed journals. This allows for a simple distinction between categories when recording results. The Design and Applied Arts index (DAAI) does not allow searching by key words, as words that denote the specific focus and content of a paper, but use the term for any words that appear in the title or abstract. Searching performed via DAAI was therefore based on subject terms that are similar but not necessarily identical to key words in ASE. This may result in a slight variance in results. However, as this mapping seeks to provide an indication of research publication in the field, this variance will be within acceptable parameters.

The addition of keyword search conditions for this mapping (as identified in Table 3.4) has enabled the identification of fashion research from a wide range of disciplines in order to account for interdisciplinary research, a term used to describe research that crosses traditional disciplinary boundaries but have a common relationship to fashion. This has been necessary to delimit results that might otherwise return 'texts which contain the word "fashion" in their titles, but whose primary interest lies in pursuit of another field of study' (Griffiths, 2000, p.74) and thus avoid a common problem for fashion researchers trying to gain a perspective of research publications in the area. The mapping of fashion research provides the disciplinary view of fashion, for, as Bye suggests, 'Visibility of any field is determined by articles published' (Bye, 2010, p.210), but also provides a snapshot of fashion research that exists outside the disciplinary boundaries of the specific fashion journals listed in the ERA journal list (ARC, 2011b).

Results and discussion

The results of each search performed have been recorded in a spreadsheet. The number of publications returned as a result of each keyword search has been recorded next to a description of the date range and search terms. Counting the number of publications that appear in each category has been a priority to establish some form of measure to enable the discussion of the development and nature of published research in the area of fashion design, which in turn is most likely to include practitioner research. The specific subjects of these publications have not been interrogated and are not relevant to this study. The data is displayed in simple bar graphs and comparative bar graphs as a visual reference for the purposes of discussion. A summary of the data collected from this mapping is also included in Appendix 4.

The first objective of mapping journal publications in fashion was to establish an overview of the number of publications that appear in scholarly journals between 1985 and 2010. The data collected via ASE (Figure 3.2) reveals that the total number of publications in peer-reviewed journals for the period 1985–1990 was 27. The amount of publications for the period 2006–2010 was 237. This is an increase of 877 per cent. A search for the same information from the DAAI (Figure 3.3) indicates that there were no publications listed as fashion in the period and that by 2006–2010 there were 95 publications. This suggests an increased interest in fashion from outside the emerging discipline, where the majority of publications have taken place between 2001 and 2010, and supports the reality of the newness of fashion research.

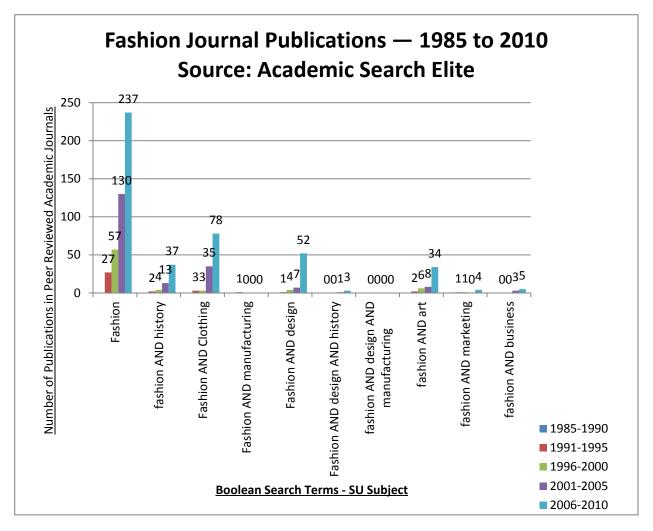


Figure 3.1 Fashion journal publications 1985–2010. Source: ASE

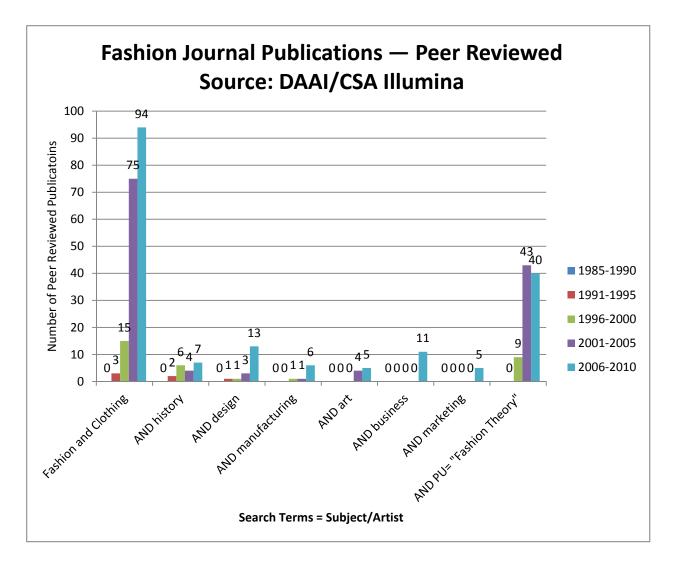


Figure 3.2 Fashion journal publications 1985–2010. Source DAAI

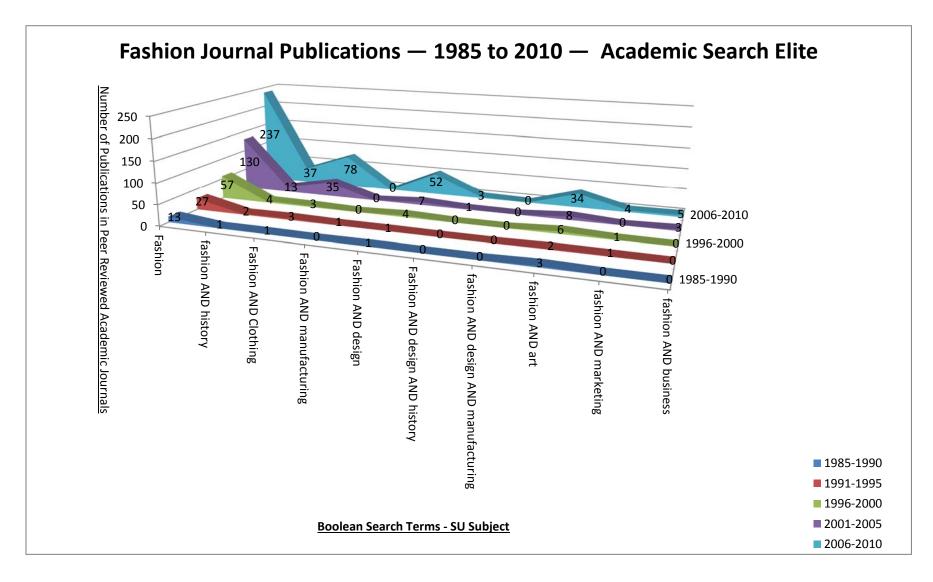


Figure 3.3 Fashion journal publications — comparison. Source: ASE

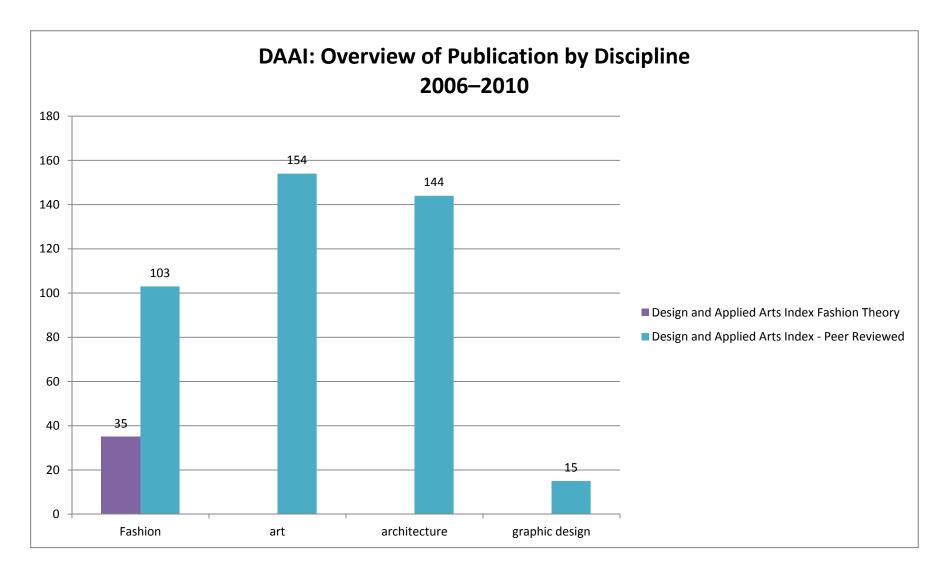


Figure 3. 4 Overview of publications in similar areas of research within the disciplines of art and design. Source: DAAI

A comparative bar chart of publications 1985–2010 (Figure 3.4) shows a predominance of the areas of history and clothing (textiles) from 1985 to 2005, while for the same period all other areas of fashion have less than ten publications: for example fashion design and wearable art (fashion and art) returns nine papers for the period 2001–2010. Of most interest is the absence of research in the areas of fashion manufacturing and fashion design, which returned no publications.

The comparison of data over time (Figure 3.4) also reveals a marked increase in the areas of clothing and design during the period 2001–2010 with approximately 100 per cent growth in 'clothing' between 2006 and 2010 compared with a 400 per cent increase in 'design' within the same period. This is promising for fashion design in terms of publications. This increase and growth in the areas of design and clothing, and design and textiles is mirrored by the increase of publications in the areas of fashion and art (400 per cent between 2006 and 2010). This growth indicates an increase in arts practice that utilises garment as a medium, but remains art rather than fashion. It also supports an argument that the practice of writing is more inherent in the visual arts than in design. The results of this mapping process clearly indicate that the manufacturing (or action) of making fashion as an integral part of fashion design remain unrepresented in scholarly publication in the field. This is reflected in the results for <fashion AND design AND history> indicate a lack of publications that are concerned with the history of the design process as opposed to the outcomes of design.

A final comparative graph (Figure 3.5) concerns the position of fashion publications in relation to other disciplines in art and design for the period 2006–2010. The results include peer-reviewed publications that are indexed by DAAI as an indication of the performance of the

¹⁶ This formatting, of showing text entered into a field for searching, is borrowed from computer programming conventions and is intended to make these terms identifiable from standard grammar.

field in terms of quality, scholarly publications. The data shows that publications in fashion, although not equal in number, are now at least comparable to those in the fields of art and architecture. The area of graphic design has significantly fewer publications than these other disciplines, which may also indicate similar issues from practitioner researchers in this field. The mapping of research publications in the area of fashion supports the claim that there is a lack of published research in the area of fashion design (fashion and design) but has also revealed an increase in these publications over the past five years. This indicates willingness for editors to engage with research in the area. However, the data also demonstrates a relative absence of publications that address design from the perspective of manufacturing (or make) in either contemporary or historical terms, supporting the necessity for the development of methods that support publications through an academic understanding of practitioner knowledge and a goal of enabling this knowledge to be effectively communicated to other researchers.

Non-traditional research outputs

Although this thesis discusses the continuing primacy of publication as the main factor in defining fashion as a discipline, and as a method of gaining currency, there have been moves over the past decade to more formally recognise other forms of research that do not result in publication. In Australia, the ERA specifically identifies these as non-traditional research outcomes, where non-traditional is described as a curated or exhibited event, live performance, original creative work or recorded rendered work (ARC, 2011c, p.229). This change has been the result of the ERA consultation process whereby the ARC seeks feedback and recommendations from leading Australian universities to continuously improve the ERA methodology (ARC, 2009). This has been a significant change from previous publications produced by ERA, such as the ERA guidelines to indicator descriptors (Australian Research Council, 2008a), which makes no mention of these NTROs. The ERA national report for 2010

(ARC, 2011a) confirms that of all research outputs, non-traditional outputs make a very minor contribution:

The majority of the outputs submitted were journal articles (62%) followed by conference papers (22%). Non-traditional research outputs (NTRO) constituted approximately four per cent (4%) of the outputs submitted to ERA. (ARC, 2011a, p.16)

This is somewhat understandable given the short time between the recognition of nontraditional outputs and the evaluation exercise. Further to the minimal amount of total nontraditional outputs, the same report reveals 0.02 per cent of total outputs in humanities and creative arts and no NTROs in the specific category relating to textiles and fashion design (Field of Research Code: 120306).¹⁷ There were also no NTROs in art or design categories such as visual arts and crafts (1905) or art criticism and theory (1901). A summary of the incidents of NTROs being submitted for ERA evaluation appears at Appendix 5. These figures will hopefully be approved in line with the new ERA recommendations for non-practitioner research being developed at the time this research was undertaken.

To complete the mapping of fashion, in consideration of these more recent developments in the ERA, a search has been conducted to attempt to determine the extent of non-traditional research outcomes that might exist and involve fashion research. This method of disseminating research is relatively new, thus the results presented here are at best exploratory. In Australia, databases that are open to public access are used to make publications available online. At QUT the ePrints is an example of this; similarly, RMIT has ResearchBank. A keyword search of ResearchBank for outputs related to fashion reveals that, of 336 outputs, only 8 are nontraditional. Similarly, a search of QUT ePrints returns 36 fashion research outcomes, of which

¹⁷ Under ERA guidelines, research is assessed within disciplinary categories that are identified by FoR codes of 2, 4 or 6 digits . For fashion and textiles the code is 12, denoting Built Environment and Design; 03, denoting Design Practice and Management; and 06, denoting Textile and Fashion Design. Hence, 120306. Fashion Theory is represented by a different code for Design History and Theory as 120301.

6 are identified as creative works. The results demonstrate a move towards recording outputs for fashion that are non-traditional and in turn may be reflected in the 2015 round of evaluation by ERA. While both these databases include functionality to upload scholarly publications as well as NTROs, such as described by the ARC, there remains a majority for published research, while non-traditional outputs are less likely to be peer reviewed or available to an international audience. Limits are also imposed by the physical nature of outputs in the form of object or artefact and the temporal nature of exhibition that restricts the ease with which these outputs can be disseminated beyond some form of publication. Therefore, it is unlikely that nontraditional outputs in fashion will be able to meet ERA research evaluation principles by becoming 'internationally recognised' (ARC, 2008b, p.5) or being classified as 'at or above world standard' (ARC, 2008b, p.5).¹⁸

Publications and explicit knowledge

The exclusive use of publication as a means of evaluating research within any field of study privileges the type of knowledge best suited to the methods for recording and transferring explicit knowledge, in this case through journal publications. Practitioner research — while becoming more accepted as rigorous forms of research — is more likely to produce non-traditional research outcomes that remain limited in terms of disseminating research findings beyond the reach of an exhibition of works alongside a written exegesis. Although there is future potential for alternative mechanisms of disseminating non-traditional research outcomes, there is no cohesive plan to advance these systems. As a result, the literature review (or in some cases contextual review) will remain a key aspect of the methodology of practice-led research in fashion until such time as effective methods exist to record and transfer

¹⁸ While systems of evaluating NTROs for the purposes of research evaluation exercises are continuing to develop, and there are outstanding fashion research outcomes that are put forward as 'at or above world standard', the methods of ranking the quality and quantity of NTROs, and evaluating their impact, are not yet equivalent to the methods used to evaluate publications

practitioner knowledge. The method of contextual review, in combination with literature review, is based on the idea of examining existing research within a field to find a gap in existing knowledge. This becomes problematic for practitioner researchers if the objects of practitioner research are inaccessible. The lack of published research within fashion, which represents the research of practitioners, is a further problem as it is resulting in a onedimensional view of fashion, as an area of research, and as an emerging discipline devoid of practitioner perspectives.

Practitioner knowledge that can be made explicit does appear in the form of non-research publications on the topic of fashion. This chapter would not be complete without mention of examples that demonstrate the existence of practitioner knowledge within fashion as explicit published knowledge. In cases where professional practice is taught to students within a formal system of education, such as technical colleges or universities, the publication of explicit knowledge has focused on instructional texts such as design (Jenkyn Jones, 2005), patternmaking (Joseph Armstrong, 2006) and fashion drawing (Riegelman, 2006), and are chiefly instructional and intended to be used as a reference to improve practice or reinforce skills that have been demonstrated in a studio environment. In other words, these publications have emerged within the skills-based education paradigm of fashion design prior to the move to a university environment. Although they could be considered academic, they do not warrant further discussion here as this type of publication does not deal specifically with fashion research and would not be considered an indication of practitioner research in fashion under the ERA guidelines. However, they do have relevance for the discussion of practitioner knowledge in the area of fashion and are discussed in Chapter Five.

The role of publication in developing a discipline

The use of publication as a key measure of research success poses additional problems for practitioner researchers beyond the obvious problem of formats for dissemination of research findings that provide inadequate competition for the method of journal publication. Polanyi suggests, albeit in a different context, that the end result or the intended outcome of research has a tacit and powerful effect (all the more so because it may be subconscious action) on selecting the methods (the means) used to achieve these ends. The dominance of publication as the main measure of research success determines that the methods of training and initiating new researchers will focus on producing the most desirable outcome in these terms. It is reasonable to conclude that alternative methodologies that focus on practitioner research and the development of non-traditional research outcomes, despite having gained some acceptance, are limited when measured by publications. The connection has been made, to some degree, in the rhetoric surrounding knowledge in practice as tacit and unable to be communicated through publication; however, the results would suggest that there is no potential for tacit knowledge to be effectively communicated as a part of practitioner research via alternative methods.

In his study of academic life, Becher (1989) identifies publication as playing the pivotal role in shaping not only the state of a discipline but also the positioning of individuals within the academic society or culture to which they belong: institutionally, nationally and internationally. There can be no argument about the importance of publication to researchers. The most hallowed goal of quality scholarship is to record concepts, observations and philosophies for future scholars to acknowledge, read and reflect on — the main aim being to build on an existing body of knowledge. The role of publication is not singular — to allow the author to present theories or concepts as in the original monastic sense of the thesis. Publication has transformed to have several important meanings: acceptance from an important peer group, acknowledgment of our ability to engage with the work of others (citation) and acquisition of status within the 'academic tribe' (Becher, 1989).

Aspirations of transparency and rigour in research remain important to scholars who use nontraditional research methods, and increasingly non-traditional methods, of recording and disseminating research findings. However, while technology and opinion of practitioner research have improved, the practices of writing and publication have struggled to keep pace. Ironically, knowledge of academic practices is passed on as tacit understanding gained through participation. For this reason, changes are slow and limited by a generational system of passing on cultural knowledge of research. This knowledge is different within each discipline and largely informs research methodology. The necessity to observe long-held traditions, notwithstanding accepted research that demonstrates the potentials and rigour of alternative forms of research and practice, is proving difficult to overcome. These traditions define what it is to be an academic and determine a set of behaviours and expected outcomes that place high value on scholarly writing and publication.

Methods of writing and publication are suited to recording and transferring explicit knowledge. This has long been raised as an important issue for scholars from emergent disciplines, including architecture, visual arts and design, where traditional forms of knowledge transfer have been employed and where different forms of knowledge, in particular tacit knowledge, have a more prominent role in contributing to a successful research outcome. The idea that tacit knowledge is limited to areas of practitioner research is equally as misleading as the premise that practitioner researchers are unable to engage with publication. Polanyi (1964/2009), trained as a scientist, argued that the language of science allows knowledge to be recorded in a way that can be read by other scientists and replicated but that scientists should not discount the role of tacit knowledge in the scientific experiment as discussed in Chapter Two. There

must be a balance between practitioner knowledge that is tacit and knowledge that can be communicated in explicit formats.

From the mapping of publications we can identify which areas of fashion are being well represented and identify that there is a lack of representation from areas of fashion where these other methods of tacit knowledge transfer may play a more prominent role. This demonstrates the limitations of journal publication to adequately represent the discipline. The problem revealed by the mapping is that there are not adequate methods available for practitioners to disseminate their research beyond the method of publication in journals. Alternative ways of representing practitioner knowledge within fashion can only be developed by exploring the type of knowledge that exists in practice and devising ways of communicating this knowledge that can be as accessible as publication. One solution may be to explore methodology as a means of encouraging practitioners to develop research outcomes that can be published; another is to develop alternative methods of publication equivalent to the medium of the journal. An additional consideration is that opportunities for researchers to publish have been steadily increasing with the addition of digital formats that effectively mean that existing knowledge is exhaustive — impossible to digest in an individual lifetime.

The attachment of a level of prestige to the publisher of research papers is entrenched in academic communities and has proven challenging for individual researchers in fashion studies who have fought for acceptance within this community. This section identifies that the lack of representation of practitioner research in the area of fashion, which is clearly evident in this mapping, is also significant because of the role publication plays in defining a discipline. Inadvertently, the success of researchers in costume history and fashion studies has resulted in the discipline of fashion being devised, or defined, with the exclusion of practitioner research in the field. Therefore, the problem of a lack of visibility in terms of the wider academy is

secondary to what is arguably a more pressing problem of a lack of visibility for fashion researchers within their own emergent discipline.

The writing of Efrat Tseëlon, a well-published writer and critic of fashion studies since her PhD in the 1990s, supports this claim that publication has played a role, albeit unforseen, in creating a view of fashion as an emerging discipline that largely excludes practitioner research. Tseëlon's (2001, 2010) work has been previously discussed here in the context of her criticisms of the discipline as lacking methodology and theory but which excludes practitioner research. In deference to her standing as a well-known fashion researcher, and to provide a more comprehensive image of her viewpoint, a review of her more recent work reveals that practitioner research, although desirable and an aim of the newly launched journal of which she is editor, *Critical studies in fashion and beauty* (published by Intellect), is still classed as secondary to more published areas of fashion research. The most recent paper (Tseëlon, 2010) is confusing. The journal claims to be seeking submissions from a wide variety of different areas of fashion research, yet the 'outline of a fashion studies project', and Tseëlon's descriptions of the characteristics of quality fashion research, continue to exclude practitioner research. The work of practitioners is seen as worthy of analysis and discussion by others, as self-evident in her own writing of the paper. None of the designed objects discussed in the journal article have been properly cited or referenced. This is indicative of a culture in fashion research that respects fashion publication over fashion practice and, to a large degree, sees the object-based outcomes associated with practitioner research as illustrations rather than research outcomes, which are not worth citing in an academic tradition.

Fashion theory versus fashion practice

A recent conference on the future of fashion studies, held in 2009, the aim of which was 'to discuss the methodologies and research agendas of the growing area of fashion studies and

possible future opportunities for collaboration' (McNeil, 2010, p.105) seems to have excluded representation from practitioner researchers. Part of the reason for this can be largely attributed to the important role that publication plays in defining research within a discipline. Peter McNeil (2010) describes in *Fashion Theory*, in the context of his review of this conference, the state of fashion studies in Australia:

Although dress studies in Australia had got off to a good start in the late 1980s, the retirement of [early Australian fashion academics] Manyard and Carter and the concentration of fashion studies within design schools without a history of research activity commensurate with the Humanities did not point to a large critical mass of research based endeavour. (McNeil, 2010, p.108)

McNeil's comments reflect a sentiment that real research, such as that in the humanities, is not happening within 'design schools without a history of research activity' (2010, p.108). By this, and there should be no suggestion that McNeil's statement be taken out of context, a conclusion can be drawn that he means in universities such as UTS, where he holds a post in Australia, and similarly QUT in Brisbane and Fashion and Textiles at RMIT in Melbourne¹⁹ or any the newer universities that developed from the trade and technical colleges around the 1990s:

The organizers noted that 'Notwithstanding its inter-disciplinarity, the study of fashion as an academic subject remains weak, particularly in universities.' By 'weak' they cited the standing of the field in research terms [publication].²⁰ (McNeil, 2010, p.106)

Throughout the report a point is made about the 'interdisciplinarity' of fashion. This is a view of fashion studies that is reflected by publications in the field, yet research that crosses the boundary of collaboration between fashion practitioners and fashion theorists or fashion

¹⁹ Fashion studies are divided at RMIT, which is explained by the development of the university from several different colleges and campuses. RMIT Fashion and Textiles at Brunswick evolved from the technical college, while Fashion at the city campus is a part of the School of Architecture and Design.

²⁰ It is very important that McNeil's comments about the lack of a critical mass of research in design compared with humanities is not interpreted as his own personal opinion. Anyone interested in McNeil's standpoint on any issue should read his report in its entirety.

historians is non-existent by comparison. Fashion studies are considered interdisciplinary before they have arrived at a disciplinary state. The work of practitioners is often included and discussed, a case in point by Tseëlon, but rarely are practitioners included as co-authors or contributors. In most cases, the practitioners' work is inadequately cited or referenced. This appears to be a system developed in which practitioner research is 'written up' by those who are experts at writing. It would be folly to assume that the problem would be solved if all practitioners could write, and this is not the suggestion, but it would be interesting to find out if practitioners would write more about their research if their training provided the necessary skills to engage with the medium.

Other well-known and respected fashion researchers share a similar view of a lack of 'real research' within the field. Elizabeth Wilson lamented that she held

... some concerns about the current uses of theory, which had become increasingly eclectic and somewhat of a 'magpie' approach ... [and among other things that] To return to the linguistic philosophy of the 1970s was a potentially tedious turn. (as cited in McNeil, 2010, p.106)

This observation raises a relevant point that the adoption of methodologies from other disciplines necessitates the adoption of more than a means with which to demonstrate rigour. The methodological 'goodie bag' comes with free theoretical and conceptual approaches, and in addition, it appears, a generational lack of understanding of methodology, theory and concepts are now revealing themselves as Wilson, among others discussed here, have observed. The model of rigour that seems to dominate the publication process, the use of theory and methodology to gain acceptance within the community, has emerged as a problem. This is identified by Susan Melrose (2005b), who has demonstrated great insight based on her own experiences as a practitioner in developing research alongside her roles as dancer and choreographer. As she has suggested in her discussion of publication as an academic practice:

... the expert practitioner researcher will realise, soon enough, which mode of undertaking is more resource-efficient; more mobile, easier to own, as intellectual property; more likely to be identified by peers as authoritative. (Melrose, 2005b, p.3)

It is not difficult to propose that the use of methodology and theory is likely to become a streamlined practice to overcome barriers to research publication. On the positive side, the end may justify the means if the result is a richer source of published practitioner research that, in turn, might see an increase in the body of knowledge of practitioner research, which constitutes knowledge building within the emerging discipline as a whole, or a continued use of theory to produce research 'Musak' (McNeil, 2010, p.106) that Wilson claims is the current order.

The suggestion of 'Musak' likens the way in which 'nice music' is devolved into its base chords (or simplified to a basic level) so that a melody is recognisable but bears a loose connection with the original piece of work. From this perspective, the metaphor is used to describe theory as being used by many researchers in fashion to give their work the basic characteristics of research but to develop research that is not as meaningful as it should be. This point is made here as another example of the important role of publication in the development of fashion as a discipline but is be discussed later in this thesis in regard to other types of knowledge in fashion.

The discussion reported on by McNeil (2010), from the perspective of this study of knowledge in fashion, reflects some important concepts about the future of fashion as an emerging discipline, but mainly it outlines a view of fashion within the academy as existing sans practitioners. This is further supported by writings on fashion studies, including Tseëlon (2010, 2001), Breward (2008) and Griffiths (2000). The mapping of the emergent discipline also supports a view of fashion as being devoid of practitioner research and the associated practitioner perspectives on issues for the discipline. Practitioner researchers, or actual designers, remain, for all intents and purposes, unrepresented through publication.

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Conclusion

A mapping of journal publications, which are used to determine research quality across all disciplines, provides the only potentially objective view of fashion research within the academy. The discussion of fashion research, especially practitioner research, has been surrounded by emotive discussions focused on justifying practitioner research, methodologies and knowledge as different to other types of knowledge. These lines of inquiry have relevance to practitioner research in the emerging discipline but there is little evidence of practitioner research beyond exhibited artefacts as non-traditional research outcomes, conducted as a part of postgraduate degrees in fashion.

The lack of publications authored by practitioner researchers in fashion is problematic for the development of the emerging discipline of fashion as a whole. The method of journal publication is inadequate in determining the landscape of fashion research as it supports a twodimensional view. The important role that publication plays in the establishment of a discipline, and in the socialisation of individual researchers, has a significant influence on how research is developed within the area of fashion. For this reason it is important to explore methods to overcome possible barriers to publication, or alternative forms of disseminating non-traditional research outcomes, so that the discipline can continue to develop in an appropriate way. The acceptance of non-traditional research outcomes and alternative research methodologies has been a positive outcome for practitioner researchers in art and design but, unless there are effective means of recording and communicating knowledge that are comparable to publication, the positive effects are limited. There are only three possible outcomes given the current state of research within the area of fashion:

1. Practitioners could discontinue pursuing research in the area of fashion.

- 2. Practitioner researchers in fashion could explore methodology that promotes writing and publication as a part of the research process. This has been developing within some areas of practitioner research and is becoming a part of research training.
- 3. Alternative methods of recording and communicating research, which can compete with the method of publication, are developed and made a priority by the wider community of practitioner researchers within the art and design disciplines.

The majority of research published in journals is not authored by practitioners and is interdisciplinary in nature. Publications in fashion that are related to fashion practice are focused on the technical aspects of how to make fashion and clothing, and have been developed primarily as teaching materials for use in technical training. As in other fields, the development of these texts and the assimilation of knowledge they contain is instructional knowledge and lacks the spontaneity and realism of knowledge transfer in action. As Polanyi believed, to exclude the tacit is to lack the passion that is an essential part of all research (Polanyi, 1966/2009c, p.21) — whether that of the scientist or the artist or the designer. Other types of knowledge exist in fashion, and potentially other methods of recording and transferring knowledge, but in order for these strategies to be advanced there needs to be some consensus on the type of knowledge that exists in practice in order to develop more appropriate methods for practice-led research in fashion. Chapters Five and Six focus on the types of knowledge that exist in fashion practice, within the context of knowledge proposed by authors including Polanyi (1966/2009c), Schön (1983), Sullivan (2005) and Cross (2006), and present a model of practitioner knowledge.

Chapter Four: Fashion Knowledge

s seen in the previous chapters, fashion knowledge has been the topic of several studies from the perspectives of global knowledge flows in economics (Aspers, 2006a), business (Entwistle, 2009) and production systems (Weller, 2004, 2007) but the knowledge of fashion design, specifically the way designers are able to design *fashion*,²¹ is still thought to be largely tacit knowledge. Although fashion garments are recognised as important artefacts within museum studies, and within designer's archives as reference pieces, their value as a means of recording and transferring fashion knowledge, in terms of design practice, has been undervalued. The contribution of this thesis is to identify that there are layers of fashion knowledge that can be recorded, stored and transferred through fashion objects. As early as the 1970s it has been observed that

... few contributions have been made to a theoretical understanding of the ways in which the artifact explicitly implements, expresses, and documents a particular way of life. In short, museums have paid relatively little attention to developing a discipline of artifact study. (McClung Fleming 1974, p.9)

Since then, researchers have shared similar views of the value of objects in the study of fashion (Andrade, 2004a, 2004b; Steele, 1998) and this has been a topic of discussion in other areas of art and design (Buckland, 1997; Latham, 2012; Miller, 2010; Svensson, 2008; Scrivener, 2002). However, practitioner researchers in fashion, although presenting research outcomes that exist as fashion objects, have not yet developed a consensus or framework surrounding the type of knowledge encapsulated within garment objects. The discussion of practitioner knowledge in fashion as tacit knowledge fails to form a strong connection between the fashion

²¹ Fashion is not discussed here from the perspective of the process of design through process models (like 'design thinking' or how fashion designers explain their own creative process in 'fashion thinking', 'fashion speaks', but rather the tacit aspects of designing *fashion* rather than designing products or garments which have been discussed in other studies.

object as a research outcome and the tacit knowledge that exists within the practice (methodology) used to develop these outcomes. As a consequence, the development of suitable methods that can be applied to the discovery of this knowledge has stalled.

The focus of this chapter is an examination of a number of couture fashion garments, sourced from museum collections in the United Kingdom, Australia and New Zealand. The method of object analysis has been used to explore the potential for practitioner knowledge to be encapsulate (recorded and communicated) through garment objects. The method is also analysed in relation to the advantages that an object-focused methodology may have for practitioner research as opposed to practice-led methodologies more common in fashion and other areas of research within the disciplines of art and design. The focus of knowledge as existing in practice has formed a view of practitioner knowledge in fashion as expertise, talent and gut instinct, rather than having the potential of becoming codified knowledge that can be recorded and transferred through fashioned objects. The aim of this chapter is to demonstrate that there are different forms of knowledge, relevant to practitioners, encapsulated in objects. This knowledge takes the form of technical knowledge, expert knowledge and tacit fashion knowledge. Some of this knowledge can be made explicit, some can be codified and other knowledge, although tacit, may be transferred through participation and the action of design practice. There are various ways of interpreting this knowledge that are reliant on the life-world of the researcher (Denzin in Williams, 2000, p.213). In this sense, the argument that fashion knowledge is contextual (Aspers, 2006) is supported and expanded on in relation to practitioner knowledge in fashion. The advantages of object analysis, as an object-based methodology as opposed to practice-led methodologies, offers practitioner researchers the opportunity to adopt a multi-method approach that considers the knowledge encapsulated in object alongside the tacit knowledge that has been argued as existing in practice.

The chapter is structured as follows. The first section summarises the main argument surrounding the ability of object to encapsulate practitioner knowledge within art and design. Practitioner knowledge in fashion is discussed within the context of the development and use of object-based methodology within the area of museum studies. Section two reflects on the practice of object analysis and evaluates the potential of the method for fashion design research by practice. An existing study of a dress designed by The House of Louise Boulanger (Andrade, 2004), which draws on this method, is re-examined from the practitioner perspective to discuss the use of object analysis for practitioner researchers in fashion. The discussion focuses on summarising the different types of knowledge that engage through the use of the method within different contexts of knowledge. Section three extends these findings to propose a framework for practitioner fashion knowledge in fashion and to discuss the role of fashion objects in recording and transferring tacit knowledge. The observation is made that combining an objectcentred approach with existing practice-led methodologies has advantages for practitioner researchers. The ability for objects to encapsulate practitioner knowledge, in the historical sense and in the sense of non-traditional research outcomes that are object based, is discussed in the final part of this chapter, which includes possible limitations of the method of object analysis. The potential the method has to contribute to building core research skills within the emergent area of practitioner research in fashion, in providing a sound framework from which to draw out knowledge that would otherwise remain tacit, is outweighed by possible limitations of the method.

Object-based methodology provides a means of analysing objects to extrapolate knowledge that may be thought to be tacit but that can be explained, albeit in a way that is more involved than might be necessary to communicate this knowledge between expert practitioners. This does not assume that there remains tacit knowledge that cannot be explained. The aim of practitioner research is not to make tacit knowledge within object explicit by trying to explain what cannot be told but to find more accessible ways of transferring this knowledge through object. The re-examination of the Louiseboulanger²² dress demonstrates that it is possible to discuss research of fashion objects, through image and text, but it is also possible to gain practitioner knowledge of the object without physical knowledge of the dress itself. In the area of fashion design research, and in practice within the fashion industry, tacit knowledge of *fashion* is also possible without this physicality. In both cases, however, the experience of interacting with the practice and action of *fashion* — in this case *fashion* design — affects the level of understanding that is possible through the examination of fashion objects.

The method of object analysis

McClung Fleming (1974), Prown (1980, 1982) and Steele (1998) outline and propose the usefulness of examining objects themselves as a source of information and the methodology developed from research practice rather than from existing theory. Taylor (1998) and Andrade (2004) evaluate the method of object analysis within academic debate surrounding the area of dress history. Andrade (2004) uses object analysis in a case study conducted as a part of her Master's thesis at Southampton University. This methodology, although developed for the study of artefacts or objects, especially those such as fashion garments that had previously been thought to be limited to being examples of object 'too trivial or ephemeral to save' (Steele, 1998, p.333), has proven very successful in revealing knowledge that would otherwise have remained unknown. The model for analysis that emerged, first published in its entirety for fashion objects by Valerie Steele (1998), provide a structured approach that could be replicated and applied to different cases. The method can be summarised as a three-stage process divided

²² Andrade uses Louiseboulanger to denote the House of Louise Boulanger as a brand and Louise Boulanger to denote the designer herself. This practice is continued here.

by the type of knowledge that can be expected to result from each stage. Figure 4.1 is a diagrammatic representation of the method.

The first stage of object analysis involves the careful documentation of what is observable, measurable and recordable from an examination of the garment. The aim of this stage is to record observations able to be made about the physicality of the object and could include the name of the designer or the company that produced the object, the fabrication of a garment based on the documentation that can be found in the form of a care label and the country where the object was manufactured. This stage may also include identification of the construction methods that were used, particular design features of the object and factual information such as its size and colour. The findings from this stage should require no interpretation and could essentially be listed objectively by a researcher, regardless of their experience or knowledge of design.

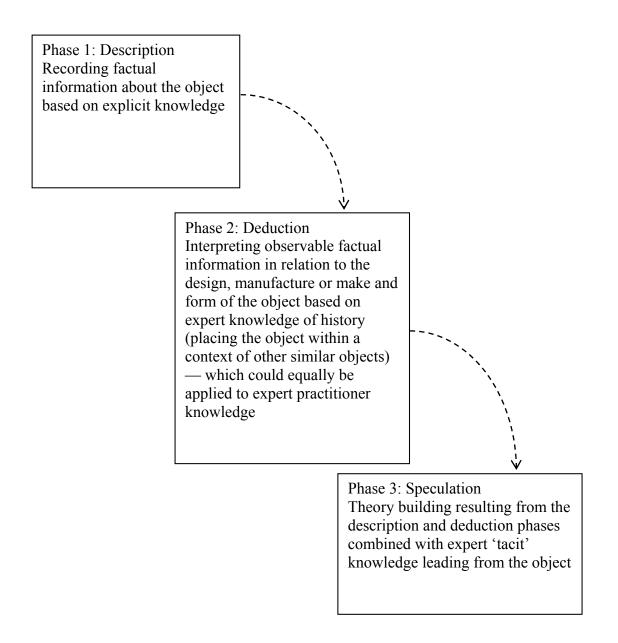


Figure 4.1 Diagrammatic representation of object analysis based on McClung Fleming (1974), Prown (1980, 1982), Steele(1998), Taylor (1998) and Andrade (2004)

Phase two of the process allows for educated assumptions to be made about the facts of the object. Although subjective, these assumptions are based on the researcher's skills and experience (or on the evidence or advice of those with the relevant knowledge or expertise in the area of design). The present framework for this methodology relies on the expert knowledge of the historian but, applied to practitioner research, this expert knowledge would focus on practitioner knowledge. According to Collins, this is an area where knowledge can best be described as 'specialist tacit knowledge' (2010, p.60). In terms of practitioner research in

fashion, this expert knowledge should be based on personal experience gained from a period of employment within the fashion industry, knowledge of the design and make of fashion garments, and tacit *fashion* knowledge. This type of knowledge is not exclusive to the practitioner and there are various levels of expert practitioner knowledge informed by the experience of the individual researcher.²³

The findings from phase two of object analysis are usually linked with some key observations that results from the close examination of the object combined with the researcher's experience to allow the observer to deduce a case. In terms of current usage, this case would involve observations of the fabrication, method of construction, silhouette or styling (detailing) that, when compared to other objects of the same or similar type, enable the deduction of a historical case. For example, the observation that a particular brocade fabric is common to garments made in France in the 1930s allows the garment to be placed within a time period, and enables further comparison to other garments from the same period. Such an observation would rely on many aspects of the researcher's knowledge, such as knowledge of historical textiles, colours and styling, as well as the means to identify a case for each of these factors, and could be considered expert knowledge of history. Others may have this knowledge but the connection between all of these different aspects of knowledge is required for the deduction to be made. On the other hand, the use of particular construction methods for the purpose of influencing the final look of a garment (construction that results in a particular aesthetic), or the use of particular design detailing as a result of advancements in technology, may not be of any interest to a researcher who does not have expert knowledge of design or garment construction. The explicit recording of information surrounding objects is given authority over evidence provided by the object itself. For example: the identification of fabric can be a result of an incorrect recording of an

²³ Knowledge of practice within fashion can exist, and can be made explicit, through observation of fashion objects. A researcher who may not be considered an industry expert, or an expert practitioner, may have some expert knowledge of practice through their amateur experience of making.

artefact, despite the evidence provided by the materiality of the object. A light-weight cotton fabric could be identified as 'muslin' rather than 'organdie' based on information recorded at the time a garment becomes a part of a museum collection. This misidentification — the result of inaccurate recording of explicit information — can be addressed through expert evaluation. The type of knowledge that is dominant within a discipline has a large role in decisions regarding the usefulness of any data, but also has relevance in terms of the methodology employed in different areas of research.

The final phase of the process, Speculation (Prown, 1982) or Interpretation²⁴ (McClung Fleming 1974) involves the analysis and evaluation of the facts and deductions that can be made about a particular object. This has been described as 'framing hypotheses and questions which lead out from the object to the external evidence for testing and resolutions' (Prown, 1982, p.7). Andrade is an example of the use of the method of object analysis in a study of a fashion garments as a primary source for historical research (Andrade, 2004). Her study began with a request to discover the history of a French couture garment from the House of Louise Boulanger²⁵ (Figure 4.2), which formed part of the textiles collection at Hampshire County Council and Museum Archives Collection (HCCMAS) in England (Andrade, 2004). ²⁶ Consideration of the study reveals that the object relates its history through a) explicit information about itself — the label states the designer's name and location — b) the aesthetic of the design and the textiles, which, although not explicitly stated, are concrete as they can be identified and recorded and c) provision of a basis to enable the expert viewer to extrapolate knowledge based on these factors (both explicit and observable) and develop a hypothesis.

²⁴ The term 'Speculation' has been chosen from the framework of Object Analysis but Steele identifies that the description of the model includes previous work from McClung Fleming, who described a variation on this phase but uses the term 'Interpretation'.

²⁵ See previous note about Andrade's naming conventions.

²⁶ This gown will also be referred to as the Hampshire gown.



Figure 4.2 Andrade (2004) Fig. 1 & Fig. 2: Original caption: 'Front and back of the dress. Courtesy of Hampshire County Council Museums and Archives Service (hereafter HCCMAS) C 1976.31.415.'

The knowledge from these phases can be supported by written documentation, such as design registrations, fashion ephemera and designer's archives (garments, sketches and notes), as sources of knowledge and potentially lead to the discovery of new knowledge. The study of the history of the fashion garment produced by Louiseboulanger would have been less successful without the garment object. The garment object, originally added to the collection as an ephemeral object from the inter-war period (1919–1939), would not have revealed knowledge relating to the couture system of the period and the house from which it was produced if it had not been examined as a handmade fashion object.

Types of knowledge in museum object

The use of object analysis to draw out knowledge from objects or artefacts in the study of historical garments reveals different types of transferable knowledge encapsulated within these objects. Andrade's study (2004) is drawn upon to propose a model of the different types of knowledge that can be revealed from an object-based study. The descriptive phase of the methodology identifies knowledge that can be gleaned from the physical facts of the object itself. The garment produced by Louiseboulanger is recorded as a part of the museum collection in an explicit form of written text. This is similar to other artistic or designed works usually labelled in an explicit way, either signed (as artworks), bearing a maker's mark (as ceramics or metalwork) or bearing distinctive branding (such as product design). In some cases the object is able to reveal the manufacturer of the object — especially for haute couture, where strict codes of manufacturing are an integral part of the system — and the country of origin, now legislated as required labelling in many countries. The materiality of the object, fibre composition of the fabrics and components used in detailing, can also be considered explicit knowledge as these factors are evidenced in the object and are not open to interpretation. Identification of these facts can lead a researcher to other forms of explicit knowledge that deal with the object. In the case of Louiseboulanger, the knowledge of the design house led to the discovery of a large number of design registrations that revealed technical knowledge of the object, specifics of the fabrication and make, that would provide a context from which to view the garment (Figure 4.3).



Figure 4.3 Andrade (2004) Fig. 3. Design registration for an original gown from the House of Louise Boulanger

Original caption reads: Registered design of the satin dress by Louiseboulanger. Model from the winter collection by Maison Louiseboulanger. The description of the registered design reads: 'Evening gown in white satin and silver embroidery, straight line. Knotted poufs in white satin. Low décolletage.' An embroidered fabric sample accompanied the registered design. Courtesy of Archives de la Ville de Paris, DEM, Numéro du dépôt août (Andrade, 2004, p.114)

The researcher is also able to deduce further information from an analysis of the object as 'information-as-thing' in its ability to provide information from which knowledge is gained as a result of 'being processed in some way' (Latham, 2012, p.50). The discovery of other relevant information, in the form of explicit knowledge relating to the period in which the object was made, can allow the researcher to place the single object within a context of similar objects (designed by the same designer) and produced during the same period. In this case, it is the discovery of 2297 designs for fashion garments explicitly recorded, in the form of design registration records, held within the Paris archives (Andrade, 2004, p.114). The individual garment has led to many others of the same type, which can in turn be compared with the work of other designers from the period. This comparison allows theory to develop about

commonalities of style within times periods, or characteristics of garment construction for example, that fit within an evolving understanding of *fashion* from an historical perspective. Combining this knowledge with the findings from the descriptive phase can be used to make links between the object and other resources and records that are considered explicit knowledge.

Expert knowledge

The design aesthetic, methods of construction — both of textiles and garments — and the quality of materials used form part of the knowledge encapsulated in garment objects. Decoding this knowledge requires the researcher to draw on their expert knowledge to place objects within a market or make deductions about its quality. In the area of museum studies the object is considered to exist within a wider collection of objects and is usually compared to other objects of a similar type (Buckland, 1991, p.354). The basis of the comparison can be made from different perspectives but the comparison of individual objects to a collection of other objects is a core component of the object-based approach. For fashion researchers, the perspective could be more focused on making discoveries that relate to practice rather than historical information. The objects examined could be non-traditional research outcomes and comparisons could be made between different practitioner's approaches to the same research topics. The aim may be to identify and compare different approaches rather than find examples that demonstrate similar traits. Practice-led methodology places the focus on the practitioner and their experience of the practice component of the research rather than the analysis of the objects that result from the research practice. The ability for these objects to encapsulate practitioner knowledge, gained through practitioner research, can provide an alternative to publication if this knowledge were able to be accessed through object by other practitioners.

The garment created by Louiseboulanger encapsulates practitioner knowledge as much as it is able to tell us about its past. In one sense this knowledge can be considered explicit knowledge (as existing in the physical form of the garment) and can be drawn out through the process of object analysis, forming the basis for speculation from various expert perspectives. The paradigm of knowledge is related to the discussion of ways of telling that are discipline specific, such as mathematical formulae, but relatively incoherent to those without the specific knowledge to access this information, as discussed in Chapter Two. The speculation phase of object-based methodologies is reliant on practitioner knowledge, to varying degrees, with the level of potential observations and connections rising alongside the level of the practitioner researcher's expert knowledge of practice. Expert knowledge is also context dependent on the expertise of the researcher. Expertise may be in practice, as in the case of the practitioner researcher, or it may be in expert knowledge of a particular period of history for example. In other words, practitioner expert knowledge is a specialism of expert knowledge. Without this expert knowledge, understandings of *fashion* that are able to be deduced or speculated on, as a result of examining fashion objects, may be considered tacit knowledge but are more correctly examples of expert fashion knowledge that is not made explicit. This does not replace the theory that knowledge of fashion is tacit knowledge; but posits that the degree of tacit knowledge that exists in fashion may have been overstated in the past. In terms of object-based methodology, this knowledge exists as tacit knowledge that is encapsulated in objects. Fashion knowledge of this type remains tacit through the examination of fashion objects, and is transferred as tacit knowledge through interaction with these objects.

Technical knowledge

The garment object is also able to relate technical knowledge of fashion as knowledge that is relevant to the development of a garment's fashion context through creation of a particular aesthetic or by positioning a garment within specific areas of the fashion market. Andrade identifies as 'a relative novice with a training in fashion' (2004, p.117) and, as such, has been able to make some observations about the sewing of the garment as a result of the deductive phase, but her observations about the way in which these factors relate to the design of the object are limited in line with her level of expertise in the area of designing and making fashion garments.²⁷ Consider the statement, 'The inside of the dress was almost more appealing than the outside, the materials and decoration as important as the cut' (Andrade, 2004, pp.116–117). The inside of the dress (Figure 4.4), specifically the construction techniques and the 'poorness of their finish' (Andrade, 2004, p.117) compared with similar gowns from the period, was found to be an exciting factor in arriving at a conclusion about the limited historical profile of Louiseboulanger. A fashion novice could come to the conclusion that this poorer quality of construction may be a reason why the work of Chanel, described as 'beautifully finished with an attention to detail not found in Louiseboulanger's work' (Andrade, 2004, p.117), has been collected by museums in preference to the latter.

However, a practitioner researcher with expert technical knowledge of fashion garment construction would theorise that the inside of the Louiseboulanger garment may be different in construction from the outside of the gown as a result of the intended design aesthetic of the gown.²⁸ Alternatively, the expertise of the researcher in the practice of bias cutting may also allow speculation that the altered behaviour associated with fabric cut on the bias can result in different methods of finishing, which prioritise the fabric's behaviour rather that the seaming method.²⁹ This is an example of the role of the expert technical knowledge of the practitioner

²⁷ The specifics of the 'training' are not readily accessible apart from a Master's degree from University of Southampton in the area of History of Fashion and Textiles. It is doubtful that this training included fashion design practice.

²⁸ In my own case, 25 years professional experience of fashion design, pattern cutting and garment construction, including industry design practice and fashion design research practice, would allow me to speculate as an expert practitioner.

²⁹ As a designer with extensive experience of design and construction of bridal couture, I have extensive and expert knowledge of bias cutting and garment finishing techniques and the trade-off between the two that is often a part of the design process. This knowledge, gained through practice, led to the speculation that the gown would have had a separate lining garment and to find evidence of this within the garment object.

researcher in developing research findings. In this case, the level of expertise of the researcher in terms of technical knowledge is reflected in observations with the potential to lead to theories resulting from the method of object analysis.



Figure 4.4 Andrade (2004) Fig. 6. Original caption: 'Details of [the inside of the] dress showing the superimposition of fabric and overstitched seams (HCCMASC 1976.31.415)' (p.115)

Expert technical knowledge of fashion has relevance to the practitioner researcher but also has relevance to the historian. Knowledge of fashion practice, and identifying practices that are dominant in the creation of specific design aesthetic enables another level of analysis for objects with others of the same type. Making practitioner knowledge more explicit, in this case the importance of bias cutting within the context of historical relevance, would indicate that the Louiseboulanger gown would be more appropriately compared to the designs of Madeleine Vionnet, who was known for her innovation of the bias cut. The methods of construction could be compared between objects created by these two houses in order to be able to make an informed observation of the quality, or lack thereof, of the Louiseboulanger gown. The garment construction of a Chanel evening gown and that of LouiseBoulanger are not comparable unless they are identified as having both been bias cut. Chanel evening gowns, despite also being known for being bias cut during the 1930s, are not all cut on the bias. The comparison of the

design aesthetic, as examples of gowns from the same period of fashion is, however, most suitable from the historical perspective.

In an observation isolated from any discussion of the design of the gown, Andrade identifies that 'journalists depicted Chanel as a modern couturière ... [and] Louise Boulanger as romantic and flamboyant, keen on layers of bias cut panels' (2004, p.116). If the gown from the Hampshire collection is cut on the bias, such an observation could have been made by a relative novice. It would require the researcher to see that the grain line of the fabric is at a 45-degree angle to the horizon, and have the knowledge that this factor indicates (and is referred to as) a bias cut.³⁰ The waterfall effect created at the front of the gown shown in the image in Figure 4.2 (Andrade 2004, Fig. 1) would suggest a bias cut to a practitioner researcher³¹, with various level of practitioner knowledge, devoid of their ability to access the original garment beyond the photographic image. The method of the cut of the dress was not a factor in Andrade's study, which compares this gown to evening dresses by contemporary designer Coco Chanel (p.116), who was not known for using the method of bias cutting at this time. The bias seam visible in Figure 4.2 (Andrade 2004, Fig. 2) would confirm that at least some sections of the gown are cut on the bias grain (Andrade 2004, p.113). The main point of this observation is to establish that understanding the practice of bias cutting as a technical aspect of design and having expert practitioner and expert technical knowledge of bias cutting as a method used to create a particular aesthetic are different levels of knowledge. The personal knowledge of practice is accompanied by an understanding of bias cutting as a method that comes with a set of conditions that affect the finish of a garment and its design aesthetic. For example: bias cut

³⁰ An observation could be made that everyone may know this but I would argue that many people may know *of* this but have different levels of understanding of bias cutting. Some would understand the term 'bias' and its literal meaning but have no knowledge of the act of bias cutting, the advantage and the limitations and how the cutting method is related to the resulting design aesthetic.

³¹ There are other experts who are not practitioner researchers who will also be able to make such distinctions including reputable dealers and experienced conservators. The focus on the practitioner researcher is not intended to exclude but to refine the discussion for the purposes of the thesis.

fabric drapes and falls differently from fabric cut on the straight grain, making the garment drape more closely to the body and this could be known by both the expert and the novice. This could be a reason that the garment was not designed with a fully attached lining, as restrictive lining can affect the fall of the outer garment and a more flexible lining solution would have been required. Different weight cloths do not fall equally unless they are cut on the straight grain. Fabric cut on the bias does not fray as easily or in the same manner, which could be a reason why the seams might be finished with minimal overcasting. The tension brought upon bias cut cloth from the internal finishes can affect the fall of the gown. The warp bias and the weft bias behave differently and often the two sides of a symmetrical design are cut slightly differently to accommodate this difference. Based on Andrade's account, it is plausible that the Louiseboulanger bias cut gown was compared with a Chanel couture evening gown that was not cut on the bias and therefore would have required a different internal structure, perhaps including an enclosed lining.³²

The practitioner researcher as an expert can speculate on observations that would be beyond the inexperienced observer or an observer with limited knowledge of practice. This is the same for any area of expertise in research but is underplayed in terms of practitioner research in fashion, where expertise is more often held to be tacit in nature. For example, in the case of the Hampshire gown, rather than being a standalone piece, the gown is more likely to have been two pieces, one piece formed by the outer garment and a second piece being a separate lining (a slip or petticoat). This is supported by explaining an otherwise 'tacit' understanding of the design aesthetic as being interconnected with the technical aspects of bias cutting. In addition, the information that the design house was compared in press to its contemporaries, including

³² Several Chanel garments have been examined through the course of this research. All had fully enclosed linings. An enclosed lining is one where there is no opening to allow a view of the internal seams of the garment, which results in a finish where no wrong side of the fabric is visible — it has been concealed by a lining fabric. The use of a fully enclosed lining could be the result of the garment design rather than as a means to indicate a higher quality of garment construction.

Chanel, can be used to speculate that it is unlikely that a slip would not form a part of the design and, supporting that, it is more likely that this piece of the garment has not been preserved rather than did not exist. A short description of the garment included as an appendix in the original study identifies that 'There is no lining; one end of a strip of fabric is sewn inside each shoulder and fastened with press-studs at the other end, suggesting that an undergarment would have been worn and its straps secured in place by these strips' (Adrande, 2004, p.119). This provides a logical explanation for the level of finish observed on the inside of the Boulanger compared with the inside of the Chanel — where the inside of the Chanel (which was lined) is more equivalent to the inside of the missing slip. A counter argument would be that no slip or undergarment is identified in the design registration documentation recovered from the Archives de la Ville de Paris in Figure 4.3 (Andrade, 2004, Fig. 4). The design registration process would not have permitted the slip to form part of the registered design as it could not be original (in other words, a slip is a standard garment that could not be considered a protectable design).

Practitioner knowledge

The object-centred approach as an alternative methodology for practitioner research, and as opposed to practice-led methodology, offers the opportunity for researchers to consider the potential of the objects that result from the research practice to encapsulate knowledge that is not entirely tacit. The focus on this knowledge as tacit knowledge can limit potential research findings. In the case of Andrade (2004), placing the object within a context of similar objects involved researching the designer of the garment, where the garment was made and importantly the place of the designer within the contemporary industry of the inter-war period in comparison with other designers from the same period. As she states: 'Internal evidence from the object led me outwards into a much broader and deeper investigation of the identity and significance of the House, and the workings of inter-war couture' (Andrade, 2004, p.113). The

ability to locate Louise Boulanger as a contemporary with Gabrielle 'Coco' Chanel can lead to other research questions such as: What is the role of quality dressmaking in determining whether or not a garment is added to a museum collection? (Andrade, 2004, p.117). Researchers interested in this question can draw on this study as a part of answering other research questions and contribute to knowledge of this topic by searching for other examples, documenting other cases, analysing primary evidence from the perspective of the practitioner and thus enable analysis and comparison with the findings of other studies. In the same way, using object-based methodology, practitioners can focus on placing their own work within a context of others working in the same area of research. Similarly, the objects of past research practice can become primary sources of knowledge for further research beyond the single case often associated with practitioner research that is practice led. The format used to document research objects, the way they are recorded, could be a factor in allowing this culture to develop. The limitations of this method are the current difficulties in gaining access to museum collections in order to observe and analyse individual garment objects. However, increasing demand for online access to collections is starting to change the paradigm with more collections able to be accessed via this medium. The way in which these objects are recorded and catalogued, as valuable resources for fashion researchers, could be improved with more experimentation with the method of object analysis from the practitioner perspective.

Knowledge in fashion garments: A case study

The method of object analysis was refined and evolved from a proposed model through the research practice of different researchers using and writing about the method. In the same way, this evolution can continue and be further refined as a result of its use by practitioner researchers in fashion. This study is the first part of that process but is also a further part of an ongoing refinement of object analysis. An examination of fashion objects using the method of

Designer/label	Garment ID	Category	Date range
Cristobel Balenciaga	BATMC 1.09.834	Dress	1950–59
Jaques	BATMC I-09-833	Dress	1948–50
Charles/Jaques Charles Cannes	BATMC I-09-833 +A	Petticoat	1948–50
	BATMC-09-115+B	Belt	1948–50
Henry a la Pensée (attr. to Balenciaga)	BATMC 1.09.9024	Dress	1950–59
Gabrielle Chanel	A8945	Suit	1965
Gabrielle Chanel	96/386/5	Suit	1965
Karl Lagerfeld for Chanel Boutique	91/2020	Suit	1991

Table 4.1 Object analysis November–December 2010

object analysis demonstrates the use of the method in terms of practitioner research in fashion. For this study, six couture garments were selected from collections in the United Kingdom and Australia. The garments were chosen for their ability to be compared as objects of the same type or to similar types of high-fashion garments. The analysis of these objects occurred in two stages between November and December 2010, with an examination of items from the Bath Fashion Museum/Museum of Costume Collection (BATMC) and *The* Powerhouse Museum (PM) in Sydney. The methodology adopted was object analysis as described and discussed here, with a focus on exploring the potential of the method for practitioner research. The aim has been to explore the types of fashion knowledge that could be extrapolated from garment objects and to analyse the processes used to arrive at this knowledge. The results demonstrate how the methodology is instrumental in revealing knowledge of practice from inanimate objects and the role of expert knowledge of fashion (practitioner knowledge and technical knowledge) alongside tacit *fashion* knowledge. The fashion garments examined in this stage of the study are itemised and categorised in Table 4.1.

The garments were viewed at a study table to which each of these items was brought in turn and individually examined, sketched and photographed — inside and out — as a part of the descriptive phase of the analysis. The relevant recorded information for each garment, consisting of supporting documentation and catalogue records, was provided to the researcher at the time of the visit. Photographs were identified and matched with each garment through sequencing and image records, including descriptions of each image. Notes were taken of some observations at the first viewings but it became obvious that the time available to view each garment was very limited and would be best used to create visual records of each item. These records were catalogued and used to perform a more in-depth analysis throughout the remainder of this study.

The Fashion Museum (Bath) — object analysis part I

In phase 1 of the research it was not possible to select specific items from the collection for viewing as the Fashion Museum did not, at that time, have all of its items available in an accessible online database. After permission to access the collection was granted, a selection of garment objects was made by the assistant curator.³³ The criteria for selection was based on

³³ The research visit had to be planned from Australia a minimum of three months prior to the museum visit. Without access to the museum records, it was not practical to select individual objects. The ability to access

a request for access to 'a range of couture garments from the 1950s; contemporaries of Christian Dior's New Look'.³⁴ Dior was chosen because garments from the house were comparable with couture items available in collections in Australia and New Zealand. From these criteria, three garments were chosen, each a fashion gown recorded as having been designed and made in France between 1948 and 1959. The gowns all had a similar design aesthetic in terms of silhouette, which was a dominant feature of Dior's New Look (and the 1950s). An initial deduction, the result of coincidence rather than planning, was that each of the gowns randomly chosen by the curator was from a different level of the French industry, including a haute couture gown, a couture gown made by a French couture dressmaker (manufacturer) and an early version of prêt-a porter gown designed and made for a leading French department store.³⁵ This made a comparison of the similarities and differences between the gowns a comparison between different types of fashion gowns made in France from the period (1948 to 1959). All of these gowns were cocktail dresses and would have been worn for special occasions or functions rather than in the street or for work. The original records for these gowns had been lost over the years since they had become a part of the BATMC collection. Only the basic information remained alongside the objects themselves and was provided as a part of the viewing process. This was a good starting point for the analysis of these garments. Had more detailed background information existed, the ability for the object to reveal information about itself would be limited by existing information, which may be taken as exhaustive, rather than initiate a different method of deduction.

some items through the Fashion Museum website would mean that researchers would now have some ability to identify individual garments for viewing on a research visit.

³⁴ This was the exact wording used in an original email request to access the archives at the Fashion Museum in Bath Spa, United Kingdom.

³⁵ At the time of viewing, the curator revealed that she had made a random selection based on gowns in the collection from the period that she thought I may like. The ensuing discussion did not reveal any attempt at selecting gowns from different levels of the market and rather all of the gowns were listed as dresses designed in France.

The Powerhouse Museum (Sydney) — object analysis part II

Prown (1982) suggests that, following the descriptive and deduction phases, the findings should be used to inform and direct the design and the focus of the research study (p.10). This can be extended to allowing the initial study of a group of objects to direct the design of an additional study of objects of a similar type. In this case, the second part of a critique of object analysis was conducted at the PM in Sydney. The findings from the first stage were used to inform the selection of garments chosen for viewing. Unlike BATMC, the PM has an extensive electronic archive available online. The selection criteria for part II of the analysis was fashion designed and made in France from the same period. The museum did have an online collection that was searchable and allowed the possibility of selecting a variety of couture garments from a single house. The house of Chanel was chosen and the type of garment chosen was the Chanel suit. This was due to the fact that there were two very similar objects in the Sydney collection, both designed by Gabrielle Chanel for the Couture line. A third Chanel suit was also available and was chosen because, although for the same house, this suit was designed by Karl Lagerfeld for Chanel Boutique (a ready-to-wear derivative of the Couture label). Inclusion of the Lagerfeld provided an opportunity for comparison between haute couture garments from both the PM and BATMC collections and designer garments made for the ready-to-wear market. Given the history, Lagerfeld having taken over design of the label following Chanel's death, also provided an opportunity to reflect on the possibility of the transfer of tacit fashion knowledge that may have been evident in a comparison between these garment objects. The selection of garment objects of a similar type and context enabled a comparison of the objectbased methodology by Andrade (2004) and the experiences of the first phase of the study.

Practitioner knowledge in museum fashion objects

The main difference between the analysis of a fashion object in the case of Andrade (2004) and the analysis conducted in this study is the expertise of the researcher. The fashion object may have a slightly different story to tell the practitioner than the one it is able to tell the historian.³⁶ As discussed in the previous section, different types of knowledge can be drawn from fashion objects at each phase of the method of object analysis, but the expert is able to extract knowledge that would otherwise remain tacit. For example, the description of the garment objects in the Sydney study included a description of the physical objects in terms of textiles, silhouette, colour, quality and construction. The physical aspects of the garment objects were recordable but the knowledge of the researcher was used to describe the result of stitching a length of chain on the inside of the hem just above the finished edge (Figures 4.5 and 4.6). Although this has been observed as characteristic (a part of the design handwriting) of Chanel, some aspects of this seemingly aesthetic addition also affect the design aesthetic of the suit jacket. This addition will have the effect of weighting the hemline of the jacket, encouraging it to sit more smoothly against the body, and of making the jacket hem hang straight. This may have been added as a way of stabilising a very open weave fabric that might have been difficult to control (Figure 4.5).

³⁶ The historian cannot always be assumed to be a non-practitioner. It has been brought to my attention that there are many noted historians who are also able to make fashion garment, and indeed have studied fashion before embarking on careers as fashion historians.



Figure 4.5 Chanel Suit Jacket (Item # A8945, 1965) image shows a length of metal chain attached inside the garment just above the level of the finished hemline



Figure 4.6 Chanel Suit Jacket (Item # 96/386/5, 1965) a length of metal chain attached inside a Chanel jacket just above the level of the finished hemline



Figure 4.7 Wool tweed fabric used in the Chanel Suit designed in 1965 has a hand-loomed quality in that it does not look perfectly even in spacing or tension (Item # A8945 Chanel, 1965)

The loose weave of the fabric can also account for another observation about some seemingly decorative stitching that appears in the lining of the same jacket. The quilting style stitching, which has also become a hallmark of Chanel, was used here to support the open weave and prevent sagging within the piece. On a close examination of the outer garment, and just visible in Figure 4.7, the practitioner is able to identify that the lining is stitched through to the outer garment. Figure 4.8 is an image of the quilt-like stitching on the lining. A non-expert viewer may have noted the stitching but would not have been able to make the specific connection between the stitching and the design aesthetic. This is similar to the Andrade case, where an observation was made about the strap keepers (strips of fabrics with clips on the end) in the shoulder line of the Louiseboulanger dress (2004, p.119). The significance of the observation, that the dress would have been accompanied by a slip, was not connected to the discussion of the inside finishing techniques that were discussed as a lesser quality than the researcher had

expected. The stabilising quilting shown in Figure 4.7 and Figure 4.8 is a difficult operation and could only be achieved by a skilled person. Those who have experience (practitioner knowledge) of having created such stitching could deduct that this would not have been done for aesthetic purposes connected to the design of the lining (where the stitching appears decorative) but rather to contribute to the overall aesthetics of the finished garment.



Figure 4.8 The jacket lining is 'quilted' at intervals of approximately 5 cm to prevent the outer fabric from dropping during extended hanging or wearing (Item # A8945 Chanel, 1965)



Figure 4.9 Garment labelling often includes explicit identification of the brand, fabrication and country of production (Karl Lagerfeld [for Chanel], 1991)

The description of garment objects begins with attempting to identify the designer, label and country of origin of that object. The information provided through labelling, as shown in Figure 4.9, is an example of explicit knowledge that forms part of the object's knowledge of itself and is easily communicated. The labelling of fashion garments can be used to position the garment within a geographical context, and in doing so also identify characteristics of manufacturing observable through the method of object analysis. There are other forms of explicit knowledge that are not written text. The fabrication of the garment, although in many cases this is also explicit, as shown in Figure 4.7, can sometimes be identified by distinctive characteristics. Chanel is known to have used Harris Tweed, a loosely woven wool fabric used in the jacket item #A8945. An example of the expert use of this methodology in terms of identifying textiles is explained by Taylor (1998):

Rothstein included a sensitive and astute analysis of the Englishness of Spitalfields silk design at one moment of high achievement, the 1735–45 period. This account remains unequalled, because it was based on a lifetime of research into the design details of these specific silks. (Taylor, 1998, p.354)

The immersion of the researcher within this context of textile design will have enabled an expert knowledge to develop. This knowledge may be considered expert as Rothstein would have gained knowledge of the colour, texture, pattern and idiosyncrasies of different manufacturers of these silks from the historical perspective. It would be unlikely that this expert knowledge would have been gained through written records and other documents alone; it is more likely that the examination of physical examples of woven textiles would have contributed to this expertise.



Figure 4.10 A measuring tape provides a scale for images of the Balenciaga gown (Item # BATMC 1.09.834 Balenciaga, circa 1950). Adding the element of scale to the image can also allow comparison to be made between proportions of widths and heights.

For the viewer who has expert technical knowledge, the garment object can be considered explicit knowledge in terms of the cut of the garment. Figure 4.10 illustrates how the inclusion of garment measurements as a part of object analysis adds the dimension of scale to the image. The lengths and widths of the garment object can provide explicit, quantified information that can be used by a practitioner researcher, with expert technical knowledge, to create a pattern for the garment, for example. The explicit knowledge of these measurements alone would not allow a practitioner to exactly replicate the cut of the garment object but, combined with

practitioner knowledge of cutting and tacit knowledge of fashion, a replication of the gown would be possible. The combination of these types of knowledge are central to the replication of the design aesthetics of the fashion object and are combined to explore the shapes and construction methods used to create the silhouette. The way a garment fits the body, the degree of fit, the way the fabric falls are thought to be tacit understandings of fashion but often these factors can be explained in more explicit terms, such as through garment objects, than simplified to tacit knowledge.

The two-dimensional shape of a fashion garment can also be considered technical knowledge of fashion but the direct link between this knowledge and the final aesthetics is the domain of the expert practitioner. The tacit nature of the cut and fit of the garment remains but the creation of a pattern (which could result from the process of object analysis) is a means of rendering this tacit knowledge explicit — as a pattern is a way of telling these otherwise tacit aspects of fashion design. Figure 4.9 shows an example of how objects are able to encapsulate explicit knowledge of *fashion*, in the form of technical knowledge, which is not written text. The inclusion of a measuring tape in the frame of the image in Figure 4.10 indicates a scale to the image that is recorded and that can be replicated. The process of recording objects during the descriptive phase of object analysis should be extended to include measurements of the main lengths and widths of the garment object. There are other ways in which the garment object can be recorded and documented that are widely used within professional practice but not usual in practitioner research as a recording method.

Sketching is a method of both understanding and recording design knowledge that has relevance for the method of object analysis as an object-based methodology. For the practitioner, the descriptive phase of object analysis benefits from the addition of methods taken from professional practice, such as photography and sketching. These methods support and extend the description of the fashion object in a language common to practice — a visual



Figure 4. 11 Sketch of the Jaques Charles gown reconstructed from the method of object analysis (Jaques Charles, circa 1948). Sketching is a method of both understanding and recording *fashion* knowledge encapsulated in object.

language — that is explicit in terms of being recordable and transferable. The practice of creating sketches is not limited to recording details of the garments but is also a method of seeing things as a designer or maker of fashion objects. These methods can be used to draw out forms of knowledge from the object, which may otherwise remain tacit, and also provide a means for deduction and speculation to occur from the perspective of the practitioner. This is particularly relevant for developing *fashion* knowledge of design such as silhouette and proportion. The interpretation of a garment onto a figure through drawing captures the practitioner's understanding of the design of the garment as it would relate to the body and spatially. An image that resulted from the examination of the Jaques Charles Cannes gown (Jaques Charles, circa 1948) is an example of the otherwise tacit ability to relate the proportions of the design to the body, based on an examination of the object. The sketch (Figure 4.11) becomes both a method of understanding the fashion design and transferring explicit

knowledge of the design to an expert viewer. The sketch as an object can be considered an interpretation of data in the same way as any researcher interprets data through the process of analysis. This is relevant for practitioner research in terms of understanding the methods used to transfer *fashion* knowledge. The sketch is able to record and communicate knowledge of the silhouette, the physical dimensions, the cut, the construction and the 'feeling' of the design. All of these factors form a part of *fashion* knowledge. This knowledge of *fashion* is not explicitly communicated in writing but is explicit in objects, including digital object images³⁷ and design sketches that form a part of the design practice.

A framework of practitioner knowledge

Explicit knowledge within the garment object that *is* text has the advantage of being utilised to search for related documentary evidence. This knowledge can be used to find other information about a garment or designer beyond what would be possible without it. In this respect the fashion object is like artwork, particularly paintings, where the signature of the artist provides knowledge of the artist, and their body of work, beyond a single piece of work. The observation of other factors that surround an artwork are used to develop or support a case where work is attributed to a particular artist or designer but the labelling of the work provides a direct method of comparison and helps to place the work within context. The description of the object includes close attention being paid to conducting the analysis 'as objectively as possible' (Prown, 1982, p.8). In the case of this study, an analysis of the label litself (Figure 4.12) connected the Jaques

³⁷ The digital object image is a term used here to denote digital images of objects that can be used, in place of the object itself, to communicate some of the knowledge encapsulated in fashion objects. This has limitations at present but the method of developing these digital object images is improving with demand. An example of digital object images can be seen via the FIT museum website http://www.fitnyc.edu/13666.asp where online collections are being developed. The use of emerging technology is more advanced for the purposes of online sales in fashion and exciting innovations are occurring at this level. See ASOS website, which included video of garment objects, worn on the body and on the catwalk http://www.asos.com

Cannes garment from the Fashion Museum collection with an object outside of the museum, which led to an important finding about the lesser known designer.

In this case, the second object is a vintage Chanel coat thought to be from the 1960s (Figure 4.12) and is described as having a label that reads 'Cannes Jaques-Charles 56. Rue d'Antibes' attached below the Chanel label.³⁸ The explicit knowledge recorded on



Figure 4.12 The explicit knowledge recorded on the label of the Jaques Charles dress was used to search for related information about the designer and business (Jaques Charles, circa 1948)

the garment label can be used to develop the search for other documentation that can lead to a link between Jaques-Charles in Cannes and Chanel in Paris. The Jaques Charles gown viewed at the Fashion Museum can now be examined in a new context. The connection between Jaques Charles Cannes and Balenciaga was also made at the Fashion Museum. The item has been added to the collection as the house was rumoured to have produced designs from other couturiers such as Chanel and Balenciaga during the period. The coat shown in Figure 4.13 would support this, at least in the case of Chanel.³⁹ This finding may be of historical interest

³⁸ The item description does not mention Chanel Boutique but states a 'Chanel' label. The seller also states that the 'size tag is missing', which would indicate that the garment is likely Chanel couture.

³⁹ The information about the labelling on this coat was discovered in the description of the item when it was listed for sale online. An image of the label itself has not been possible to recover as the item has since been removed from the internet.

but it is also important from the perspective of practitioner knowledge. The method of a fashion garment's make and the system of licensing and manufacturing at this level of high fashion can challenge contemporary understandings of the fashion industry. The discovery of a gown with Chanel labelling that was not made within her Parisian atelier does raise questions about existing knowledge surrounding the haute coutur*e* system, but answering such questions is beyond the scope of this thesis.



Figure 4.13 A vintage Chanel coat described as having a Chanel label with a label stitched beneath that reads 'Cannes Jaques Charles 56. Rue d'Antibes'. It is possible that this coat was produced for Chanel by Jaques Charles in Cannes.

Physical description of fashion objects

The observation and analysis of physical attributes of a fashion garment can also impart knowledge of design aesthetics. The type of construction methods can be analysed and used to interpret the intention of the designer, especially in terms of garment silhouette and fit. Observations made about the inside of a garment, such as identification of the specific construction methods used to create a *fashion* garment, can be categorised as technical knowledge of fashion. However, the link between this knowledge and the knowledge that can be deduced about the resultant design aesthetic can be made more explicit through analysis of the garment by the fashion practitioner. The experience of fashion design is not limited to understanding fashion aesthetics but includes knowledge of specifics of garment cut and construction. An expert practitioner can draw on this knowledge to make observations of the physical aspects of objects that relate to the tacit knowledge of their design. In other words, to make connections between the specific cut or construction methods of fashion garments are not normally be made explicit, in written form, but are more usually communicated effectively through fashion objects themselves. Although it is not automatic to make these connections explicit, the method of object analysis leads to a practice of making explicit observations through the combined methods of note taking, photography and sketching.

The practice of making concrete links between observable facts (such as technical knowledge of fashion), as a part of an object-centred methodological approach, has the potential to build practitioner knowledge in fashion where practice-led approaches appear to have had limited success. An example of documenting physical aspects of fashion garments is included in Table 4.2 to demonstrate how an assessment of the descriptive phase of object analysis has been used to make comparisons and draw conclusions about the differences in garment quality between haute couture and ready-to-wear from the same label over time. The speculation phase involves the consideration of this information with expert technical knowledge and expert practitioner knowledge in combination with existing theory surrounding consumers' perceptions of indicators of garment quality. An argument developed that the specific construction techniques used on the couture garments carried with them a connection to the craftsmanship involved in their make. The connection between user and maker is theorised as an important aspect of the connection consumers have with couture clothing. The outcome of this analysis was that this knowledge of fashion could be used to develop more sustainable design through different

methods of manufacturing (Finn, 2011). The following sections describe the type of knowledge used in the making of the Chanel suits examined throughout this chapter. The aim is to explain the method of examining the type of practitioner knowledge that can be drawn out from garment objects.

Characteristic or detail	Hand-finishing techniques		Industrial or mass- manufacturing methods		Allowances for bulk garment cutting methods		Other details or observations		
Garment ID	Object A	Object B	Object A	Object B	Object A	Object B	Object A	Object B	
Outer garment	X			Х			The treatment of the lining in both the skirt	It should be noted that the 1991 garment has not been worn but	
Lining	X	x		x		x	and the jacket are a strong indicator of the quality make of this garment. The lining has been cut the same shape as the outer (which would not be possible in bulk cut garments as	was purchased from Chanel boutique and donated to the museum. There are some signs of hand stitching: e.g. the hand stitching on the label is prominent, although combined with machine stitching on the care label. The label itself has	
Buttonholes	X			x					
Buttons	X			x					
Zip closure	X	х		х					
Hook and eye closure	X						cutting is not 100% accurate). The stitching through all of the layers	started to become detached (even though the garment has not been worn or laundered).	
Garment labelling	X			x			of the jacket would prevent the loose weave tweed from 'dropping' as a result of extended hanging or wear.	This could indicate a lower	
Hem finish	X			x					
Object A = Chanel Suit, 1965. Designed by Gabrielle Chanel (1965) Object B = Chanel Suit, 1991. Designed by Karl Lagerfeld for Chanel (1991)									

Table 4.2 Comparison of construction techniques between two garments from Chanel Couture and Chanel Boutique (Finn, 2010)

Expert industry knowledge

The fashion garment object can record and transfer the method of its production. The analysis of specific methods of cut and construction can reveal knowledge of aspects of the garments that have been affected by the methods of its manufacture (Finn, 2008). This type of knowledge would be observed by a practitioner with expert knowledge of the fashion industry, alongside expert practitioner knowledge and expert technical knowledge of fashion. In this case an observation has been made that the lining of the Chanel garment (Chanel, 1965) contains no ease, in other words it has been cut the same as the outer jacket. This would be to enable the quilting effect construction method used to control the loose weave of the wool tweed fabric (as previously discussed). The use of this method would not be possible unless the lining were cut by hand to match the outer jacket. If this were not the case the lining would be twisted out of shape as the stitching was applied. A deduction can be made that the jacket was made as a one-off (as haute couture). The opposite case can be deduced in the case of the Chanel Boutique garment (Lagerfeld, 1991). This can be deduced by the pleat in the centre back lining of the Lagerfeld version, which can be seen in Figure 4.14. The seam line above the label and the fold falling from below the label form a pleat, which is a method of cutting a lining pattern so that it can be adjusted as necessary to prevent any tension on the outer garment that would in turn affect the fall of the garment on the body. The method is common in garments that have been designed for bulk manufacturing rather than individual cut and construction. The expert knowledge of the practitioner can respond to signifiers of production and relate their meaning to the knowledge, action or practice gained from their experience of design and production within the fashion industry.



Figure 4.14 The analysis of the Chanel Boutique garment object by a practitioner draws out expert industry knowledge; in this case, the inclusion of a centre back pleat in the pattern and construction of the garment lining

Expert design knowledge

The analysis of fashion objects can be used to develop a framework of the various types of knowledge that exist in fashion. This knowledge is contextual and paradigm specific, as discussed, dependent on the expertise of the researcher who makes the analysis. This is true of any research but the practitioner, who has first-hand experience of the practice of creating fashion garments, can use this expert knowledge to draw out other knowledge that is explicitly recorded and communicated within the fashion garment object and make this knowledge accessible to a less expert reader. This expert fashion knowledge consists of practitioner knowledge, technical knowledge and *fashion* knowledge. A combination of this type of explicit knowledge with tacit understandings of *fashion*, which have traditionally been transferred

through fashion object, is the advantage of object analysis as a methodological approach for the practitioner research in fashion.

Tacit knowledge and fashion objects

Analysis of the method of object analysis as discussed within the literature, and as demonstrated through action involved in using the method of object analysis within this study, does not negate the possibility of tacit knowledge existing within object or being transferred through object. The action of analysing fashion garments, and the study of fashion garments of the same or similar types, does impart some tacit knowledge of the *fashionableness* of these objects. Although by definition this remains inexplicable, the indwelling experience⁴⁰ as discussed in relation to tacit fashion knowledge from the perspective of fashion buying (Entwistle, 2009) and fashion business (Weller, 2007) and production models (Aspers, 2006) is equally relevant to fashion design. The practice of trying to 'get inside a designer's head' uses a design methodology of reviewing a designer's process but the most successful cases within the industry of recapturing a spirit, known as the handwriting of a leading designer, are those where design archives are maintained and studied by the current head designer for the brand. This is evident in well-known luxury brands including Hedi Slimane (Yves Saint Lauren), Karl Lagerfeld (Chanel) and Alexander Wang (Balenciaga). Recently, Diane Von Furstenberg, when interviewed about her Fall 2013 Ready-to-Wear collection shown at New York Fashion Week, revealed the practice of a designer referencing their own past collections. She explains, 'it's [the collection] all very Diane, it's all very my closet' (Condé Nast, 2013). She is not alone in using the practice of mining her own data collection, in the form of her personal design archives, in this case to recapture this tacit knowledge of her own designs for her Glam Rock collection. In the case of transferring tacit fashion design within the fashion

⁴⁰ An indwelling experience is where knowledge is gained through a process of osmosis as a result of an extended period of 'living' within a particular knowledge domain.

industry, the collection of objects as a whole are used to allow designers to immerse themselves in the work, a form of indwelling with a collection of *fashion* objects, to gain the tacit knowledge required for the design to be successful.

The outcome of this study of fashion objects is an understanding that tacit knowledge of *fashion* is transferred through a process of examining many *instances* of the same *class* of objects (in the sense of object-oriented programming). Where Prown (1982) uses the concept of tokens and types, the fashion garment is better described as an *instance* of a cocktail dress, for example, within the *class* of dress. In this sense, the fashion garment becomes one example of the object type *fashion*. To labour the point, fashion does not exist in one instance of an individual gown from a single designer. The *fashionableness* of an object depends on the existence of many others of the same class. Evaluations of object analysis within dress history similarly identify that the usefulness of the method is the structure, which enables a comparison of more than one object of the same type. The connections, based on the explicit knowledge that exists in fashion objects — such as garment labelling — can lead to the discovery of other types of evidence, such as documentary evidence, that provide a basis from which to develop hypotheses as a part of practitioner research in fashion.

Limitations of object analysis

Andrade (2004), Partington (2001), Taylor (1998), Steele (1998) and Palmer (1997) recommend the validity of object analysis for fashion research but also identify that limitations of the method stem from an overreliance on individual objects without considering their value to a fashion context. A similar limitation for practice-led research is for fashion objects or artefacts to be considered in isolation from other objects or artefacts that are the result of research practice. For practice-led fashion research, the object must be related to the fashion context as well as to the theory and methodology of design practice. The object or artefact can

communicate knowledge of its materiality and technical knowledge of its construction but the context of the object, and supporting documentation surrounding the object, is required to develop meaning, to be found through the technical and physical aspects of individual objects or artefacts. Object analysis becomes ineffective as a research method when individual aspects of fashion objects are read in isolation because the strength of the methodology is the means for objectively viewing objects or artefacts from within a structured framework (Andrade, 2004, p.116). A limitation of the method of object analysis for practice-led fashion research remains chiefly a question of the limited accessibility of fashion garment objects to other researchers.

A potential solution is to develop methods of documentation that are responsive to the different types of knowledge that are potentially communicated through objects or artefacts that include digital photography and moving image. Some knowledge is explicitly written in garment labels, supporting documentation and other existing records, but other knowledge is explicit and knowable from an analysis of the garment object itself. The raw materials and finishes, fibre components, fabric construction (knitted, woven, non-woven, by machine or by hand) are examples of physical and technical aspects of fashion objects that have the potential to be knowable through documentation. At the time of writing, this is starting to take form as online collections are being developed at some leading museums. For practitioners, the current limitations of object analysis can be addressed by recording and communicating objects or artefacts that form the outcomes of practice-led research using these methods, and cited similarly to written texts. This has the potential to enable the examination of object or artefact research outcomes from different contexts and research paradigms.

Advantages of object analysis

The main advantage of object analysis, from the perspective of practitioner research in fashion, is the ability of fashion objects to transfer knowledge. The garment object encapsulates knowledge that is explicit and knowable but not in a form that is easily communicated beyond the physicality of the object itself. This knowledge is explicit through garment labelling or a process of decoding based on the expert knowledge of the researcher. Knowledge of *fashion* design, as opposed to technical knowledge of pattern or garment construction, remains tacit knowledge that is in a sense made explicit through object but remains inexplicable in comparison with our current understanding of explicit forms of communicating knowledge as written text. As methods and systems of recording objects within the museum are becoming more technical, and information is available through online databases, this is changing. Although this chapter identifies different types of knowledge encapsulated within fashion objects, and discusses these objects as a way in which this knowledge has been made explicit, a degree of tacit knowledge is also transferred as a result of examining these objects. It remains that the tacit nature of this knowledge is not transferrable through written text but an argument has been made that it is possible to gain this knowledge through exposure to these objects. A different methodological approach challenges the belief that the majority of knowledge of fashion is tacit knowledge. Although the practice of making fashion knowledge explicit is not inherent within the academy, the garment object is one way in which this fashion knowledge is transferred, in the fashion industry and within the academy.

The advantage of adopting a methodology capable of providing a structured framework for the examination of garment objects offers an opportunity to develop a system of recording and transferring tacit knowledge of *fashion* in conjunction with more explicit knowledge. The power of the method for the practitioner researcher is not limited to the examination of museum

objects but extends to fashion objects within the fashion industry. The use of methodology suited to the type of knowledge sought within practice-based research in fashion, namely knowledge of the practice of design within fashion, reveals a valuable resource that has been largely overlooked within existing research practice. This is the fashioned object. A thorough examination of the method of object analysis reveals an opportunity for objects to be a means of transferring and recording expert knowledge of fashion and design. The requirements of academic rigour as established in the literature review are met by a clear and transparent process (methodology) of analysis that is able to be recorded and is repeatable. The transfer of object knowledge within the fashion industry is a widespread and long-established practice that has potential for use in the context of academic fashion research. Like many of the professional disciplines (Schön, 1983) that have counterparts beyond the university, design has the advantage of being able to draw on industrial methods of recording and transferring knowledge. This is the case with the method of transferring knowledge through object, which can be replicated, and has been long established as a method of knowledge transfer in the fashion industry, in fashion education and in the master–apprentice relationship.

Conclusion

The method of object analysis must be conducted in a rigorous way to meet the requirements of quality academic research and offers the creative practice researcher a framework from which to *draw out what would otherwise remain tacit* and this is the key finding of this chapter. A criticism of this method could be that the successful analysis of garment objects in terms of practice research is reliant on the expert knowledge of the researcher. An individual researcher with expert practitioner, technical and *fashion* knowledge will be able to make different observations based on the garment object than those of an historian for example. However, this argument could be equally applied to the method of literature review where the knowledge of

the reader affects the links that can be made between different texts. In this sense, all research is reliant on the expertise of the reader. In the context of this research, surrounding more appropriate methodology for creative practitioner research in fashion, an observation can be made that the use of the most appropriate methodology — in this case object analysis as an object-based approach — provides a variety of primary research material from which to make observations, and develop theories of practice. The ability to undertake this research and to write up observations and publish the results is not mutually exclusive. The knowledge, which is argued as existing within fashion objects, cannot be considered research findings unless recorded in a way that can be read by the non-expert reader. The method of object analysis, as a conscious and recorded method of engaging with non-traditional research outcomes that result from practice-led research, alongside the examination of fashion garment objects from the marketplace or the museum, has many advantages for practitioner researchers. The missing link is that publication provides a mechanism to communicate *explicit knowledge* that seems on the surface to be incompatible with tacit knowledge.

Finally, the object provides a medium through which to record and communicate tacit *fashion* knowledge, within the limits of the research context, and has a history of being the most effective way of transferring this knowledge within the fashion industry. The assumption that tacit knowledge that exists in fashion objects can be communicated solely through object, for the purposes of academic research, has some basis but the ability to make the resultant observations and findings accessible remain the dominant measure within the environment of the university. As discussed, the ability for *digital object images* to be disseminated in a similar way to traditional online journal publications offers more opportunities for practitioner researchers in fashion. The use of methods such as object analysis is one example of how a more appropriate methodology could encourage different types of research through different methods of knowledge seeking. A paradigm shift from practice-led methodology to object-

based methodologies could complete a partial transition move of fashion from the technical college and art school to the university, which has taken place from skills-based educational models to knowledge-based models. The success of the methodology depends on its suitability to be appropriate to the type of knowledge sought and its ability to meet the requirements of transparency and rigour that are at the core of the academic research environment.

Chapter Five: Discussion

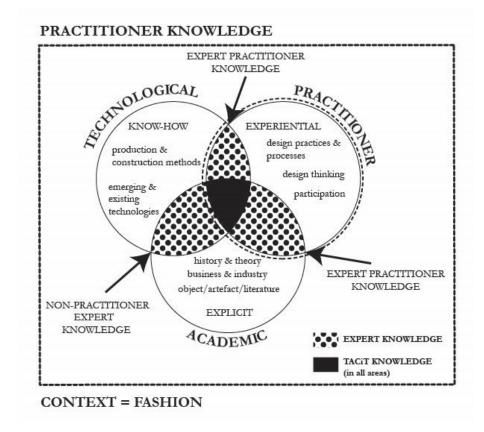
he aim of this thesis is twofold. First, it sets out to determine the state of practiceled fashion research within the university by investigating the current visibility of practitioner research outcomes; second, it investigates the ability for fashion garments, as objects or artefacts, to disseminate research findings. At the commencement of this research, publications were argued as the most effective method of disseminating research findings. However, a more specific format for presenting non-traditional research outcomes in fashion provides an alternative that has the potential to be equal to publication, for evaluating research, and my recommendations for increasing accessibility of these outcomes contributes to the potential for them to become equal to publications. Communicating research findings from practice-led fashion research is essential for the emerging methodology of fashion as material culture and this research makes a significant contribution to fashion research by providing methods for practitioner researchers in fashion to become a part of this emerging discourse. This chapter challenges the proposition that all practitioner knowledge of fashion is tacit knowledge and that, instead, this knowledge exists as a hybrid space and as a relationship between technical, academic and practitioner knowledge. The work of the thesis is presented as a model of practitioner knowledge and model for practice-led fashion research, combining existing methods of design research and fashion research that have implications for the emerging field. Current guidelines for documenting practice-led research outcomes in fashion are also discussed in relation to these findings.

The discovery that existing practice-led research in fashion, as demonstrated through the critical mapping of fashion research, is focused on the technical aspects of fashion and the design process marks a turning point in this research. The dominant view of practitioner knowledge as tacit knowledge has been informed by design perspectives, drawing on theory

developed through readings of Polanyi (1966/2009c), Schön (1983) and Cross (2006). However, the model of practitioner knowledge proposed in this thesis, developed from the quantitative and qualitative analysis of fashion research outcomes, extends the understanding of practitioner knowledge of design and confirms more recent theory that positions practitioner knowledge as a relational knowledge, or can be explained as existing in a space between explicit and tacit knowledge. In other words, this research's findings indicate that practitioner knowledge is neither wholly tacit nor entirely explicit and is more accurately explained as a relationship between various types of knowledge. The outcome of this research is to define the object or artefact in fashion as the embodiment of this relationship. The aim of this chapter, in positioning practice-led fashion research within the university environment, is to establish the relevance and the role of the fashion garment, object or artefact in developing practice-led research in fashion in response to emerging theory and methodology.

The chapter is organised into four sections. The first two sections deal directly with the first of the original questions posed by this research: Is practitioner knowledge of fashion tacit knowledge? Section one presents a model of practitioner knowledge in fashion and discusses this model in relation to existing theory surrounding tacit knowledge. Section two discusses practice-led research methodology in relation to current formats, the representation of tacit knowledge in practice-led fashion research and practitioner fashion research as design research. The second part of this chapter deals directly with the second of the original research questions: What is the most effective method to communicate practitioner knowledge for the purposes of disseminating practice-led fashion research? Section three revisits an earlier focus on the importance of publications to practitioner research through a discussion of existing practice-led fashion research outcomes, methods of communicating fashion research. These methods are discussed alongside emerging theory surrounding practice-led research, fashion research, fashi

potential of practice-led fashion research in accord with developments in fashion theory and the separation between theory and practice is discussed from the perspective of fashion research rather than from the perspective of practice-led research. The final section discusses the data collected through the qualitative mapping of practice-led research in relation to existing theories of tacit knowledge and current guidelines of practice-led research outcomes identified in Chapters Two and Three. Examples from existing practice-led research are used to illustrate the potential applications for the proposed model of practitioner research presented in earlier sections of this chapter.



Proposed model of practitioner knowledge

Figure 5.1 Model of practitioner knowledge within the context of fashion (Finn, 2013)

The suggested model of practitioner knowledge within the context of fashion (Figure 5.1) presents practitioner knowledge as a combination of technological, academic and practioner knowledge. Examining the model, it is clear that practitioner knowledge is defined by its experiential nature of design practices and processes, design thinking and participation in the practice of design. The model represents the intersections between each type of knowledge as a site of expert knowledge. For practitioners, the intersection of academic and technical knowledge indicates that practitioner knowledge is not limited to the practitioner, just that the experiential aspects of this knowledge are characteristic of practice. Similarly, the intersection between technological knowledge and practitioner knowledge indicates that technological knowledge is not conditional upon experiential, first-hand knowledge. Practitioners have technological knowledge of production and construction methods beyond their own experience and explicit knowledge of history and theory of objects or artefacts through existing literature without experiential knowledge. Practitioners can also have technological knowledge of practice that is from the past but can relate this knowledge to the present through practice. In this model, tacit knowledge is represented as a part of all types of knowledge related to practitioner knowledge. As knowledge becomes more complex, the result of multiple viewpoints and experiences, the specifics of knowledge become more difficult to explain. This view extends earlier theories of tacit knowledge and methodologies of practice-led research, which position tacit knowledge as a dominant part of creative practice. I theorise that this knowledge exists as a result of a wide knowledge of all areas of practitioner knowledge and is therefore not *limited* to skills-based knowledge resulting from the action of expert practice. This supports Collins' (2010) and Sennett's (2009) emergent theories of tacit knowledge as *relational* tacit knowledge, and existing as a part of complex knowledge relationships. This is discussed later in this chapter. It is evident from this research, and this is reflected in the model,

that practitioner knowledge has focused on the experiential without paying proper attention to the other types of knowledge that contribute to expert practice.

Friedman (2003) states that a problem with defining practitioner knowledge as tacit is that it is based on an incomplete understanding of tacit knowledge by its original author, Polanyi (Friedman, 2003, p.154). The model presented here responds to this criticism by providing a more comprehensive version of practitioner knowledge. Friedman (2003) is correct in stating that 'to say that tacit knowledge is not research and that design theory is not identical with the tacit knowledge of design practice does not diminish the importance of tacit knowledge' (Friedman, 2003, p.155). Based on this research it is evident that the balance between tacit knowledge and other types of knowledge has been overstated in the favour of tacit knowledge. For fashion practice, this can be connected to the focus of practitioner research on the processes of design practice, through an inherited understanding of design as a process and adoption of design theory and methodology for practice-led research in fashion. The development of fashion research discussed in Chapter Two reveals that this area of research has been informed by theory and methodology from different disciplines at different stages of its development. The earliest stages involved methodologies of history and museum studies; the 1980s and 1990s saw the development of practice-led research through visual arts models including Gray and Malins (1996) and Sullivan (2006). This examination of more recent practice-led fashion research reveals, as discussed in Chapter Three, a shift from art to design theory and methodology based on Schön's (1983) model of reflective practice and more recently Cross's (2006) model of design thinking. Both of these models draw on Polanyi's theory of tacit knowledge as a large part of practitioner knowledge within the discipline of design.

Entwistle's (2000) explanation of a tendency in fashion research for 'producing a theory of dress that is simplistic in its attempt to be all-inclusive' (Entwistle, 2000, p.57) can be related to practice-led fashion research as a way of understanding the simplification of practitioner

knowledge as tacit knowledge, which Friedman, citing Cross (2003, p.157) maintains is the case for design research. Section three discusses emerging definitions of 'valid, demonstrable research outputs' in more detail but the point here is that *tacit knowledge claims* are being overstated as a part of arguing for what is a perceived lack of valid research outcomes from design practitioners. I argue that this is not the case for fashion. Valid research outcomes are simply not *yet* as accessible (and citable) as other research outcomes. Drawing on the literature review and the critical mapping of practice-led research in fashion reveals a dominance of reflective practice methodology, practitioner researchers in fashion would seem to have found an all-inclusive methodology but I argue this methodology is the most recent in a line of different methodologies for fashion and is being used as a means of 'doing' practice-led research; first arts practice methods, and more recently design practice methods. The proposed model for practitioner research in the next section of this chapter is intended to extend methodology beyond a method of doing research and proposes a methodological and theoretical model as a starting point for practice-led research in fashion to connect with *fashion* research.

Tacit knowledge, previously theorised as a driver in expert practice, is instead proposed here as a *result* of expert practice. Explaining expert practitioner knowledge as tacit knowledge is a way of accounting for a level of expertise that draws on each area of knowledge in an inexplicit way. Tacit knowledge is also involved in all knowledge, so that each area of knowledge is dependent on some degree of tacit knowledge. Thus tacit knowledge is not the stimulus for practitioner research in fashion, although it is a part of practitioner knowledge and all knowledge, and contributes to research outcomes. The critical mapping of existing practice-led research has revealed that the majority of this research is motivated by design as problem solving and addresses research question–solution scenarios that are technical and aim to contribute to design knowledge. Collins' (2010) version of tacit knowledge is more scientific in its description of both tacit and explicit knowledge and has positioned relational tacit knowledge within his explanation of explicit knowledge, rather than in a separate category of its own. Collins explains relational knowledge as 'how *particular* people relate to each other' within 'the local social groups to which they belong' (Collins, 2010, p.86). This can partially explain how tacit knowledge has evolved as such a central aspect of practice-led research across many different fields within the university. Particularly fashion, where often unspoken signals are sometimes enough to 'explicitly' communicate knowledge without any need for translation, as Collins explains, 'the knowledge is vouchsafed to those within the appropriate social network or social space — who can communicate with 'a nod and a wink' — but hidden from those who do not belong to the in-group' (Collins, 2010, p.96). However, as identified in Chapter Two, it remains that knowledge is not tacit because it *hasn't* been made explicit but because it *cannot* be told. This has relevance for the question of the nature of practitioner knowledge of fashion that was originally proposed in this research as almost entirely tacit knowledge. However, modelling practitioner knowledge has revealed that much knowledge of fashion, for the practitioner, has simply 'not yet been told' (Collins, 2010, p.86).

Collins (2010) suggests that tacit knowledge becomes codified and eventually, over time, becomes able to be explained or less tacit. In line with Collins' (2010) discussion of tacit and explicit knowledge, garments or objects act as a form that facilitates the transformation of practitioner knowledge from tacit to explicit and supports the idea that it is possible to render tacit knowledge explicit (Collins, 2010, p.27). In this case, the garment or object acts as the connection between different types of fashion knowledge. Sennett (2009) explains an opposing theory that challenges the idea that practitioner knowledge begins as tacit knowledge. He argues instead that the practice of repetition makes knowledge of craftsmanship less conscious and in this way this knowledge becomes tacit (rather than beginning as tacit knowledge). This is a very valid point, that learning a technical skill, argued by Polanyi (1966/2009c) as a process

of osmosis, may be the opposite. Technical knowledge of fashion is often taught quite consciously, as a design process, as strict methods of cutting and construction; however, over time expertise allows these skills to become more intuitive and less conscious. The loss of ability for expert craftsmen to articulate their knowledge of practice in an explicit way, or their ability to 'know more than they can tell', may account for explanations of this knowledge as tacit knowledge. These theories extend the earlier works of Schön (1983) and Polanyi (1966/2009c), among others discussed in relation to tacit knowledge in earlier chapters, to challenge existing knowledge binaries in fashion, where knowledge up to this point has been aligned with tacit knowledge.

Sennett's (2009) discussion of tacit knowledge as being related through fashion objects such that it 'emphasises the lessons from experience through a dialogue between tacit knowledge and explicit critique' (Sennett, 2009, p.51) provide a theoretical point to this research's findings. His discussion of the 'bedding-in' of a practice (Sennett, 2009, p.123) suggests that the expert knowledge of a practitioner becomes tacit from the performance of a skill rather than always having existed as tacit knowledge. In other words, much knowledge that may have been considered up until now as tacit knowledge is actually tacit as a part of a fluid state that moves between tacit and explicit through *action*. Tacit knowledge arises from a practised skill rather than existing as a specialist knowledge that is acquired tacitly. For practice-led research, the focus on tacit knowledge, as a result of the expertise of experienced practitioners within the university, has been on tacit knowledge in a codeless state. By this I mean that this knowledge is expert, related to practice and specialist but is neither encoded nor decoded as potentially communicable knowledge. This marks the second major turning point in this study. Not all tacit knowledge of practice, or of fashion, is tacit. It is more accurate to explain this knowledge as existing in a space between explicit and tacit, and draw on Sennett's (2009) explanation as a way of positioning practitioner knowledge of fashion as explicit through its relationship to Page | 183

other forms of practitioner knowledge. I demonstrate this aspect in my visual representation of tacit knowledge by positioning tacit knowledge as a part of all types of knowledge rather than limited to the domain of expert practice (Figure 5.1).

Proposed methodology for practice-led fashion research

Figure 5.2 is my model of an object-based, practice-led research methodology based on the results of my research. This model incorporates the methods of object analysis as a fashion methodology (Andrade, 2004, Steele, 1998; Taylor, 1998) with the methods of practice-led design research centred in Schön's (1983) model of reflective practice and Polanyi's (1966/2009c) theory of tacit knowledge. The concept of developing methodology based on the practices of industry, or professional practice, through methodologies involving reflective practice (Schön, 1983), is a strategy for improving practitioner research within the discipline of design that has been adopted by the majority of practice-led researchers in fashion as identified through a critical mapping of fashion research outcomes. The advantage of a multimethod approach is that the different types of knowledge within fashion can be drawn out through different methods of inquiry. The model of practitioner knowledge discussed in the previous section provided the basis for this model, alongside the object analysis and reflective practice that formed the body of my research, discussed in previous chapters.

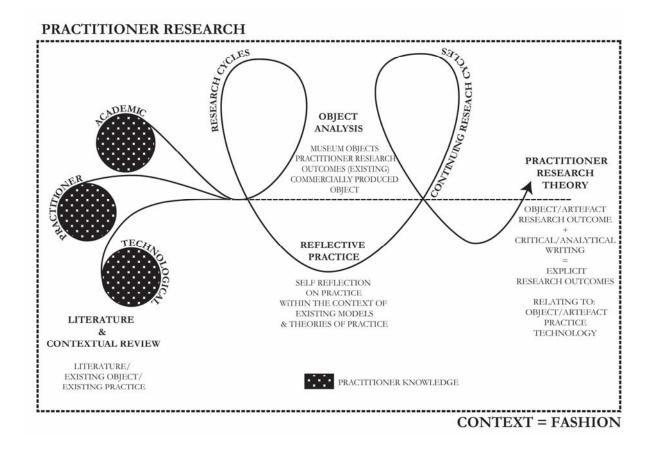


Figure 5.2 Proposed model of object-based, practice-led research methodology (Finn, 2014)

This model of practice-led design research methodology (Figure 5.2) effectively combines current design-led approaches to practice-led fashion research and current object-based approaches to fashion research. Practice-led research and practice-led research outcomes in fashion are proposed as the means of extending Riello's (2011) theory of a material culture of fashion that 'articulates itself through a series of concepts to fashion that takes a *direct* interest in the 'material sphere' (Riello, 2011, p.1). This is different from existing approaches to fashion research that propose the object as either a site of knowledge that gives rise to theories of dress history or a physical manifestation to support abstract ideas through case study. Riello (2011) explains this as either inductive or deductive approaches to fashion research that involve garment objects or artefacts. The diagram shown at Figure 5.3 is a visual representation of this theory.

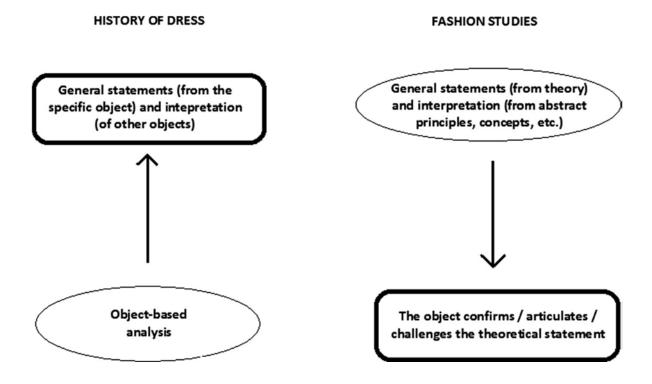
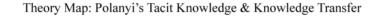


Figure 5.3 Inductive versus deductive approaches (Riello, 2011)

The method of object analysis originally adopted for this research, based on Andrade (2004), Taylor (1998), Steele (1998), Prown (1980, 1982) and McClung Fleming (1974) is objectbased rather than object-led. The model presented in Figure 5.2 is responsive to emerging fashion theory and has been developed taking into account the object or artefact in existing fashion research, including practice-led fashion research.

To address the model directly, the relationship between the types of knowledge that exist in practice is made clear rather than, as in an earlier model representing practitioner knowledge, centred in action and based on Polanyi's (1966/2009c) theory of 'tacit knowledge' (Figure 5.4). The methods of contextual and literature review, as the method of determining existing knowledge surrounding a research topic or question, have continuing relevance for practitioner research as shown here, but should respond to existing theory and practice within a field rather than arising solely from contexts of individual practice. This responds to Riello's (2011) call

for researchers in fashion to utilise both inductive and deductive approaches to support each other. This also preempts criticisms of practice-led fashion research as individually focused, considering earlier criticisms of fashion discussed in earlier chapters. Evans (2003/2007) would appear to disagree with this structured approach in relation to the advantages of visualising fashion history as a labyrinth of facts and objects that designers are advantaged by methods akin to 'ragpicking' (Evans, 2003/2007, p.115) by taking liberties in associating various different garments to construct contemporary meaning (Evans, 2003/2007, p.115). However, her theory and methodology of fashion as dress promotes the ability for fashion designers within industry to make discerning and knowledgeable selections of garments that have relevance to the current needs of society.



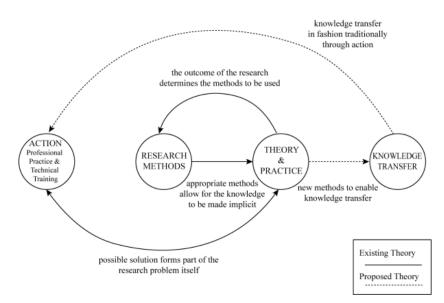


Figure 5.4: An experimental theory map of Polanyi's Theory of Tacit Knowledge (Finn, 2010)

Wilson (1985/2003/2007) also discusses the ability for fashion to be imbued with meaning in response to the needs of society, observing that, 'If liberated dress meant doing your own thing, no one ever commented on how strange it was that everybody wanted to do the *same* thing' (Wilson, 1985/2003/2007, p.207). The purpose of the literature and contextual review is to provide an overview of existing contexts and concepts that are relevant to the research aims;

hence for the designer as a *fashion* researcher, the same ability to make reliable selections should apply. Designers (as fashion practitioners) are able to determine the relevance of literature and contextual sources to their research that will also be relevant to a wider audience of fashion researchers. This is an alternative to current practice-led methodology that bases the literature and contextual review around a general research question or problem. This model for practice-led research incorporates the need for practitioner research to be informed by existing knowledge of literature, both history and theory, and emerging technology and other forms of explicit knowledge in the form of object or artefact, including existing practice-led research outcomes. The method of literature review has undergone change as a result of improved technology to index and search existing journal publications and books, allowing researchers to gain access to material that would have been invisible as recently as ten years ago. The critical mapping of fashion demonstrates that the method of contextual review is not as effective for accessing an exhaustive account of current practice-led research outcomes. This is because methods of indexing and searching non-traditional research outcomes are not yet fully developed. Inclusion in a digital repository (such as ePrints at QUT) does not automatically guarantee that research outcomes are searchable and accessible via the dominant research databases discussed in Chapter Two. In other words, based on my research experience, the systems exist and perform well in accounting for practice-led research outcomes but are not connected to each other as efficiently as databases that index journal publications.

This model deviates from existing models of practice-led research by incorporating the method of object analysis as a valuable part of the *cyclic process* of reflective practice and action research. The emphasis of design methodologies is the action of designing and making objects or artefacts and the findings evolve through each iteration of practice. Design research is often focused on problem–solution relationships (Cross, 2003) whereas fashion research is as concerned with the idea of fashion as immaterial. Riello (2011), Griffiths (2000), Entwistle Page | 188

(2000) and Leopold (1992) go further to state that fashion research is dominated by the view of fashion as immaterial over industry perspectives. Practice-led research can equally be said to be concerned with the technological aspects of fashion and not paying enough attention to the immaterial aspects of fashion through its association with design theory and methodology. This research supports that the immaterial aspects of fashion exist in the space between different forms of knowledge and proposes that practitioner *fashion* knowledge exists as a part of an effective–evocative relationship where, at present, the effective (technical) is more easily documented than the evocative (*fashion*). The consequences of this theory of hybridity for communicating research is discussed in the next section but the argument being made here is that there are different ways of thinking about practice-led research beyond research question or problem and solution that have advantages for practice-led research in fashion.

Hamilton and Jaaniste (2009) argue for a more nuanced view of practice-led research and propose that the drivers for practice-led research exist as a spectrum between effective and evocative approaches to research within the creative industries. Their later work (Hamilton & Jaaniste, 2010), based on an empirical analysis of fifty-nine masters and doctoral theses from within the faculty of Creative Industries at QUT in Australia, is an important evaluation of the *existing* form of practice-led exegeses. Based on their research, Hamilton and Jaaniste (2009) are able to identify patterns in these works to develop a model of the exegesis as it is *emerging* through practice-led research. This is an example of the turning point that has been reached for practice-led research, where theory of what practice-led research *should* be is becoming informed by *existing* practice-led research outcomes. This in turn has informed the development of the methodological model of practice-led fashion research, other fashion research and existing theoretical and methodological models of both design and fashion.

This research started from the position that Schön's (1983) model of reflective practice was ideally suited to practitioner research in fashion, whereas the outcomes have demonstrated that a more nuanced view for developing fashion design methodology considers methodology as continuously developing rather than a fixed set of methods unaffected by developments that are being led by ongoing practice-led research projects. Reflective practice, from this perspective, is suited to some practice-led research but is not a one-stop solution for all practiceled research projects. In terms of this model of practice-led research methodology, objects or artefacts form research outcomes, but also drive fashion research by offering an additional object-focused perspective. This position of the object or artefact as both driver and outcome of practice-led fashion research enables knowledge encapsulated in fashion objects, including tacit knowledge, to act in a way that is similar to publication by both informing and communicating practitioner perspectives of fashion. Object-based methodology moves beyond the question of the ability of objects or artefacts to encapsulate knowledge, whether explicit, relational or tacit knowledge, and, as Hamilton and Jaaniste suggest, 'gravitates toward the evocative' (Hamilton & Jaaniste, 2009, p.12). The incorporation of object-based methodology builds on Evans' (2003/2007) theory by arguing that design researchers are able to generate contemporary meaning for existing objects or artefacts that form the major portion of practiceled research outcomes, and transfer this immaterial fashion meaning through object or artefact. The triangulation of object knowledge with academic knowledge, technical knowledge and tacit knowledge, through the expertise of practice, provides a methodology for this type of research to develop as fashion research.

The findings here extend the theory proposed by Hamilton and Jaaniste (2009) by demonstrating that, as they suspected, the danger for the effective–evocative research spectrum can result in effective research methodology contorting what is evocative research. At the evocative end of the spectrum, iterations of practice are not always evaluated by an external

Page | 190

analysis and personal evaluation is a valid means of determining the potential for research based on each iteration of the reflective cycle (Hamilton & Jaaniste, 2009, p.9). In this respect, I argue that the tacit knowledge of practice remains tacit and personal knowledge, and the part of practitioner knowledge that is tacit knowledge cannot be told by *definition*, and this remains the case for a proportion of practitioner knowledge. However, the point of separation from existing theory is that there is no need to make this tacit knowledge explicit. The object or artefact acts as a method of communicating this knowledge, as a part of an emerging set of theories of this type of knowledge as relational and existing as a result of other expert knowledge of fashion and practice. This point responds directly to the second research question: How can this knowledge be effectively communicated for research purposes? The answer is through documentation and communication of the research object or artefact. This extends the de Freitas' (2002) theory of active documentation for research practice but I recommend, based on my research, that the focus should be developing improved formats of documentation for research outputs as well as for research practice. This does not mean that tacit knowledge is not significant to *fashion* research — the opposite is the case — but this type of knowledge has had no history of currency within the academic environment, because it has been defined through its inability to be transferred in an explicit way. This is changing and practitioners have a unique opportunity to participate in the ongoing development of nontraditional research outcomes. This is highly appropriate as practitioners produce object or artefact-based research outcomes and are soon to be more directly involved in quality evaluation through changes to ERA (ARC, 2009, 2011a) that incorporate peer review as a means of assessment.

Practitioner knowledge as fashion knowledge

The first part of this chapter has theorised the separation of practice-led fashion research and other fashion research as the result of current theory and methodology for practice-led research in fashion and a focus on the differences in the type of knowledge that exists in practice as tacit knowledge. The outcomes of this research reveal that the original question, of whether or not practitioner knowledge of fashion is tacit knowledge, can be extended to accommodate the question of whether or not practitioner research in fashion is *fashion* research. The aim of this section, in relation to discussing an object-driven approach to practice-led research, is the relationship between practice-led research in fashion and the emerging discourse surrounding the development of fashion as a discipline. This research demonstrates that, at present, the majority of practice-led fashion research is *disconnected* from other fashion research by theory and methodology because the focus has been on design as a result of design-led theories and methodologies of practice. Visual art and performance have extended practice-led methodology beyond the ability for practice to solve research problems. However, practice-led fashion research, based on the results of my quantitative and qualitative analysis of existing research outcomes drawing on the methodology put in place through ERA (ARC 2008a, 2008b, 2011a, 2011b, 2011c, 2012), is focused on design contexts and technical aspects of design rather than existing fashion contexts from the areas of the history of costume and dress, dress studies, fashion studies and fashion as material culture.

The theory of practitioner knowledge of fashion as *hybrid* contributes to the debate within fashion, surrounding the disconnection between differing areas of fashion research, by identifying that practitioner knowledge of fashion forms part of the fashion system through its dual relationship between practitioners and the industry, and through the ability designers have to translate consumer desire for new *fashion* into product form through design. Entwistle (2000,

p.208) and Riello (2011, p.2) characterise existing theories of fashion as concerned with either consumption, extending from Veblen's (1899) theory of 'conspicuous consumption', or production focusing on the fashion system as an industry. Leopold (1992) discusses the dominance of the idea of fashion as consumer driven rather than driven by production such that 'it is fashion that makes the industry rather than the industry that makes fashion' (Leopold, 1992, p.101) and '... "consumer demand" is the determining force in the creation of fashion' (Leopold, 1992, p.101). This marks a significant turning point for fashion research by identifying that 'the fashion system is a hybrid subject' (Leopold, 1992, p.101). Entwistle (2000), Riello (2011) both identify the limitations of discussing fashion consumerism without discussing the industry; examples of theory that focus on the fashion industry are not proportionate to the attention given to the immaterial side of fashion by theorists before the start of the new millennium. Emerging views of fashion as a material culture would benefit by considering the role of the designer, as well as the objects that they design, as a central part of this emerging methodology. Riello's (2011) theory takes into account the 'attribution of meaning to objects by the people who produce, use, consume, see and collect them' and theorise 'material culture is a platform for the mixing of different methodologies and approaches' (Riello, 2011, p.3). However, the role of design is not considered in terms of making meaning in fashion. Practice-led *fashion* research can make a significant contribution to this aspect of fashion as well as to the material and technological aspects of fashion.

Caroline Evans (2003/2007) argues convincingly that fashion (the practice of fashion designers) is what is needed to revitalise fashion theory. This marks another leap forward in fashion research — her own description characterises this as a 'tiger's leap' ⁴¹ (Evans, 2003/2007, p.115) — by suggesting history is relative and culture is a matter of perspective.

⁴¹ The 'tiger's leap' that Evans refers to was originally proposed by Walter Benjamin.

Her theory that fashion has relevance beyond specific time periods marks another turning point in fashion theory by juxtaposing contemporary fashion designs into discussions of fashion history. The object or artefact as a means of embodying practitioner fashion knowledge supports Evans' theory that fashion knowledge has relevance beyond its time; this is evident in the technological aspects of fashion practice. If the meaning of fashion is generated by the wearer, rather than imbued by the designer, or a combination of both existing as a communication of fashion knowledge, researchers such as Caroline Evans (2003) and designers such as the late Alexander McQueen make an equal contribution to existing fashion knowledge through the meaning they attach to garment objects and the resultant fashion aesthetics. Or, as Evans states: 'Fashion designers can elucidate these connections visually in a way that historians cannot do without falsifying history. For designers, it is precisely through the liberties they take that contemporary meaning can be constructed' (Evans, 2003/2007, p.115). Extending this theory, this research suggests that designers elucidate connections materially as well as visually. Barrett and Bolt (2007) propose that 'materialising practices constitute relationships between process and text' (Barrett & Bolt, 2007, p.5). For practitioner researchers in fashion, the risk taking, creative, experimental aspects - previously understood as tacit — offer a means of exploring this side of fashion by *materialising* existing fashion theory through engagement in fashion design practice.

Fashion as *hybrid* is a concept that has been drawn upon by fashion theorists, extending Leopold's (1992) theory of fashion as a hybrid subject, to develop different perspectives of fashion. Entwistle (2000) calls on hybridity in theorising 'dress' as a new model for fashion studies and hypothesises the body, and relationships between objects and the body, as central to the study of fashion as costume and dress (Entwistle, 2000, p.46). More recent discussions surrounding the development of fashion studies align with Küchler and Miller's theory of clothing as material culture (Küchler & Miller, 2005) and promote a hybrid structuralist

approach to draw out knowledge from an object of clothing that has been imbued with cultural meaning, thus combining the traditions of the object-based approach (valued by museum studies and costume history) with a semiotic or cultural studies approach to fashion studies that argues that fashion garments have meaning through their relationship with the wearer. Riello (2011) also identifies an element of hybridity as competing theories of fashion describing fashion as 'at the same time an (immaterial) idea and a (material) object' (Riello, 2011, p.2). His discussion of a developing theory of fashion as 'the material culture of fashion' (Riello, 2011, p.2) offers the framework for a 'hybrid methodology' (Riello, 2011, p.1) that incorporates the material and immaterial aspects of fashion.

The outcomes of the empirical and theoretical work here resonate with the notion of hybridity on two levels; by presenting practitioner knowledge as hybrid knowledge but also in proposing that the object or artefact acts as a hybrid by encapsulating both material and immaterial knowledge of fashion. The idea of hybrid is not a complete disconnection between two spheres of knowledge but infers that a small part of each system is related to other parts such that one part cannot exist in isolation from the other. This is an idea that is clearly evident in the model of practitioner knowledge (Figure 5.1). Therefore, practitioner knowledge in fashion as a hybrid knowledge is an important concept for researchers are interested in fashion research through practice. In contemporary fashion, practitioner knowledge of fashion (design) is the bridge between production and consumption; the designer is tasked with matching the needs of the market to the capabilities of production. Fashion design practice offers the best opportunity to connect theories of fashion as consumption with theories of fashion as production. Leopold's challenge of existing fashion history as a demand-driven version (Leopold, 1992, p.101) is central to the continued development of practice-led research. This research reveals that the role of the designer is still in the process of being defined within fashion. The designer does not belong to either the consumption or production of fashion and

therefore exists outside of current theory of the fashion system. Or, as discussed earlier, the role of the fashion designer is part of *both* the consumption and production systems within fashion. The outcomes demonstrate the idea of the design practitioner, with practitioner knowledge of fashion as defined here, provides the basis for understanding design as the connection between consumers and manufacturers. This could become a key part of developing theories of fashion as a system of consumption, *design* and production.

The separation between practice-led research and other fashion research mirrors the current separation within fashion as an emerging discipline. An object-based methodological approach supports calls by theorists including Riello (2011), Entwistle (2000) and Leopold (1992) for a *reconnection* between the fashion system as one of either production or consumption. Riello (2011) proposes that either of these views of fashion are equally valid but identifies that all discussions are limited to 'one aspect or the other' (Riello, 2011, p.2). This separation must be considered in terms of the separation between theory and practice within fashion research that has resulted from the separation of practice-led methodologies from fashion methodologies. The materiality of fashion has been previously limited to the discussion of the fashion system as one described by Entwistle (2000) as 'a particular set of arrangements for the production and distribution of clothing' (Entwistle, 2000, p.45). The theory and methodology of fashion design practice is proposed here as a means to connect fashion as immaterial (a set of ideas) to the material aspects of fashion (fashion garment objects).

Non-traditional research outcomes in fashion

This section returns to the second of the original research questions: What is the most effective method to communicate practitioner knowledge for the purposes of disseminating practice-led fashion research? The previous section addresses this question in terms of fashion theory and methodology, where this section focuses on the findings from existing fashion practice in

relation to the findings from the literature review and critical mapping of fashion to extend the starting viewpoint that publication is the 'answer' for increasing visibility of practitioner research. ERA is making significant leaps forward in accounting for NTROs, and in evaluating artefact, object or exhibition through peer review. In Australia, the 2015 round of evaluation should be informative for practitioner researchers in decision making surrounding the best formats for non-traditional research outcomes but, in the meantime, practitioners need to become proactive in developing methods and formats for *publishing* non-traditional research outcomes, which ERA defines as having been 'made publicly available' (ARC, 2011b, p.31). Some of these formats are already crossing the boundary between industry and academia and existing practice-led research gives an insight into other formats that can be added.

Creative production research projects can be considered 'subjective and personally situated' but this is not necessarily a weakness (Barrett & Bolt, 2012, p.7). This type of practitioner research is able to contribute to knowledge of practice through other forms of dissemination beyond publication through objects: 'although artefacts are produced, their novelty, shared interest and usefulness may not be easily demonstrated or assessed' (Scrivener, 2000, p.2). For example, the rise of the creative workshop as a means of discussing research through practice has potential for transferring tacit knowledge of practice. This format of research presentation has developed alongside more traditional conference presentation as a means of engaging and interacting with practitioner research; whether as a side effect of the type of knowledge that exists in creating fashion objects, or as a tacit way of sharing research findings that are equally tacit, is not really understood. Examples of this type of dissemination include Otto Von Busch's Hactivism interactions (von Busch, 2008) and Roberts, Rissanen and McQuillan's Cutting Circles events (McQillan, Rissenan, & Roberts, 2013). The expansion of tacit fashion knowledge through action and interaction is of interest regarding this question of fashion knowledge. The reflection on the practice of other researchers is significant and generally missing from current research publications in existing journals that utilise literature and professional contexts of practice within art or design.

Reflexivity has an important role to play in terms of reflective research practice within practitioner research. The ability to examine past research and make observations and decisions about new ways to move forward is characteristic of reflective practice. The process is cyclic with each phase or cycle of research informing and, in effect, changing the way the researcher views the next cycle of research, where 'disciplined self-reflection in which the research topic and process, together with the experience of doing the research, are critically evaluated' (Scrivener, 2000, p.11). The move from self-reflective research practice to reflective research practice, which builds on an existing body of knowledge of practice, is reliant on understanding the various ways this knowledge is recorded and transferred, and prioritising these methods within the research process. The reflexivity involved in the re-examination of existing practice (through examination of objects that are the result of research practice) is an important factor in offering new insights from existing fashion knowledge. The different types of fashion knowledge communicated by object are inseparable in this transaction.

The conditions for submitting non-traditional research outcomes for evaluation as a part of ERA has led to growth in digital repositories both in Australia and New Zealand as a method of accounting for this form of output. QUT ePrints is an example of a digital repository that has grown exponentially over the past few years and has become one of the largest digital repositories of non-traditional research outcomes in Australia. This may be true in terms of the number of NTROs recorded within the system but the format of database entries is not as specific as those for entering traditional publications. In terms of fashion, objects or artefacts make up a small percentage of outputs, whereas the dominant number of entries for fashion are in traditional publication formats (QUT, 2014). The next section focuses on developing a

framework for recording garment or artefact for the purposes of disseminating research findings that extends current guidelines included as a part of ERA assessment requirements. The model presented here (Figure 5.1) draws on current fashion theory and practice-led fashion research that incorporates fashion garment objects or artefacts as research outcomes. This model is discussed in relation to the methods that are theorised as having the potential to cross the industry–academic divide and contribute to methods for communicating non-traditional research outcomes in a way that is equal to publication, in view of the most recent recommendations by ERA (ARC, 2012).

The most recent ERA guidelines (ARC, 2011c) extend previous versions (ARC 2008a, 2008b, 2011a, 2011b) by requiring the submission of a specific research statement as a part of non-traditional research outcome submission and acknowledging that, for peer reviewers, 'the research component of the work may not be immediately clear' (ARC, 2011d, p.5) Table 5.1 provides a summary of data requirements for NTROs put forward for peer review under the latest version of ERA submission guidelines (ARC, 2011c) where the NTRO is included in a digital repository.

Table 5.1: A summary of requirements for non-traditional outputs for peer review assessment based on	
ERA submission guidelines (ARC 2011c, p.45)	

Data item	Comments
Staff creator(s)	Required for all authors who are eligible researchers
Creator(s)	Required to list all authors of the output
Title	Required
Place of publication	Required

Publisher	Required if available
Year published	Required
Extent	Required
Non-traditional output category	Required
Media	Required if available
Notes	Required if available (e.g. include venue name and type, venue commissioner, role of creator)
Four-digit Field of Research (FoR) code apportionment ⁴²	Required (a maximum of three)
Portfolio name	Required for items that are part of a portfolio
Portfolio number	Required for items that are part of a portfolio
Research statement	Required for peer-reviewed items, include for only one output if part of a portfolio

From these requirements it is clear to see that the format for NTROs is not specified. The submission requirements do not extend far beyond 'institutions must supply additional documentation as a part of the Research statement for ERA peer review of NTROs' (ARC, 2011b, p.46). A portfolio of work is defined as 'a group of individual works submitted separately which together constitute a single research outcome' (ARC, 2011c, p.82). For fashion this would suggest that individual designs that form a collection in response to 'same underlying research endeavour' (ARC, 2011c, p.44). The similar condition for research publications is not made explicit in the documentation. Regardless, the main point here is that

⁴² 'For the purposes of ERA, disciplines are defined as four-digit and two-digit FoRs as identified in the Australian and New Zealand Standard Research Classification (ANZSRC). The ANZSRC provides 22 two-digit FoR codes, 157 four-digit FoR codes, and an extensive range of six-digit codes' (ARC, 2011a, p.8).

the exact means of documenting a non-traditional output for fashion remains unspecified and, rather than a challenge, this offers practitioners an opportunity.

Fashion objects or artefacts also have the potential to be presented as registered designs under ERA guidelines. This has not been an approach for fashion researchers who have presented their research outcomes in the format of creative works or exhibitions based on the mapping of practice-led fashion research as a part of this study. This format offers a lot of potential for documenting object or artefact and has a high degree of potential to be searchable, drawing on the current indexing for patents and design registrations. This has been demonstrated here in Andrade's research, in particular where French designers had a good practice of explicitly documenting individual fashion designs through design research registrations. ERA recognises registered designs 'as a design registered under the Designs Act 2003 (where "design" refers to the overall appearance of the product resulting from one or more visual features of the product)' (ARC, 2011c, p.83) rather than the result of innovations in methods of designing product that result in a distinct design aesthetic. Examples of the latter would include Rissanen's (2011, 2013) and MacQuillan's (2009) distinctive cutting methods, Evans-Mikellis's (2011) innovation in generating shape within knitwear and Reilly's (2009) distinctive method of using Arduino technology in designs for safe night cycling. Exciting design-led projects like Fraser's (2009) refashioning of existing garments into new designer dresses suitable for manufacturing processes would also fall outside the remit of the registered design in Australia. In addition, the current cost of registering a design in Australia is based on an industry model and, while I recommend this method of documentation, a new system of registering designs that are the result of research would require some further investigation.

The following format for documenting an object or artefact as a creative work for the purposes of communicating fashion research relates the model of practitioner knowledge to current methods of 'publishing' research findings, moving beyond the dominance of publication as the most *effective* method of communicating research outcomes, and engages with the evocative research project's potential to offer 'unfolding possibilities' (Hamilton & Jaaniste, 2009, p.9). Digital images have emerged as the main method of documenting fashion research in line with industry, where the method has been dominant since the 1930s (Breward, 2007). For practiceled research, the fashion image is used to illustrate points within the text rather than forming the text. This is most evident in early projects where the outcomes of practice-led fashion research often took the form of being included as an appendix. Brough (2008) is a good example of how images can be used to show technical aspects of fashion garments as well as the evocative aspects, the immaterial, of a fashion research project. His thesis 'NeoDandy: Wearability, design innovation and the formal white dress shirt for men' (Brough, 2008) represents an example of a practice-led master's thesis in fashion. The images of Brough's (2008) documentation are examples of what is possible for future research projects. The first example is Shirt number 11 (Figure 5.4). This image appears in an appendix (unnumbered) (Brough, 2008, p.127). The image is presented as part of the research diary and represents one of over sixty shirts that are documented as part of the exegesis. Brough (2008) discusses the choice of a photographic style for documenting the shirts that formed the body of his work, explaining that showing the shirts on a hanger did not do justice to showing the fit of the shirts and their relationship to the body. This talks to the elements of scale and proportion discussed in earlier chapters in this thesis. In his own words:

I experimented with a range of styles for the photographs ... shirts on hangers did not adequately record the fit of the shirts. Thus the final method selected was a body display so as to accurately record the fit. (Brough, 2008, p.100)



Figure 5.4: Shirt number 11 [fashion object] documented by Brough (2008, p.127)

The image format is useful as an exemplar because it attends to the technical aspects of the object or artefact by showing clear images of the front, side and back views of a the garment, related to the body through being worn. For this reason the images are a valid documentation of these aspects. The next image from Brough's exegesis (Brough, 2008) shows a different approach that has equal value for the practice-led research outcome as a fashion object or artefact. Figure 5.5 is an image created by Brough from one of his concept shirts on a hanger as a part of an exhibition. The shirt image has been manipulated in photoshop (Brough, 2008, p.100). This image captures the essence of the immaterial fashion aspects of the work that is encapsulated in object or artefact because the garment or object has been presented in a way

that illustrates the designer's intention rather than to communicate the material and technical aspects of the work. This demonstrates that the object or artefact acts as a method to communicate this aspect of fashion through documentation of the outcomes of practice-led fashion research. The evocative style is equally relevant, the hanger providing an implied relationship to the body, and scale and proportion (although somewhat distorted) are maintained, through the armhole and shoulder shaping in relation to the object itself. In this way, the image encapsulates the technical knowledge of the practitioner but also suggests the context of the object within fashion as immaterial.



Figure 5.5: Shirt number 37 [fashion object] documented by Brough (2008, p.97)

The ability for drawings to act as either predominantly technical or as images that are representative of a fashion garment all operate on these principles. The technical specification drawing is an obvious example, as mentioned earlier, but the design drawing is another case where the style of drawing aims to document the evocative alongside some technical aspects as a means of communicating design ideas. Evans Mikellis includes an example of this in her practice-led master's exegesis entitled 'Future forms: A methodological investigation for

garment shape innovation in knitwear design' (Evans Mikellis, 2011), where she discusses the advantages of a less structured rough design sketch over standard flats (technical design drawings) and specification drawings in communicating the 'designer's context' (Evans Mikellis, 2001, p.58). An example from Evans Mikellis's exegesis is shown here as Figure 5.6 to illustrate this point (Evans Mikellis, 2011, p.57).



Figure 5.6: Design sketches based on a tank top (Evans Mikellis, 2011, p.57)

A characteristic of both the evocative digital photograph and the design sketch is their efforts to capture movement. The medium of video is an advancement in documenting fashion object or artefact that has considerable potential for fashion research in communicating this aspect as an essential part of the relationship between the fashion garment and the body in terms of fabric drape, texture and garment fit. The industry is leading the way in developing this type of model in both the immaterial sense of fashion and the technical materiality of fashion. YouTube video of fashion runway shows are the pinnacle of communicating the designer's context for fashion and can also meet the criteria of being accessible in terms of research. Fashion websites are also driving effective methods of communicating technical aspects of fashion through video.

ASOS (<u>www.asos.com</u>), Neiman Marcus (<u>www.neimanmarcus.com</u>) and net-a-porter (<u>www.netaporter.com</u>) all offer a short video of 'garments walking' (a sound bite of a garment on a moving body). These video examples all show the front, side and back views of a garment on the body in the same way as still photography. Although these examples have been drawn from industry, where they are used as a method for selling fashion garments, they offer another level for the documentation of objects or artefacts for research purposes. The fashion object or artefact is also being documented within other areas of fashion research, particularly fashion history. Online collections such as The Museum at FIT (<u>http://www.fitnyc.edu/museum.asp</u>) (New York) and The PM (Sydney) are leading the documenting objects or artefacts support the methods proposed here in addressing both the material and immaterial aspects of these objects. For the museum, the advantage of linking to other records via hyperlinks allows research to be led by the object or artefact and this is a feature that is highly relevant to documenting practice-led research outcomes in fashion. A summary of these recommendations is presented in Table 5.2.

Table 5.2: Summary of individual items for documenting fashion objects or artefacts (Finn, 2013)

ITEM	RECOMMENDATIONS
Digital images	Images should form the major part of the submission. Each object should be adequately represented as flat (technical effective images of front and back, inside and outside) with the inclusion of a clear reference to scale. Garment may also be related to the body by being shown on the stand (front, back and side). Evocative images that aim to capture the immaterial aspects of fashion objects should also be included. Images should be made available as a folder that is tagged with searchable key words (relating specifically to the objects) and stored in digital repositories. Practice-led research outputs that do not included these images cannot be considered to have been published.
Media	Moving image of the garment on a body based on existing models within industry. This could include evocative video (object/artefact as a part of a fashion installation/exhibition/fashion show) or effective imagery (ASOS/Neiman Marcus style video snapshots of the garment on a moving body). The relationship between the garment object/artefact and the body forms a part of the immaterial in fashion and short film is another option for attempting to communicate these non-technical aspects of practice-led fashion outcomes.
Technical specifications	The specification is a standard in industry that has great potential for documenting the technical aspects of design. This method is very similar to the requirements of design registration and documents such aspects as key measurements and materiality, and provides a technical drawing of the design for production.
Relationship to body/scale	In addition to specific methods of relating the garment object to body as mentioned above, any images, including digital photographs, sketches and technical drawings, should indicate their relationship between the body and the object. This should be a concrete measure for technical drawings. Drawings that capture immaterial aspects of fashion, such as illustrations, should relate to the body through proportion but in a less explicit way.
Links to other objects (hyperlinks and references/citations)	This is vital for communicating research outcomes and is an area that can be improved upon within fashion research. For object/artefact to be critically discussed, researchers must have access to information about the object/artefact to draw their own conclusions or develop an informed opinion on the validity of an argument based around a fashion object. This point has consequences for both key journals in fashion (Fashion Theory and Fashion Practice) where images of objects are removed for copyright purposes. The lack of images often invalidates a researcher's point of view.
Research statement	The format for the research statement is clearly defined under ERA (ARC, 2011c). For communicating research findings, the research statement is able to be replaced by a digital copy of the exegesis. This is working well as practice-led research is accessible because the exegesis acts as a publication for standard database indexes. The object/artefact outcomes are not always accessible.
List of citations	A format for referencing the fashion object/artefact should be formalised. In many cases the designer or creator is not referenced (or is mentioned in the image caption). There are standard formats for other types of publications and must be improved for NTROs.

Additional considerations for practice-led research

This study shows that serious limitations exist for practitioner research in developing a means to communicate research outcomes in a way that allows other fashion researchers to access research findings. In the case of the practitioner researcher in fashion, this translates to the potential of objects to form more than a singular case so that 'the beyond-the-single-case applicable and transferable knowledge embodied in the artefact is more important than the artefact, which is merely a demonstration of its existence' (Scrivener, 2000, p.1). A factor in determining the usefulness of practice-led research is 'that the knowledge embodied in the artefact (e.g., how to pick up an egg without crushing it) can be described separate from it [the artefact itself] (thus offering the potential for reuse)' (Scrivener, 2000. p.1). The previous chapter provides an outline of the fashion garment that, as an artefact or object, is difficult to access within the current system of recording objects that are a part of archives or collections. In the case of designers' own archives, there is an understanding that these objects embody fashion knowledge of the design house, and therefore these garments are appropriately held in private collections. In the case of fashion garments as objects that are the result of research practice, and form the majority of NTROs for practitioner researchers, the need to record and communicate these objects is essential to developing academic practices.

The belief that all practice-led research in fashion is *fashion* research is currently limited by differing ideas of fashion and reflects a continuing tendency to group all practitioner research together based on methodology rather than on research topic. My research shows that the different paradigms of fashion practice are yet to emerge due to the limitation enforced by boundaries for communicating knowledge. This chapter attempts to address these issues beyond the examiners of any individual dissertation or thesis in relation to methods of recording research outcomes, but also in terms of gaining an understanding of the existing

landscape of *fashion* research. Where accounts of designers attempting to explain their design process and analysis of different approaches to design seem to be lacking something, they can be enriched by the use of supporting documentation. This is becoming a common practice in the case of the expanding medium of YouTube, through the designer interview as an effective format to enable a behind-the-scenes insight into the world of high fashion. The designer is often filmed trying to explain their current collection but their meaning is often abstract if one aspect of fashion is considered in isolation from other types of fashion knowledge. Here is an example to illustrate this point. In a recent interview, Marc Jacobs describes his new collection as inspired by a cardboard box, explaining: 'because I think the colour is beautiful, and it's humble, and it's familiar, you know, it's something very familiar, and it's so richly done but it's such a poor material, you know' (ParisModesen, 2010). However, when taken in combination with an image of the relevant Autumn/Winter 2010/11 line-up the meaning becomes clearer. Figure 5.7 shows a screenshot taken from another YouTube video of the show in New York (ROPtv, 2010).



Figure 5.7 Screenshot of Marc Jacobs Autumn/Winter 2010/11 fashion week show on YouTube (http://www.youtube.com/watch?v=rw8HuDXZmJI)

The combination of different forms of knowledge, in disseminating knowledge of fashion Page | 209 design, is important in the academic world as much as within the fashion system. The exegesis has an important role to play in providing part of this knowledge, but it cannot, and should not, be viewed as complete without access to the objects or artefacts that form the practice-led research outcome to which it relates. The use of alternative methods of dissemination of fashion knowledge, such as panel discussions and panel interviews where designers respond to particular aspects of their work, is a step in the right direction. The inclusion of video of catwalk shows would be useful to practitioner research in fashion in terms of both providing context around existing designers' work and in communicating fashion objects or artefacts in an evocative way to capture some of the *fashion* aspects of the research. The contextualisation of this knowledge is important in forming an overall impression of the practice, which can be used reflexively in new cycles of research practice. The researcher's individual understanding of the design practice of other practitioners remains individual but the ability for the many-to-many relationship of understandings of practice, which is central to the academic environment, has an opportunity to develop.

Conclusion

A solution has been offered here in the form of a model of practitioner research methodology based on an evaluation of the traditional methods of knowledge transfer in practice-led fashion research, the fashion industry and other fashion research. While there are material aspects to fashion, namely fashion garments, and fashion is most commonly connected to the body, there are also many aspects of fashion that are inexplicit, and yet fashion exists as a system of producers, consumers and associated industries, where fashion knowledge is effectively communicated on a global scale. It is understandable the many researchers in the discipline of fashion design maintain that knowledge in fashion is tacit after Polanyi (1966/2009c) — because, in academic terms, fashion remains ethereal, undefined, but effectively communicated

through networks of participation and visually communicated through image, rather than written text. However, as discussed in this chapter, not all practitioner knowledge in fashion is tacit knowledge. The models present practitioner knowledge as a hybrid knowledge and fashion design practice as a theoretical and methodological approach to practice-led fashion research. This marks a step forward in understanding what has been previously described as the tacit knowledge of fashion within the context of fashion as both material and immaterial at the same time. This theory of practitioner knowledge proposes that, rather than being tacit, practitioner knowledge exists in the space between tacit and explicit knowledge and is reliant on complex knowledge relationships between technological, academic and tacit knowledge. In addition, new definitions and conditions surrounding the meaning of 'publication' within academia, alongside new methods of transferring fashion knowledge being made possible by advancements in communication technologies, can be considered explicit knowledge. The methods of documenting practice-led research outcomes, which are shown here to have advantages in capturing the technical (material) and evocative (immaterial) aspects of fashion mark a 'tiger's leap' (Evans, 2003/2007, p.115) in theorising the future development of practice-led fashion research as a part of fashion as a material culture.

Chapter Six: Conclusion

his thesis makes a contribution to the emerging discipline of fashion by demonstrating that difficulties in the communication of practitioner knowledge are a result of defining this knowledge as tacit and framing practice-led research in fashion as design research through the adoption of design theory and methodology. These positions directly affect practice-led fashion research in two aspects. First, categorising practitioner knowledge as tacit knowledge relegates fashion practice to a skills-based knowledge, as a lesser form of knowledge within academia, and disconnects practitioners from emerging theory and methodology of fashion as an area of scholarly inquiry. Second, accepting this knowledge as 'tacit' limits the ability of practitioner researchers to engage with existing methods of communicating and disseminating research findings and renders practice-led fashion research invisible to other fashion researchers and potentially within the wider academic community. The aim of this chapter is to position practice-led research in relation to the outcomes of this research project. The chapter is structured in five sections. The first section focuses on the implications of a more comprehensive model of practitioner knowledge for in fashion. The second section considers recommendations for practice-led research in consideration of fashion theory and methodology and the implications for fashion research. Section three clarifies the importance of publications for practitioners and the value of engaging with existing methods not limited to traditional research outcomes. Section four identifies some limitations of an object-based approach and the final section summarises the key aspects of this research and makes recommendations for future research based on its outcomes.

Practitioner knowledge

An original contribution of this research is to demonstrate that focusing on the *differences* between practitioner research and other research, based on a difference between knowledge that is either tacit or explicit, is limiting the ability for practitioner fashion researchers to engage with other *fashion* researchers. It is *because* of the different types of knowledge in practice that it is essential for practitioner researchers to engage in emerging fashion discourse. The ability to 'draw out' practitioner knowledge of fashion, including design, and make this knowledge more accessible is central to the continuing development of fashion as a discipline. Although this study begins with the position that there is some knowledge of fashion that is tacit and therefore cannot be told it ends with a more informed view that there are ways of publishing practitioner research that utilise existing methods, frameworks and technologies. These methods, from documenting the objects or artefacts that form practice-led research outcomes in fashion to referencing and citing YouTubeTM videos and interviews from Style.comTM, are beginning to find a place within the academic environment. This challenges academia to forego an on-going preference for journal articles and books as the main means of communicating and disseminating research findings. The development of alternative formats for presenting research, such as submitting research in digital formats as dynamic PDF documents and publishing outcomes in online journals is also affecting the nature of academic publication. The ability to link to video and to include larger images, in high quality colour and detail, in ways that are interactive with zoom functionality and dynamic hotspots that link to external content, offers more opportunity to include material that conveys some of the 'tacit' knowledge encapsulated in objects or artefacts without the previous limitations of printing costs and page limits. The challenge for practitioner researchers is to focus on a stronger engagement with publishing their research and an awareness of the best methods of recording and presenting objects or artefacts as non-traditional research outcomes, thus extending the reach of existing Page | 213

digital repositories by including outcomes alongside more traditional publications within the major academic database indices. This thesis directly contributes to possible strategies in overcoming these challenges.

Language and terminology, although partially addressed here, remain a critical issue for practitioner research in fashion. This research clarifies some of the issues surrounding practitioner knowledge and establishes a framework for discussing this knowledge beyond the limited descriptions of practitioner knowledge as tacit knowledge. A secondary contribution made here is in theorising fashion *design* as a hybrid space between emerging fashion theory, either material or immaterial. Fashion knowledge is also hybrid within this space between tacit and explicit knowledge. The connection between the fashion system as one of either production or consumption, to draw on Entwistle's (2002) overview of existing fashion research, is in part realised through *fashion design*. The meanings of the term 'fashion' are potentially enriched through contributions to fashion theory by practitioner perspectives of fashion design. This research identifies that fashion design is currently defined as an industrialised design process relating to the idea of fashion as an industry rather than as a creative practice involving tacit knowledge but also practitioner knowledge that can be communicated through the objects or artefacts of fashion. Knowledge of fashion is potentially different for each individual designer, as a result of differences in their knowledge of fashion, and this contributes to the way in which designers are able to develop their own aesthetics. In other words, the contribution of this thesis to fashion research is through the idea that the immaterial aspects of fashion are communicated through their relationship to fashion's materiality.

Practice-led theory and methodology

This thesis responds to criticisms of fashion research made by Wilson (cited in McNeil, 2010), Skjold (2008), Tseëlon (2001) and Winakor (1988), amongst others, that the emerging discipline is lacking in common structure, definitions, language and authoritative sources. The problem of ambiguous terminology extends to using the term 'practice' to describe the method of research but also to define and categorise practitioner research through its practice-led methodology. Basing fashion *practice* on models of art and design research defined by key authors, including Cross (2006), Gray and Malins (1996) and Schön (1983), plays a part in contributing to potential problems for new fashion researchers trying to engage with *fashion* research but being informed by practice-led methodologies of art and design. The actions and processes of fashion practice appear similar to the model of reflective practice and this may account for its dominance as a methodology for existing practice-led fashion research projects. However, while the process of design may appear similar in aspects of studio practice and research outcomes that take the form of objects or artefacts, the focus on design has consequences for the *fashion* aspects of fashion design practice. For many *design* practitioners, an indication of good design is that the outcomes are purposeful and functional. It is always a process of problem solving. Design is inherently related to creating a plan for something entirely new or something better than existing models for the purposes of replication and production. The designed object is not only an outcome or solution to a research problem, the action of designing the object is also a research method used to address a problem or question, or a way of understanding design practice.

Tseëlon's (2001) proposition that "a real scientific status" for fashion research is the result of adopting methodology from other disciplines is not supported by evidence from this study. Conversely, the available evidence suggests that the practice of adopting methodologies may

have the opposite effect and can result in limiting the abilities of practitioner researchers to engage with alternative and existing methods of publication for traditional and non-traditional research outputs that have the potential to be critical for communicating and disseminating practice-led fashion research. This research demonstrates that inappropriate methodologies, formerly referred to as scientific methods (Gray & Malins, 2004; Schön, 1983), are restrictive to research practice, unnatural for designers and limiting to the creative process. Likewise, the traditional methods of the arts and social sciences, considered a better option in the 1980s and 1990s, are not without problems for practitioner research. This is identified in the original theory of reflective practice as a methodology for practice-led research where Schön suggests that "if one party to an institution wishes to begin acting in a non-traditional way, he is apt to create new sorts of dilemmas for himself" (Schön, 1983. p. 303). The risk for practice-led research in fashion is that over-structuring studio practice, and documentation and reporting as a means of demonstrating rigour through methodology, will continue to impact the development of practitioner research. The approach of adopting practices to make research more academic is a practice that did not prove a successful strategy for fashion researchers entering the university during the mid-twentieth century. What is different here is an approach that has looked to existing theories and methodologies of fashion that may have been overlooked in favour of defining practice-led methodology by its methods rather than incorporating practitioner methods into fashion research.

Practice-led fashion research is currently driven by design theory and methodology rather than by *fashion*. The result is that practitioner research is similarly concerned with the technological and process models that are characteristic of practice-led design research. Consequently, the knowledge of practitioners in fashion is also considered tacit knowledge. This thesis demonstrates that practitioner knowledge involves a degree of tacit knowledge but that this is not the dominant form of knowledge within practice. Alternatively, tacit knowledge is theorised as a hybrid space through complex relationships between technological, academic and practitioner knowledge. Thus a contribution made by this thesis is that fashion practice includes types of knowledge that can be communicated and disseminated using current methods of publication within the university environment. Understanding practitioner knowledge extends the potential of current methods of recording and transferring knowledge beyond academic writing and publication. This provides an opportunity for fashion researchers to develop rich resources for the continued growth of practitioner research within *fashion* using existing methods of documenting object or artefact outcomes that are considered equal to more traditional forms of published research.

Advantages of object-based methodology

The examination of objects or artefacts, as a part of a collection of objects of the same type, can provide insight into the design of objects or artefacts within historical, social, industrial, and cultural contexts of fashion. The examination of a single case limits the impact of any findings and the relevance of the observations that are made become too closely associated with a few specific cases, rather than allowing a stronger case to be built around a larger number of objects or artefacts related to the research being undertaken. The ability to frame objects within a context, and developing a means for researchers to search for these objects, is necessary for fashion research to reach its full potential within the areas of both non-practitioner research and practitioner research. The advantage of practitioner research methodology incorporating the methodologies of reflective practice and object analysis is to encourage practitioner researchers to re-examine objects and artefacts from their past research practice within different contexts, a practice that is common for developing traditional publications. In addition, the research practice of other fashion practitioners (within the university and from the fashion industry) can be examined within a different research context,

thus building knowledge of *fashion* around fashion objects and practice. Past research can therefore be built upon and re-examined in the same way as academic writing draws on past research publications to develop a case. Thus reflective practice can be expanded beyond the single case to include other cases of design practice through reflective practice. Practitioner theory is only able to develop if the research of other practitioners is made available. At present this happens through conference presentations, workshops, master classes, teaching collaborations but documentation of the objects or artefacts that form practice-led research outcomes offers a significant opportunity to extend the impact for this type of research.

Limitations of object-based methodology

The use of object-based methodologies in fashion research is currently limited by the relatively small number of similar cases that can be identified and examined through the conventional academic database system compared with methodologies that rely on existing literature as a method to determine the extent of existing research. The framework for presenting fashion objects or artefacts as research outcomes is equally relevant for fashion researchers who are not practitioners but are similarly affected in developing theory based on a limited amount of data available in terms of objects and artefacts. This is because these objects are located within collections that are geographically separated and this makes them difficult to examine, certainly more inaccessible than journal articles. Importantly, their existence may not be discoverable if items within museum collections are not searchable through a digital database. The studies used here, including Andrade (2004), Partington (2001) and Palmer (1997) mark a significant move forward in demonstrating the potential for object-analysis as a methodology for fashion research. However, the current practice of removing images from publications means that Palmer (1997) is much more meaningful if read in the hardcopy issue of *Fashion Theory* compared with the online edition (where images are removed to protect copyright). For

practitioners, careful use of images with the relevant permissions is an important consideration for future research.

The re-examination of case studies, examination of contextual work from the perspective of the practitioner and examination of both current and historical examples of fashion objects offer a more rigorous methodological approach than existing methodological approaches of individual cases of reflective practice. The exegesis, as a written text is representative of practice-led research but is not the major outcome of research practice and can be improved through a more structured approach to documenting object or artefact outcomes of research practice as a result of understanding practitioner knowledge as involving more than tacit knowledge. The role of reflexive and reflective practice does not end with a single case but should be able to be extended to the work of other practitioner researchers within the academic environment. Publication is more likely to deal with observations of explicit findings that result from the practice, or can be demonstrated through examples of the practice, where objects provide a primary source of research data that has ongoing relevance for future practitioner and non-practitioner research.

In the same way that early fashion researchers utilised the methodology and theory of established disciplines to 'academicize' fashion research, the model of practitioner research methodology presented here can be taken at face value and cause additional problems for practitioner researchers. The re-examination of existing methods reveals that combining the practices of knowledge transfer from the fashion industry, and the types of knowledge that form practitioner knowledge in fashion, including expert and tacit knowledge, is the best strategy to improve the visibility of practitioner research within fashion. However, a focus on the object or artefact as an alternative methodology is as problematic as one that focuses on research practice as a cyclic process. The balance between the knowledge encapsulated within

object or artefact and the ability to reflect on research practice are related to the type of knowledge seeking valued within the university environment. The focus on object or artefact, without the knowledge of the practitioner, is already represented in existing fashion research but this research can also benefit from engaging with the outcomes of practice-led fashion research.

The fixation on methodology is reflective of the methodological uncertainty that is characteristic of practice-led research in fashion and is the result of an incomplete paradigm shift from 'knowledge-how' to 'knowledge-what' within the university environment. Other key indicators of the problems of this shifting paradigm are that definitions of the type of knowledge of practice are weak (limited to tacit knowledge) and there is a lack of primary data resulting from practitioner research, in the form of sketching, photographs and journal reflections, that are 'lost' within an individual researcher's journal. The most serious limitation of object-based methodology is that objects themselves are difficult and costly to access compared with publications that are often available online. A proposed framework for publishing non-traditional research outcomes may prove limited in conveying an adequate representation of the physical object for the purposes of accessing this research as the basis of other fashion research. However, methods to communicate fashion that are developing within the fashion industry are proving successful in communicating *fashion* contexts within the commercial environment. For this matter, only time and further research will offer further insight.

Publication for practitioner research outcomes

The problem of not having effective methods of indexing published practitioner research outcomes that take the form of objects or artefacts effectively means that all practice-led research is beginning from the same starting point. This gives some credence to Wilson's view that "existing work is too often overlooked, in the desire to claim that a course, methodology or theory is 'new', rather than part of a mature and developed area of study" (cited in McNeil, 2010, p.108). The literature and contextual review can provide a method for interrogating existing publications and object or artefacts from professional practice but cannot access existing practice-led outcomes as effectively. For practitioner fashion researchers, the issue is a continuing examination of problems for fashion as *new* problems because publications of practice-led fashion research, either traditional or non-traditional, are not addressing existing theories of *fashion* practice. Conferences have become an important method for practitioners to discover practitioner research but methods of publishing practice are still under development. Without publications, practitioners are limited to referencing journal papers, books and practice-led research that they are aware of through participation in an emerging academic community of practitioners. However, practice-led research outcomes are not yet equivalent to traditional research publications because there is no effective way of accessing these research outcomes through existing academic database indexes.

A proportion of research findings that form the contribution to knowledge resulting from practice-led research are embodied in the artefact or object produced through research practice. The method of contextual review results in a different focus for examining existing research but may not be effective in accessing appropriate literature based on a key word search. The result is that the reflexivity that "must be seen as a central feature of research-in-design" (Scrivener, 2000, p. 11) has therefore not reached its potential. At best, this means that research is unknowingly replicated and, at worst, the result can be that the same questions continue to be asked at a surface level and the ability to engage with "the cyclic process" (Scrivener, 2000, p. 11) is limited by research methods that encourage rigour in dealing with published research but are less rigorous in developing robust methods of referencing and citation for practice-led research outcomes.

As a part of the shift to the university environment, along with different understandings of research and research practices, practitioner researchers in fashion bring a different idea about how knowledge exists in practice, and, importantly, how knowledge is communicated within fashion based on their knowledge of methods within the fashion industry. Unlike more traditional academics, whose training and culture encourage the practice of reading scholarly journals and potentially the ability to write scholarly papers, an ultimate aim of practitioner researchers in fashion is to keep abreast of the latest developments by observing and commenting on the work of other designers and sometimes responding to this work through their own collections. This is similar to arts practice in which the contextual review process is more relevant to traditional forms of literature review that do not accommodate practice-led research outcomes. Understanding practitioner knowledge beyond the limitations of tacit knowledge enables a more informed strategy to develop regarding the most effective methods for publishing practitioner research. The inclusion of non-traditional research outcomes is relevant to practice-led research because it recognises that fashion objects or artefacts may be presented as published research outcomes. This means that non-traditional research outputs should not be disadvantaged by a difference in format. This thesis identifies the possible framework for communicating and disseminating practitioner research, hence making research outcomes public, through alternate forms of publication discussed here.

The decision to include creative works as non-traditional research outputs within ERA guidelines for what constitutes research in Australia is affecting the development of systems to account for these outputs as a part of ERA evaluation. As a result, many institutions have developed digital repositories that incorporate methods for presenting non-traditional research outcomes that include fashion objects or artefacts. The advantage of these repositories is to enable practice-led research outcomes to be recorded and referenced in a similar way to written text, thus offering researchers the ability to access other practice-led research. However, this is

currently limited by a view of the exegeses as representative of the research practice, where the objects or artefacts form the major part of the research outcome. A thorough literature and contextual review of existing fashion research relies on it being represented in literature and having access to practice-led research outcomes.

Limitations of publication

Two factors have relevance for the lack of successful object or artefact databases for the purposes of this discussion. The first is the lack of a common 'look and feel' of web portals that link to these records, including a lack of standard methods of categorising objects and artefacts as searchable data. The establishment of a characteristic format, comparable to the common aspects of the journal paper, is important in developing alternate platforms that will be perceived as equal to publication within the academy but will also perform on an equal level with traditional methods of publication. This is directly related to the premise that unless research is published online and appropriately indexed it may as well remain unpublished. The second is the lack of a universal system of searching for relevant material related to specific research projects. Practice-led research methodology, for fashion that is mainly reflective practice, is internally focused and does not currently rely on examining the practice of other researchers. This means that emerging researchers are not routinely examining existing research beyond traditional literature. In association, the method of contextual review for fashion is predominantly focused on design outcomes within industry over academia. Digital repositories that allow researchers to search and return non-traditional research outcomes are still developing and can benefit by inclusion in database indexes and a more structured format for including objects or artefacts based on the framework proposed here. The use of delimiters to search specific journals of practice (limiting searching to publications within these journals) is not sufficient, as demonstrated by this study; these journals are more likely to be published accounts of traditional research around cultural, industrial, social or business aspects of fashion rather than practitioner research perspectives. There is no effective indexing system for traditional publications that utilise practice-led research methods. The inclusion of "practiceled fashion research" as a key word will benefit future practice-led research in fashion by allowing strategic searches of what is an increasing quantity of research publications that include the terms 'fashion' as well as 'practice-led'.

Summary

In response to the original questions proposed here the original contributions of this research is to identify the significant role of research methodology in developing the practice of emerging researchers in fashion. Adopting the methodology of a discipline also results in adopting its ontology and epistemology. The adoption of methods from more established disciplines, rather than advancing appropriate methods for fashion, results in a situation where fundamental stages of developing a discipline are not being addressed. In this case, practiceled fashion research is informed by the theory of practitioner knowledge as tacit knowledge and research methodology that views design as a problem-solving process. This research also contributes to possible solutions to problems currently impeding the development of a community of practice surrounding practice-led fashion research and identifies that other fashion researchers are separated from practice-led fashion through theory and methodology as much as practitioners are not yet represented within the emerging discipline of fashion. The strength and ethos of the academy is to share knowledge and to generate critical and unbiased discussion around this knowledge, this should be the aim for fashion practitioners. The purpose of this thesis is not to end the idea of publication as a valuable method of disseminating practitioner research but to demonstrate that alternative methods for publishing practitioner research outcomes can be improved through understanding practitioner knowledge.

This thesis argues that the lack of representation of practitioner researchers in fashion is indicative of deeper problems including:

- 1. The acceptance of claims that practitioner knowledge is tacit knowledge and therefore unable to be made explicit through written text,
- A view that traditional academic publications are the most effective method of communicating and disseminating research and remain the dominant method used to assess research quality,
- 3. A continuing practice of adopting research methodologies from other disciplines in order to "academicize" fashion practitioner research.

These problems for practitioner researchers have significance for:

- Epistemologies of knowledge-how versus knowledge-what resulting from an incomplete paradigm shift between the move of fashion education from the technical and art colleges to the university environment and compounded by definitions of practitioner knowledge as "tacit" knowledge,
- 2. Theory and methodology that focuses on how to design and make fashion in place of developing disciplinary knowledge of fashion that includes practitioner perspectives,
- 3. A focus on practice-led methodologies that prioritise 'knowledge-how', in explaining the research process, rather than object-based approaches that explore alternative ways of communicating and disseminating practitioner research that are equal to traditional academic publications.

This research has fulfilled the aims of exploring practice-led fashion research by:

- Establishing the current state of practitioner research in fashion, utilising the methods of evaluation proposed by the Australian Research Council and assessed through Excellence in Research Australia guidelines,
- 2. Critical evaluation of the type of knowledge that exists in fashion, including knowledge encapsulated in fashion objects, through the experience of several case studies using the method of object analysis. The result is a model of practitioner knowledge that has relevance for other contexts of practitioner research in art and design, and
- 3. Critical evaluation of object-based research methodology and comparison with practice led methodology in fashion, leading to the development of an original model of practitioner research methodology, incorporating theory and methodology from both fashion and design.

Recommendations for further research

Based on this research it is possible to make the following recommendations for areas of further research to complement this study:

- The proposed methodology should be tested by other practitioner researchers in fashion who are uniquely qualified to evaluate its effectiveness and contribute to its ongoing development.
- The framework for recording objects and artefact provides a starting point for developing a standardised approach for documenting non-traditional research outcomes. However, this framework can benefit from testing.
- 3. The integration of practice-led research with other fashion research, theorised as a means of reconnecting differing contexts of fashion as a system, is a long-term

aspiration for this research and would be supported by further research and input from both practitioner and non-practitioner researchers in the emerging discipline.

The first step in the continuing development of fashion as a discipline is for practitioner researchers to have some input into forming a consensus around fashion knowledge. For this to occur it is vital that these researchers have some visibility within the academic community. In this respect, this thesis has achieved the original aims in determining the type of knowledge that exists in fashion practice and making recommendations for the most appropriate strategy for communicating and disseminating practice-led research outcomes. However, the outcomes of this research exceed these original expectations by re-positioning practice-led research and practitioner researchers within *fashion* thus addressing a disconnection between theory and practice. In addition, a reconnection between designing and making fashion as a part of research involved with design, technological, business, industrial, aesthetic, environmental and economic contexts can become connected to cultural, sociological, psychological and historical fashion contexts through fashion theory and methodology. The methodology proposed here makes a contribution to solving the issue for practitioners but other fashion researchers can potentially gain from access to the outcomes of practice-led fashion research. This is similar to what Evans (2007/2003/1985) proposes in her labyrinth approach that demonstrates the importance of contemporary fashion design to fashion history. This thesis demonstrates that there is also opportunity for the objects and artefacts of fashion research to inform contemporary fashion research contexts. Developing methodology suited to practitioner methods, combined with the object or artefact as the materialisation of practitioner knowledge, offers the best opportunity for completing a paradigm shift from epistemologies of knowledgehow to knowledge-what within fashion as an emerging discipline.

Bibliography

- Åkerlind, G. S. (2008). An academic perspective on research and being a researcher: an integration of the literature. *Studies in Higher Education*, *33*(1), 17-31.
- Akin, O. (1984). An Exploration of the Design Process. In N. Cross (Ed.), *Developments in design methodology* (pp.x, 357). Chichester New York: Wiley.
- Altbach, P.G. (1986). The Review at Thirty. Comparative Education Review, 30(1), 1-11.
- Andrade, R. (2004). Louise Boulanger and Inter-war French Couture: Revelations from Object Analysis. [Article]. *Textile History*, 35(1), 112-119. doi: <u>http://dx.doi.org/10.1179/004049604225015693</u> Accessed 19/01/2011.
- Archer, B. (1979). Design as a discipline. *Design Studies*, 1(1), 17-20. doi: <u>http://dx.doi.org/10.1016/0142-694X(79)90023-1</u> Accessed 01/04/2013
- Archer, B. (1995). The nature of research. Co-Design Journal, 2(11).
- Aspers, P.(2006a). Contextual knowledge. Current Sociology, 54(5), 745-763.
- Aspers, P.(2006b). Designing for the other: using knowledge to upgrade manufacturing in the garment industry: MPIfG Discussion Paper. Retrieved from <u>http://www.mpifg.de/pu/dp_abstracts/dp06-9.asp</u> Accessed 12/12/2012
- Aspers, P.(2010). Using design for upgrading in the fashion industry. *Journal of Economic Geography*, *10*(2), 189-207.
- Australian Research Council. (2008a). *ERA Indicator Descriptors*. Retrieved from www.arc.gov.au/pdf/ERA_Indicator_Descriptors.pdf Accessed 02/04/2010.
- Australian Research Council. (2008b). *ERA Indicator Principles*. Retrieved from http://www.arc.gov.au/pdf/ERA_Indicator_Principles.pdf Accessed 02/04/2010.
- Australian Research Council (2009). *ERA Indicators consultation papers*. Retrieved from <u>http://www.arc.gov.au/pdf/ERA_indicators_consult.pdf</u>. Accessed 11/02/2011.
- Australian Research Council. (2011a). *ERA 2010 National Report*. Commonwealth of Australia Retrieved from <u>http://www.arc.gov.au/pdf/ERA_report.pdf</u> Accessed 08/12/2011.
- Australian Research Council. (2011b). *ERA 2012 Journal List*. Canberra: Australian Government Retrieved from <u>http://www.arc.gov.au/era/era_2012/era_journal_list.htm</u> Accessed 02/12/2011.
- Australian Research Council. (2011c). *ERA 2012 Submission Guidelines*. Retreived from <u>www.arc.gov.au/pdf/era12/ERA2012_SubmissionGuidelines.pdf</u> Accessed 23/02/2012.

- Australian Research Council. (2011d). *ERA 2012 Peer Reviewer Handbook*. Retreived from http://www.arc.gov.au/pdf/era12/ERA%202012%20PR%20Handbook_final%20f or%20web_protected.pdf Accessed 23/02/2012.
- Australian Research Council. (2011e). *Development of the ERA 2012 Journal List*. Retreived from <u>http://www.arc.gov.au/era/era_2012/journal_list_dev.htm</u> Accessed 05/12/2011.
- Australian Research Council. (2012). Excellence in Research Australia: National Report 2012. Canberra. Retrieved from <u>http://www.arc.gov.au/era/era_2012/outcomes_2012.htm</u> Accessed 23/02/2012.
- Balenciaga, C. (circa 1950). Strapless Evening gown. Paris.
- Banks, J. A. (1993). The canon debate, knowledge construction, and multicultural education. *Educational Researcher*, 22(5), 4-14.
- Barnett, R. (2000). University knowledge in an age of supercomplexity. *Higher Education*, 40(4), 409-422.
- Barrett, E. (2004). What Does it Meme? The Exegesis as Valorisation and Validation of Creative Arts Research. TEXT, (Special Issue No 3). Retrieved from <u>http://www.textjournal.com.au/speciss/issue3/barrett.htm</u> <u>Accessed 22/10/2010.</u>
- Barrett, E., & Bolt, B., (Eds). (2007). Practice As Research: Approaches to Creative Arts Enquiry [eBook Version]. Retrieved from <u>http://site.ebrary.com/lib/qut</u> Accessed 24/08/2010
- Barthes, R. (1983). *The fashion system*. New York: Hill and Wang. (Original work published 1968).
- Barthes, R. (2006a). [an early preface to] The fashion system (A. Stafford, Trans.). In A. Stafford & M. Carter (Eds.), *The language of fashion* (English ed., pp.70-85). Oxford New York: Berg.
- Barthes, R. (2006b). *The language of fashion* (A. Stafford, Trans. English ed.). Oxford New York: Berg.
- Becher, T. (1981). Towards a Definition of Disciplinary Cultures. In *Studies in Higher Education*,6(2), 109-122.
- Becher, T. (1989). Academic tribes and territories : intellectual enquiry and the cultures of disciplines. Milton Keynes, [England]: Society for Research into Higher Education & Open University Press.
- Becher, T. (1994). The Significance of Disciplinary Differences. In *Studies in Higher Education 19*(2), 151-161.
- Becker, H. (1998). Tricks of the Trade. Chicago: University of Chicago Press.
- Behling, D. U. (1992). Three and A Half Decades of Fashion Adoption Research: What Have We Learned? *Clothing and Textiles Research Journal*, 10(2), 34-41. doi: 10.1177/0887302x9201000206
- Bence, V., & Oppenheim, C. (2004). The role of academic journal publications in the UK Research Assessment Exercise. *Learned Publishing*, 17(1), 53-68.

Berg Publishing. (2011). Classic and Modern Writings on Fashion : Berg Fashion Library Retrieved 10/01/2011, from <u>http://www.bergfashionlibrary.com.ezp01.library.qut.edu.au/page/31/-coming-</u> <u>soon-classic-and-modern-writings-on-fashion</u> Accessed 10/01/2011.

- van den Besselaar, P., & Heimeriks, G. (2001). Disciplinary, multidisciplinary, interdisciplinary: Concepts and indicators. Retreived from <u>http://hcs.science.uva.nl/usr/peter/publications/2002issi.pdf</u> Accessed 21/02/2012.
- von Busch, O. (2008). *Fashion-able. Hacktivism and engaged fashion design*: School of Design and Crafts; Högskolan för design och konsthantverk.
- Biggs, M., & Büchler, D. (2007). Rigor and Practice-based Research. *Design Issues*, 23(3), 62-69.
- Biggs, M., & Büchler, D. (2008). Eight criteria for practice-based research in the creative and cultural industries. Art, Design & Communication in Higher Education, 7(1), 5-18. Retreived from <u>http://dx.doi.org/10.1386/adch.7.1.5_1</u> Accessed 10/01/2011.
- Bills, D. (2004). Supervisors conceptions of research and the implications for supervisor development. *The International Journal for Academic Development*, 9(1), 85-97.
- Black, S., & Delong, M. (Eds.). (2009). Fashion practice : the journal of design, creative process & the fasion industry, 1(1). Oxford: Berg Publishers.
- Blessing, L. T. M., & Chakrabarti, A. (2009). DRM, a design research methodology. Dordrecht: Springer.
- Booth, W. C., Colomb, G. G., & Williams, J. M. (2008). *The craft of research* (3rd ed.). Chicago: University of Chicago Press.
- Bourke, P.F., & Butler, L. (1998). The concentration of research in Australian universities: six measures of activity and impact. *Higher Education Series. Report # 32*: Dept. of Employment, Education, Training and Youth Affairs (Higher Education Division).
- Brew, A. (2001). Conceptions of Research: a phenomenographic study. *Studies in Higher Education*, 26(3), 271-285.
- Breward, C. (1995). *The culture of fashion: a new history of fashionable dress*: Manchester Univ Pr.
- Breward, C. (1996). Undressing the Past. Gender & History, 8(2), 286-289.
- Breward, C. (1998). Cultures, identities, histories: fashioning a cultural approach to dress. *Fashion Theory*, 2(4), 301-313.
- Breward, C. (2008). Between the Museum and the Academy: Fashion Research and its Constituencies. [Article]. *Fashion Theory: The Journal of Dress, Body & Culture, 12*(1), 83-93.
- Brewer, J., & Hunter, A. (1989). *Multimethod research : a synthesis of styles*. Newbury Park, Calif.: Sage.

- Brix, A. (2008). Solid knowledge: Notes on the nature of knowledge embedded in designed artefacts. *Artifact*, 2(1), 36-40.
- Broadbent, G. (1984). Design and Theory Building. In N. Cross (Ed.), *Developments in design methodology* (pp.277-290). Chichester New York: Wiley.
- Broadbent, J. (2003). Generations in Design Methodology. *The Design Journal*, 6(1), 2-13. Retreived from <u>http://dx.doi/10.2752/146069203790219335</u> Accessed 03/10/2011.
- Brough, D. M. (2008). Neo-dandy: wearability, design innovation and the formal white dress shirt for men. Retreived from http://eprints.qut.edu.au/18355/1/Dean_Brough_Thesis.pdf?origin=publication_d http://eprints.qut.edu.au/18355/1/Dean_Brough_Thesis.pdf?origin=publication_d http://eprints.qut.edu.au/18355/1/Dean_Brough_Thesis.pdf?origin=publication_d http://eprints.qut.edu.au/18355/1/Dean_Brough_Thesis.pdf?origin=publication_d http://eprints.qut.edu.au/18355/1/Dean_Brough_Thesis.pdf?origin=publication_d http://eprints.qut.edu.au/18355/1/Dean_Brough_Thesis.pdf?origin=publication_d
- Buckland, M. (1991). Rejoinder to 'Information as thing'. *Journal of the American society* for information science, 42(10), 758-758. Retreived from <u>http://dx.doi/10.1002/(sici)1097-4571(199112)42:10<758::aid-asi12>3.0.co;2-1</u> Accessed 04/04/2013.
- Buckland, M. K. (1991). Information as thing. *Journal of the American society for information science*, 42(5), 351-360.
- Buckland, M. K. (1997). What is a 'document'? Journal of the American society for information science, 48(9), 804.
- Buehl, M., & Alexander, P. (2001). Beliefs About Academic Knowledge. *Educational Psychology Review*, 13(4), 385-418. Retreived from <u>http://dx.doi/10.1023/a:1011917914756</u> Accessed 29/03/2013.
- Buker, E. A. (2003). Is Women's Studies a Disciplinary or an Interdisciplinary Field of Inquiry? *NWSA journal*, *15*(1), 73-93.
- Bye, E. (2010). A Direction for Clothing and Textile Design Research. *Clothing and Textiles Research Journal*, 28(3), 205-217. Retreived from <u>http://dx.doi/10.1177/0887302x10371505</u> Accessed 24/06/2010.
- Calder, A. (2010). Excellence in Resaerch for Australia, Retreived from <u>http://www.arc.gov.au/pdf/ERA_7Jul10.pdf</u> Accessed 05/12/2011.
- Carlo Marco, B. (2004). Guilds, Patents, and the Circulation of Technical Knowledge: Northern Italy during the Early Modern Age. *Technology and Culture*, 45(3), 569-589.
- Carter, C. L. (1984). The state of dance in education: Past and present. *Theory Into Practice*, 23(4), 293-299.
- Carter. (2004). *Material thinking: the theory and practice of creative research*. Carlton, Vic: Melbourne University Publishing.
- Chai, K.-H., & Xiao, X. Understanding design research: A bibliometric analysis of Design Studies (1996-2010). *Design Studies, In Press, Corrected Proof.* Retreived from <u>http://dx.doi/10.1016/j.destud.2011.06.004</u> Accessed 29/08/2011.

- Chanel, G. (1965a). Women's Suit Wool Item # 96/386/5. Paris: The Powerhouse Museum, Sydney.
- Chanel, G. (1965b). Women's Suit Wool Item # A8954. Paris: The Powerhouse Museum, Sydney.
- Clarke, A., & Miller, D. (2002). Fashion and anxiety. *Fashion Theory: The Journal of Dress,* Body &# 38; Culture, 6(2), 191-213.
- Collins, A., Joseph, D., & Bielaczyc, K. (2004). Design Research: Theoretical and Methodological Issues. *The Jorunal of The Learing Sciences*, 13(1), 15-42.
- Collins, H. (1974). The TEA Set: Tacit Knowledge and Scientific Networks. *Social Studies of Science*, 4(2), 165-185. Retreived from <u>http://dx.doi/10.1177/030631277400400203</u> Accessed 27/02/2011.
- Collins, H. (2010). Tacit & Explicit Knowledge. Chicago: University of Chicago Press.
- Condé Nast. (2013). *Diane Von Furstenburg: Fall 2013 Ready-to-Wear* [Video]. New York: Retreived from <u>http://video.style.com/watch/fall-2013-ready-to-wear-diane-von-furstenberg?q=diane+von+furstenberg:+Fall</u> Accessed 06/11/2013.
- Corbin, J. M., & Strauss, A. L. (2008). *Basics of qualitative research : techniques and procedures for developing grounded theory* (3rd ed.). Los Angeles: SAGE Publications.
- Corradi, F. (2008). Craftsmanship and innovation. Collezioni Uomo, no, 62(64).
- Cross, N. (1982). Designerly ways of knowing. Design Studies, 3(4), 221-227.
- Cross, N. (1984). Developments in design methodology. Chichester New York: Wiley.
- Cross, N. (2006). Designerly ways of knowing. London: Springer.
- Cross, N. (2007). Forty years of design research. *Design Studies*, 28(1), 1-4. Retreived from <u>http://dx.doi.org/10.1016/j.destud.2006.11.004</u> Accessed 04/12/2012.
- Cross, N. (2008). *Engineering design methods : strategies for product design* (4th ed.). Chichester, England Hoboken, NJ: John Wiley & Sons.
- Cross, N. (2011). *Design thinking : understanding how designers think and work* (English ed.). Oxford: New York: Berg Publishers.
- Curtis, J. R., & Shannon, S. E. (2006). Transcending the silos: Toward an interdisciplinary approach to end-of-life care in the ICU. *Intensive care medicine*, *32*(1), 15-17.
- D'Eredita, M. A., & Barreto, C. (2006). How Does Tacit Knowledge Proliferate? An Episode-Based Perspective. *Organization Studies*, 27(12), 1821-1841. Retreived from <u>http://oss.sagepub.com/content/27/12/1821.full.pdf</u> Accessed 30/10/2012.
- Dallow, P. (2003). Representing creativeness: practice- based approaches to research in creative arts. [Article]. *Art, Design & Communication in Higher Education,* 2(1/2), 49-66.
- Davis-Floyd, R., & Arvidson, P. S. (1997). *Intuition : the inside story : interdisciplinary perspectives*. New York: Routledge.

- Davis, M. E. (2007). *Classic chic : music, fashion, and modernism*. Berkeley: University of California Press.
- de Freitas, N. (2002). Towards a definition of studio documentation: working tool and transparent record. *Working Papers in Art and Design 2*. Retrieved from <u>http://sitem.herts.ac.uk/artdes_research/papers/wpades/vol2/freitas.html</u> Accessed 29/09/2010.
- De Vries, M. J. (2003). The nature of technological knowledge: extending empirically informed studies into what engineers know. *Techne*, 6(3), 1-21.
- Delanty, G. (2001). The university in the knowledge society. Organization, 8(2), 149.
- Denzin, N. K., Lincoln, Y. S., & Giardina, M. D. (2006). Disciplining qualitative research 1. [Article]. International Journal of Qualitative Studies in Education (QSE), 19(6), 769-782.
- Devereux, C., & O'Driscoll, M. (2009). Introduction: Academic Fashion. *ESC: English* Studies in Canada, 35(2), 1-4.
- Docherty, S. (2007). The lost art [Traditional forms of fashion craftsmanship are being over taken by modern methods of training]. *Ragtrader*, 16-18.
- Durling, D. (2002). Discourses on research and the PhD in Design. Quality Assurance in Education, 10(2), 79-85. Retreived from <u>http://durling.org/papers_files/Discourse%20PhD%20QAE.pdf</u> Accessed 05/01/2013.
- Eckert, C., & Stacey, M. (2001). Designing in the context of fashion-designing the fashion context. Retreived from <u>http://www.cse.dmu.ac.uk/~mstacey/pubs/fashioncontext/eckert.pdf</u> Accessed 24/11/2011.
- Elton, L. (2010). Academic writing and tacit knowledge. [Article]. *Teaching in Higher Education, 15*(2), 151-160. Retreived from <u>http://web.b.ebscohost.com.ezproxy.aut.ac.nz/ehost/pdfviewer/pdfviewer?sid=dfe</u> <u>ea2c3-94b0-486f-9e63-c3deb93cfc62%40sessionmgr114&vid=2&hid=117</u> Accessed 16/04/2010.
- Engstom, S. (2002). Kant's Distinction Between Theoretical and Practical Knowledge. Retreived from <u>http://www.harvardphilosophy.com/issues/2002/Engstrom.pdf</u> Accessed 06/01/2014.
- Entwistle, J. (2000). *The Fashioned Body*. Cambridge, UK: Polity Press in association with Blackwell Publishers Ltd.
- Entwistle, J. (2007). The dressed body. In Welters, L & Lillethun, A. (Eds.), *The Fashion Reader*. Berg, Oxford. (Original work published 2003).
- Entwistle, J. (2009). Aesthetic economy of fashion: Markets and value in clothing and modelling. London: Berg Fashion Library.
- Entwistle, J., & Rocamora, A. (2006). The Field of Fashion Materialized: A Study of London Fashion Week. [Article]. *Sociology*, 40(4), 735-751.
- Evans, C. (2003). *Fashion at the edge : Spectacle, modernity & deathliness*. New Haven: Yale University Press.

- Evans, C. (2007). Fashion at the edge. In Welters, L & Lillethun, A. (Eds.), *The Fashion Reader*. Berg, Oxford. (Original work published 2003).
- Evans, T., Macauley, P., Pearson, M., & Tregenza, K. (2003a). A brief review of PhDs in creative and performing arts in Australia. Paper presented at the Defining the doctorate: doctoral studies in education and the creative and performing arts: AARE mini-conference 2003. Retreived from <u>http://dro.deakin.edu.au/eserv/DU:30004959/evans-abriefviewofphds-2003.pdf</u> Accessed 03/04/2013.
- Evans, T., Macauley, P., Pearson, M., & Tregenza, K. (2003b). A decadic review of PhDs in Australia. Paper presented at the NZARE/AARE 2003: Educational research, risks and dilemmas: New Zealand Association for Research in Education and the Australian Association for Research in Education. Retreived from <u>http://dro.deakin.edu.au/eserv/DU:30013921/evans-decadicreview-2003.pdf</u> Accessed 03/04/2013.
- Evans, T., Macauley, P., Pearson, M., & Tregenza, K. (2004). Why do a 'prof doc'when you can do a PhD. Paper presented at the 5th International Professional Doctorates Conference, Deakin University, November. Retreived from <u>http://webhost.global.deakin.edu.au/arts-</u> <u>ed/education/research/conferences/publications/prodoc/doc/3evansmacauleypearson.pdf</u> Accessed 03/04/2013.
- Evans-Mikellis, S. (2011). Future forms: a methodological investigation for garment shape innovation in knitwear design (Masters Thesis, Auckland University of Technology). Retreived from <u>http://hdl.handle.net/10292/1395</u> Accessed 15/03/2014.
- Farrer, J., & Finn, A. (2009). Full Circle: The future of sustainable fashion manufacturing in New Zealand International Foundation of Fashion Technology Institutes (IFFTI) 2009: Fashion and Wellbeing (pp.342-352). London: The Centre for Learning and Teaching in Art and Design (cltad).
- Farrer, J., & Finn, A. (2010). The Power of a Single Prototype: Sustainable Fashion Textile Design and the prevention of Carcinogenic Melanoma. In P. Bartolo & th (Eds.), *International conference on advanced research in virtual and rapid prototyping; Innovative developments in design and manufacturing* (pp.681-685). Boca Raton; London; CRC; c2010.
- Farrer, J., & Fraser, K. (2008). Conscience Clothing: Polarisation of the Fashion Textile Market. Paper presented at the 86th World Conference of Textiles Institute 2008, Hong Kong.
- Feyerabend, P., & Feyerabend, P. K. (1993). Against method: Verso Books.
- Fine, B., & Leopold, E. (1993). The world of consumption (p.68). London: Routledge.
- Finn, A. (2007). *Ethical Fashion: The human stories driving a fashion movement*. Paper presented at the Fashion in Fiction: A transdisciplinary conference, University of Technology Sydney.
- Finn, A. (2008a). *Black Moleskin Research Diary #1*. Design Sketchbook/Research Diary [Unpublished]. Brisbane/Auckland.

- Finn, A. (2008b). Fashion manufacturing in New Zealand: can design contribute to a sustainable fashion Industry? Retrieved from http://eprints.qut.edu.au/31512/ Accessed 08/06/2010.
- Finn, A. (2010a). *Black Leather WFSmith Ruled Notebook #1*. [Unpublished]. Brisbane, Australia.
- Finn, A. (2010b). Ways of Telling: Research Methodology for Fashion Textiles Design. Paper presented at the International Conference of Education, Research and Innovation. Published in ICERI2010 Proceedings, 1820-1829. Retreived from <u>http://library.iated.org/view/FINN2010WAY</u> Accessed 29/12/2010.
- Finn, A. (2011). Luxury Fashion: The role of innovation as a key contributing factor in the development of luxury fashion goods and sustainable fashion design *Fashion and luxury: Between heritage and innovation* (pp.11-17). Paris: Institut Francais de la mode.
- Finn, A. (2012). The globalisation of fashion knowledge: Possible repercussions for local fashion narratives. Paper presented Fashion Tales 2012: 13th International Conference of ModaCult - Center for the Study of Fashion and of Cultural Production of the Università Cattolica of Milan. Retreived from <u>http://convegni.unicatt.it/meetings_3042.html</u> Accessed 22/08/2012.
- Finn, A., & Finn, L. (2010). Uncertaintly and Innovation in Fashion Design. Paper presented at the Global Fashion - Creative and Innovative Concepts Conference, Centro de Estudos da População, Porto, Portugal. Retreived from <u>http://eprints.qut.edu.au/40910/1/ICF2010_finna_finnl_final_eprints.pdf</u> Accessed 29/12/2010.
- Finn, A., & Fraser, K. (2007). The big picture: an integrated approach to fashion design education. Paper presented at the Fashion Industry New Zealand (FINZ) Annual Education Conference : The Broader Perspective of Design. <u>http://eprints.qut.edu.au/40844/</u> Accessed 24/06/2012.
- Finn, A., & Fraser, K. (2012). The Big Picture: Developing a Sustainable Design Minor for Online Virtual Delivery. Australian Fashion Research Network [AFRN] Symposium conducted at the meeting of the Fashionably Early Forum of the Australian Fashion Research Network, National Library of Australia, Canberra. Retrieved from http://fashionablyearly.com.au/abstracts/2012/5/11/angela-finnand-kim-fraser.html Accessed 05/10/2012.
- Finn, A., & Fraser, K. (2012). Contemporary Classrooms: Exploring Blackboard Academic Suite[™] and Virtual Teaching Spaces for Fashion Education *EDULEARN12 Proceedings* (pp.3792-3798). Retreived from <u>http://library.iated.org/view/FINN2012CON</u> Accessed 12/04/2014.
- Finn, A., & Fraser, K. (2013). Design for redesign: can old fashioned strategies provide new opportunities for sustainable fashion? In *Fashion and Social Responsibility Conference*. Minnesota, USA.

- Forlizzi, J., Zimmerman, J., & Stolterman, E. (2009). From Design Research to Theory: Evidence of a Maturing Field. *Proceedings of IASDR*. Retrieved from <u>http://www.iasdr2009.org/ap/Papers</u> Accessed 04/10/2011.
- Fraser, K. (2009). ReDress ReFashion as a solution for clothing (un) sustainability. Master of Art & Design Exegesis, AUT University, Auckland. Retrieved from <u>http://aut.researchgateway.ac.nz/bitstream/10292/817/2/FraserK.pdf</u> Accessed 10/09/2010.
- Fraser, K. (2011). ReFashioning New Zealand: A practitioner's reflection on fast fashion implications. Paper presented at the International Conference on Environmental, Cultural, Economic and Social Sustainability. University of Waikato, Hamilton, New Zealand.
- Frayling, C. (1993). Royal College of Art Research Papers Vol 1 No 1 1993 / Research in Art and Design: Royal College of Art.
- Frayling, C. (2011). On craftsmanship: towards a new Bauhaus. London: Oberon Masters.
- Friedman, K. (2003). Theory construction in design: criteria: approaches, and methods. *Design Studies*, 24(6), 507-522.
- Foucault, M. (1991). Discipline and punish/the birth of the prison. London: Penguin.
- Geczy, A., & Karaminas, V. (Eds.). (2012). Fashion and Art. London: New York: Berg.
- Geuna, A., & Martin, B. R. (2003). University research evaluation and funding: an international comparison. *Minerva*, 41(4), 277-304.
- Gill, A. (1998). Deconstruction Fashion: The Making of Unfinished, Decomposing and Reassembled Clothes. Fashion Theory: The Journal of Dress, Body & Culture, 2(1), 25-49.
- Gray, C. (1998). Inquiry through Practice: developing appropriate research strategies. In P. Strandman (Ed.), No guru, no method? : discussion on art and design research (pp.82-95). Helsinki: Research Institute, University of Art and Design Helsinki UIAH.

Gray, C., & Burnett, G. (2009). Making Sense: an exploration of ways of knowing generated through practice and reflection in craft. Paper presented at the Proceedings of The Crafticulation & Education Conference, 24–26 September 2008. Helsinki: NordFo. Retreived from http://www.makingsenseresearch.net/PDFs/Gray%20Burnett%20Making%20Sen_se%20Crafticulation.pdf

- Gray, C., & Malins, J. (2004). Visualizing research : a guide to the research process in art and design. Aldershot, Hants, England ; Burlington, VT: Ashgate.
- Gray, S. (2009). Remaking Fashion. Art Monthly Australia(218), 5-7.
- Griffiths, I. (2000). The Invisible Man. In N. White & I. Griffiths (Eds.), *The fashion business : theory, practice, image.* Oxford: Berg.
- Gropius, W. (1919). The bauhaus manifesto and program [translated english] Retrieved from <u>http://www.mariabuszek.com/kcai/ConstrBau/Readings/GropBau19.pdf</u> Accessed 01/09/2011.

- Guiuntini, P. (2008). Fashion and Visual Culture. In P. Guiuntini & K. Hagen (Eds.), *Garb: a fashion and cultural reader* (pp.179-185). Upper Saddle River, New Jersey: Pearson Prentice Hall.
- Haedrich, M. (1972). Coco Chanel; her life, her secrets. Boston: Little, Brown.
- Hammonds, L., Lloyd-Jenkins, D., & Regnault, C. (2010). *The Dress Circle: New Zealand Fashion Design Since 1940*: Auckland: Godwit.
- Hamilton, J. & Jaaniste, L. (2010). A connection model for the practice-led research exegesis: An analysis of content and structure. Journal of Writing in Creative Practice, 3(1).
- Hamilton, J. G., & Jaaniste, L. O. (2009). The effective and the evocative: reflecting on practice-led research approaches in art and design. *Interventions in the Public Domain*. Retreived from <u>http://eprints.qut.edu.au/29700/1/c29700.pdf?origin=publication_detail</u> Accessed 15/01/2013.
- Hancock, J. H. (2009). Chelsea on 5th Avenue: Hypermasculinity and Gay Clone Culture in the Retail Brand Practices of Abercrombie Fitch. *Fashion Practice: The Journal of Design, Creative Process & the Fashion, 1*(1), 63-86.
- Haseman, B., & Mafe, D. (2009). Acquiring know-how : research training for practice-led researchers. In H. Smith & R. Dean (Eds.), *Practice-led Research, Research-led Practice in the Creative Arts*: Edinburgh University Press.
- Hesse-Biber, S. N. (2010). *Mixed methods research : merging theory with practice*. New York: Guilford Press.
- Heylighen, A., Cavallin, H., & Bianchin, M. (2009). Design in mind. *Design Issues*, 25(1), 94-105.
- Hildreth, P. M., & Kimble, C. (2002). The duality of knowledge. *Information Research*, 8(1), 8-1.
- Hillier, B., Musgrove, J., & O'Sullivan, P. (1984). Knowledge and Design. In N. Cross (Ed.), Developments in design methodology (pp.x, 357). Chichester New York: Wiley.
- Holly, M. A., & Smith, M. (Eds.). (2008). What is research in the visual arts?: obsession, archive, encounter. Williamstown, Massachusetts: Sterling and Francine Clark Art Institute.
- Howells, J. R. L. (2002). Tacit Knowledge, Innovation and Economic Geography. *Urban Studies*, *39*(5-6), 871-884. Retreived from <u>http://usj.sagepub.com/content/39/5-6/871.full.pdf</u> <u>Accessed 24/06/2010.</u>
- Howes, L. (2010). Research impact rating to stay. Advancing the Chemical Sciences, 2010. Retreived from <u>http://www.rsc.org/chemistryworld/News/2010/November/11111001.asp</u> Accessed 11/02/2011.
- Hughes, C. (2007). Rethinking research. [Article]. British Journal of Sociology of Education, 28(6), 823-831. Retreived from <u>http://www.tandfonline.com/doi/pdf/10.1080/01425690701610225</u> Accessed 08/06/2010.

Jansson, D. G., & Smith, S. M. (1991). Design fixation. *Design Studies*, *12*(1), 3-11. Retreived from <u>http://ecologylab.net/research/publications/JanssonAndSmith1991.pdf</u> Accessed 11/02/2011.

Jaques Charles. (circa 1948). Evening Gown. Cannes: The Fashion Museum, Bath.

- Jashapara, A. (2007). Moving beyond tacit and explicit distinctions: a realist theory of organizational knowledge. *Journal of Information Science*, *33*(6), 752-766.
- Jenkins, D. (1968). Introduction Textile History: 40 Years. Textile History, 1, 1-1.
- Jenkyn Jones, S. (2005). Fashion design (2nd ed.). New York: Watson-Guptill Publications.
- Joseph Armstrong, H. (2006). *Patternmaking for fashion design* (4th ed.). Upper Saddle River, N.J.: Pearson Prentice Hall.
- Kane, R., Sandretto, S., & Heath, C. (2002). Telling Half the Story: A Critical Review of Research on the Teaching Beliefs and Practices of University Academics. *Review* of Educational Research, 72(2), 177-228.
- Kawamura, Y. (2004). The Japanese revolution in Paris fashion. Oxford [England]: Berg.
- Kawamura, Y. (2005). *Fashion-ology: an introduction to fashion studies*. Oxford: New York: Berg.
- Kawlra, A. A., & Srinivasan, A. (1997). Weaving as praxis: The case of the Padma Saliyars. Retreived from <u>http://biblioteca.universia.net/html_bura/ficha/params/title/weaving-as-praxis-the-case-of-the-padma-saliyars/id/50800749.html</u> Accessed 12/12/2013.
- Keefer, J. M., & Stone, S. J. (2009). Practitioner Perspectives on the Gap Between Research and Practice: What Gap? Advances in Developing Human Resources, 11(4), 454-471.
- Kemp, S. (Ed.). (2007). research rca. London: Royal College of Art.
- Kinsella, E. A. (2010). Professional knowledge and the epistemology of reflective practice. [Article]. *Nursing Philosophy*, 11(1), 3-14.
- Kirke, B., & Vionnet, M. (1998). Madeleine Vionnet. San Francisco: Chronicle Books.
- Kirkeby, I. M. (2009). Knowledge in the making. *arq: Architectural Research Quarterly*, 13(3-4), 307-313.
- Kirkeby, I. M. (2011). Transferable knowledge: an interview with Bent Flyvbjerg. *arq:* Architectural Research Quarterly, 15(01), 9-14.
- Koenig, K., Goldsmith, D., Van Helden, A., Tyson, N. d., Slater, M., Pereira, F. L., et al. (2009). 400 years of the telescope a journey of science, technology and thought [[videorecording] 1 videodisc (57 min.)]. United States: Distributed by VEA.
- Koga, R. (2002). 20th century: First half *Fashion: The collection of the Kyoto Costume Institute: a history from the 18th to the 20th century* (pp.331-508). Köhn; London: Taschen.
- Krishnan, A. (2009). What are academic disciplines? Some observations on the disciplinarity vs. interdisciplinarity debate. Retrieved from

http://eprints.ncrm.ac.uk/783/1/what_are_academic_disciplines.pdf Accessed 26/08/2011.

- Küchler, S., & Miller, D. (2005). *Clothing as material culture*. Oxford, UK ; New York :: Berg.
- Lam, A. (1997). Embedded Firms, Embedded Knowledge: Problems of Collaboration and Knowledge Transfer in Global Cooperative Ventures. Organization Studies, 18(6), 973-996.
- Lange, S. (2005). *Rethinking the Fashion Design Project Assessment Process*. Paper presented at the FINZ Fashion Educators Conference 10th 11th August, Auckland.
- Lagerfeld, K. (1991). Chanel Suit (Karl Lagerfeld for Chanel). Paris: The Powerhouse Museum, Sydney.
- Latham, K. F. (2012). Museum object as document: Using Buckland's information concepts to understand museum experiences. *Journal of Documentation*, 68(1), 45-71.
- Lather, P. (1986). Research as Praxis. Harvard Educational Review, 56(3), 257.
- Lave, J., & Wenger, E. (1991). *Situated learning: Legitimate peripheral participation*. Cambridge university press.
- Leopold, E. (1992). The manufacture of the fashion system. In Ash, J. & Wilson, E. (Eds.), *Chic Thrills. A Fashion Reader*, (101–117). London: Pandora Press.
- Lillethun, A. (2007). Fashion Theory: Introduction. In Welters, L. & Lillethun, A (Eds.). (2007). *The Fashion Reader*. Oxford: New York: Berg.
- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. Beverly Hills, Calif.: Sage Publications.
- Lynch, G., Chauvin, M. R., Johnson, A. P., Donofrio, G., Elliott, M., Trujillo, N., et al. (2013). Repositioning Craft Education and Training to Reconnect Artisans to Designers 3. *PRESERVATION*, 44(2-3).
- Macfarlane, B. (2006). Talking among ourselves? A personal journey across the silos of educational research. Retreived from <u>http://www.researchgate.net/publication/228512663_Talking_among_ourselves_</u> <u>A_personal_journey_across_the_silos_of_educational_research/file/9c96051fa4d</u> <u>760fa63.pdf</u> Accessed 21/02/2012.
- MacLure, M. (2006). The bone in the throat: some uncertain thoughts on baroque method. [Article]. *International Journal of Qualitative Studies in Education (QSE), 19*(6), 729-745.
- Maharaj, S. (2009). Know-how and No-How: stopgap notes on 'method' in visual art as knowledge production. *Art and Research. A Journal of Ideas, Contexts and Methods, 2*(2).
- Malins, J. (2010). Bringing Design Thinking to Bear on the Big Issues. *The Design Journal*, *13*(2), 133-135.
- Marshall, T., & Newton, S. (2000). Scholarly design as a paradigm for creative practice research. *Working Papers in Art and Design 1*. Retrieved from http://sitem.herts.ac.uk/artdes_research/papers/wpades/vol1/marshall2.html

- Marxt, C., & Hacklin, F. (2005). Design, product development, innovation: all the same in the end? A short discussion on terminology. *Journal of Engineering Design*, *16*(4), 413-421.
- McClung Fleming, E. (1974). Artifact study: a proposed model. *Winterthur Portfolio*, *9*, 153-173.
- McGuirk, T. (2011). A Nomos for Art and Design. *Journal of Research Practice*, 7(1), Article M1.
- McNeil, P. (2009). Fashion : critical and primary sources. Oxford: New York: Berg.
- McNeil, P. (2010). Conference report: the future of fashion studies. *Fashion Theory: The Journal of Dress, Body & Culture, 14*(1), 105-110.
- McQuillan, H. (2009). Using design practice to negotiate the awkward space between sustainability and fashion consumption. *International Foundation of Fashion Technology Institutes (IFFTI) 2009: Fashion and Wellbeing* (pp.453-464). London: The Centre for Learning and Teaching in Art and Design (cltad).
- McQuillan, H., Rissanen, T. I., & Roberts, J. (2013). The cutting circle: how making challenges design. *Research Journal of Texiles and Apparel*, 17(1), 39-49.
- McRobbie, A. (1998). British fashion design: rag trade or image industry? : Routledge.
- McRobbie, A. (1999). In the culture society: art, fashion, and popular music: Routledge London.
- Meagher, D. (2008). Fashion Speak: Random House Australia.
- Melles, G. (2010). Design research and training: views of educators in a university of technology in Australia. *Procedia-Social and Behavioral Sciences*, 2(2), 757-761. Retreived from <u>http://www.tandfonline.com.ezproxy.aut.ac.nz/doi/abs/10.1080/13596748.2011.6</u> <u>27152#.U7JXA7GN270</u> Accessed 17/11/2013.
- Melrose, S. (2005a). '...just intuitive...' Keynote presentation, AHRC Research Centre for Cross-Cultural Music and Dance Performance, SOAS. Retrieved from <u>http://eprints.mdx.ac.uk/3072/1/</u> Accessed 28/06/2010.
- Melrose, S. (2005b). 'Words fail me: dancing with the other's familiar' Key note address at Towards Tomorrow? International Gathering 2005. Retrieved from <u>http://eprints.mdx.ac.uk/3073/1/</u> Accessed 28/06/2010.
- Miller, C. M., McIntyre, S. H., & Mantrala, M. K. (1993). Toward formalizing fashion theory. *Journal of Marketing Research*, 142-157.
- Miller, D. (1998). Material Cultures: Why Some Things Matter. Cambridge: UCL Press.
- Miller, D. (2010). Stuff. Cambridge: Polity Press.
- Miller, K. D. (2008). Simon and Polanyi on Rationality and Knowledge. *Organization Studies*, 29(7), 933-955.
- Mitchell, M. T. (2006). Michael Polanyi : the art of knowing. Wilmington, Del.: ISI Books.

- Morillo, F., Bordons, M., & Gómez, I. (2003). Interdisciplinarity in science: A tentative typology of disciplines and research areas. *Journal of the American Society for Information Science and Technology*, *54*(13), 1237-1249.
- Morris, W. (1888). The Revival of Handicraft. *Fortnightly Review*, (November), 169-176. Retrieved from <u>http://www.gurulib.com/_user_manual_file/pic_1169656083427.pdf</u> Accessed 17/06/2011.
- Mutch, C. (2005). *Doing educational research : a practitioner's guide to getting started.* Wellington: New Zealand Council for Educational Research (NZCER) Press.
- Nagasawa, R. H., Hutton, S. S., & Kaiser, S. B. (1991). A Paradigm for the Study of the Social Meaning of Clothes: Complementarity of Social-Psychological Theories. *Clothing and Textiles Research Journal, 10*(1), 53-62.
- Naples, N. A. (2007). Feminist Methodologies for Critical Researchers: Bridging Differences. *Contemporary Sociology: A Journal of Reviews*, *36*(3), 282-284.
- National Archives. (2007). *Make do and mend : keeping family and home afloat on war rations : reproductions of official Second World War instruction leaflets.* London: Michael O'Mara Books.
- Newbury, D. (1996). Knowledge and research in art and design. Design Studies, 17, 215-220.
- Niedderer, K. (2007a). A discourse on the meaning of knowledge in art and design research. Retrieved from <u>http://niedderer.org/EAD07NIEDDERER.pdf</u> Accessed 24/11/2011.
- Niedderer, K. (2007b). Mapping the meaning of knowledge in design research. *Design Research Quarterly*. Retreived from <u>http://uhra.herts.ac.uk/bitstream/handle/2299/4406/903922.pdf?sequence=1</u> Accessed 24/11/2011.
- Niedderer, K., & Imani, Y. (2009). Developing a Framework for Managing Tacit Knowledge in Research using Knowledge Management Models. <u>http://shura.shu.ac.uk/507/1/fulltext.pdf</u> Access 24/11/2011.
- Niedderer, K., Roworth-Stokes, S., & Rochester, U. (2007). *The role and use of creative practice in research and its contribution to knowledge*. Retreived from http://dartevents.org/designing_files/Niedderer,%20Stokes.%20Practice%20in%2 Oresearch.%202007.pdf Accessed 24/11/2011.
- OECD. (2002). *The measurement of scientific and technological activities*. Paris: Organisation for Economic Co-operation and Development. Retreived from <u>http://unesdoc.unesco.org/images/0008/000840/084077eb.pdf</u> Accessed 14/09/2010.
- Olney, M., Strohmer, D., & Kennedy, J. (2002). Why Research Matters: Forging a Reciprocal Relationship Between the Researcher and the Practitioner. *Rehabilitation Counseling Bulletin*, *46*(1), 2-4.
- Palmer, A. (1997). New directions: fashion history studies and research in North America and England. *Fashion Theory: The Journal of Dress, Body & Culture, 1*(3), 297-312.

- ParisModesen. (2010). Interivew with Marc Jacobs Women's Ready to Wear Autumn/Winter 2010/11. Retrieved from <u>http://www.youtube.com/watch?v=VQWdh2tf7Sg</u> Accessed 16/06/2010.
- Parkins, I. (2010). Fashion as Methodology. Time & Society, 19(1), 98-119.
- PBRF. (2012). Performance based research fund: Quality evaluation guidelines 2012. Wellington: Tertiary Education Commission Te Amorangi Mātauranga Matua. Retreived from <u>http://www.tec.govt.nz/Documents/Publications/PBRF-Quality-Evaluation-Guidelines-2012.pdf</u> Accessed 21/11/2011.
- Pierson, D. J. (2004). The top 10 reasons why manuscripts are not accepted for publication. *Respiratory care, 49*(10), 1246-1252.
- Polanyi, M. (2009a). *Personal knowledge : towards a post-critical philosophy* (2nd ed.). London, England: Routledge & Kegan Paul. (Original work published 1962).
- Polanyi, M. (2009b). *Science, Faith and Society*. University of Chicago Press: Chicago & London. (Original work published 1946, reprinted 1964).
- Polanyi, M. (2009c). *The tacit dimension*. Gloucester, Mass.: Peter Smith. (Original work published 1966).
- Pomfret, R., & Choon Wang, L. (2003). Evaluating the research output of Australian Universities' economics departments. *Australian Economic Papers*, 42(4), 418-441.
- Prown, J. (1980). Style as evidence. *Winterthur Portfolio*, 15(3), 197-210. Retreived from <u>http://www.jstor.org/stable/1180742</u> Accessed 07/02/2011.
- Prown, J. (1982). Mind in matter: An introduction to material culture theory and method. Winterthur Portfolio, 17(1), 1-19. Retreived from <u>http://www.jstor.org/stable/1180761</u> Accessed 07/02/2011.
- Pryse, M. (2000). Trans/feminist methodology: Bridges to interdisciplinary thinking. *NWSA journal*, *12*(2), 105-118.
- Purcell, A. T., & Gero, J. S. (1996). Design and other types of fixation. *Design Studies*, 17(4), 363-383.
- Riegelman, N. (2006). 9 heads : a guide to drawing fashion (3rd ed.). Los Angeles, Calif.: 9 Heads Media.
- Riello, G. (2011). The object of fashion: methodological approaches to the history of fashion. *Journal of Aesthetics & Culture*, 3. Retreived from <u>http://www.aestheticsandculture.net/index.php/jac/article/view/8865</u> Accessed 30/10/2011.
- Rissanen, T. (2011). Zero Waste: Fashion Repatterned Photos Retrieved 06/07/2013, 2013, from <u>http://timorissanen.com/2011/04/05/zero-waste-fashion-re-patterned-photos/</u> Accessed 14/07/2013.
- Rissanen, T. I. (2013). Zero-waste fashion design: a study at the intersection of cloth, fashion design and pattern cutting. Retreived from http://epress.lib.uts.edu.au/research/bitstream/handle/10453/23384/02whole.pdf?s

equence=2 Accessed 12/12/2013.

Robertson, S. I. (1999). Types of thinking. London ; New York: Routledge.

- Robinson, V. M. J. (1998). Methodology and the Research-Practice Gap. *Educational Researcher*, 27(1), 17-26.
- Romeo, L. (2009). *Consumer evaluation of apparel quality* (1481594). California State University, Long Beach, United States -- California. Retrieved from <u>http://gateway.library.qut.edu.au/login?url=http://proquest.umi.com/pqdweb?did=</u> <u>1979875651&Fmt=7&clientId=14394&RQT=309&VName=PQD</u> Accessed 30/12/2010.
- Ropohl, G. (1997). Knowledge types in technology. *International Journal of Technology and Design Education*, 7(1), 65-72.
- ROPtv. (2010). Marc Jacobs Autumn/Winter 2010/11 Womens Collection Runway Show Retrieved 16/06/2012, 2012, from <u>http://www.youtube.com/watch?v=rw8HuDXZmJI</u> Accessed 14/07/2013.
- Rubin, A. (2000). Standards for Rigor in Qualitative Inquiry. *Research on Social Work Practice*, 10(2), 173-178.
- Rust, C. (2004). Design enquiry: tacit knowledge and invention in science. *Design Issues*, 20, *pt.* 4, 76-85.
- Sage Publications. (2011). Textiles Research Journal About this journal. Retrieved from <u>http://trj.sagepub.com/</u> Accessed 20/01/2011.
- Saletnik, J., & Schuldenfrei, R. (2009). Bauhaus Construct : Fashioning Identity, Discourse and Modernism. Retrieved from <u>http://QUT.eblib.com.au/patron/FullRecord.aspx?p=592948</u> Accessed 01/09/2011.
- Sano, T., & Yamamoto, H. (1999). *CAD system for Japanese kimono*. Retreived from <u>http://ousar.lib.okayama-u.ac.jp/file/30119/20100714102726/fulltext.pdf?origin=publication_detail</u> Accessed 19/12/2011.
- Schon, D. A. (1995). The new scholarship requires a new epistemology. (cover story). [Article]. *Change*, 27(6), 26.
- Schön, D. A. (1983). *The reflective practitioner: How professionals think in action*. New York: Basic Books.
- Schwartz, J. P. (2008). Object Lessons: Teaching Multiliteracies through the Museum. *College English*, 71(1), 27-47.
- Scott, D. (2004). Professional doctorates: integrating professional and academic knowledge. Berkshire: Society for Research into Higher Education & Open University Press.
- Scrivener, S. (2000). Reflection in and on action and practice in creative production doctoral projects in art and design. *Working Papers in Art and Design 1*. Retrieved from

http://sitem.herts.ac.uk/artdes_research/papers/wpades/vol1/scrivener2.html Accessed 09/07/2013.

- Scrivener, S. (2002). The art object does not embody a form of knowledge. *Working papers in art and design, 2.* Retreived from <u>http://sitem.herts.ac.uk/artdes_research/papers/wpades/vol2/scrivenerfull.html</u> Accessed 12/12/2012.
- Seago, A. (1995). Research methods for MPhil & PhD students in art and design : contrasts and conflicts. London: Royal College of Art.
- Seago, A., & Dunne, A. (1999). New methodologies in art and design research: The object as discourse. *Design Issues*, 15(2), 11-17.
- Seale, C. (1999). Quality in qualitative research. *Qualitative inquiry*, 5(4), 465.
- Seale, C. (2002). Quality issues in qualitative inquiry. *Qualitative Social Work*, 1(1), 97-110.
- Seddon, M. E., Marshall, M. N., Campbell, S. M., & Roland, M. O. (2001). Systematic review of studies of quality of clinical care in general practice in the UK, Australia and New Zealand. *Quality in health care*, 10(3), 152-158. Retreived from <u>http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1743427/pdf/v010p00152.pdf</u> Accessed 24/10/2011.
- Sennett, R. (2009). The craftsman. London: Penguin.
- Shattock, M. (2010). Mike Shattock (2000) Managing modern universities, Perspectives: Policy and Practice. In *Higher Education*, 4:2, 33-34.
- Shreeve, A., Bailey, S., & Drew, L. (2003). Students'approaches to the 'research' component in the fashion design project: Variation in students' experience of the research process [Article]. Art, Design & Communication in Higher Education, 2(3), 113-130.
- Simmel, G. (2003). The philosophy of fashion [original print date 1904]. In B. Clarke, M. A. Doel & K. M. L. Housiaux (Eds.), *The consumption reader* (pp.238-245). London: New York: Routledge.
- Skjold, E. (2008). Fashion Research at Design Schools Retrieved 18/05/2010, 2010, from <u>http://www.cbs.dk/content/download/78517/1047965/file/Fashion%20Research%</u> <u>20at%20Design%20Schools.pdf</u> Accessed 16/09/2013.
- Smith, H., & Dean, R. T. (2009). *Practice-led research, research-led practice in the creative arts*. Edinburgh: Edinburgh University Press.
- Souleles, N. (2013). The Evolution of Art and Design Pedagogies in England: Influences of the Past, Challenges for the Future. *International Journal of Art & Design Education*, 32(2), 243-255.
- Sproles, G. (1981). Analyzing fashion life cycles: principles and perspectives. *The Journal of Marketing*, 45(4), 116-124.
- St.Pierre, E. A., & Roulston, K. (2006). The state of qualitative inquiry: a contested science. [Article]. International Journal of Qualitative Studies in Education (QSE), 19(6), 673-684.

- Stacey, M., Eckert, C., & Wiley, J. (2002). Expertise and creativity in knitwear design. International Journal of New Product Development and Innovation Management, 4(1), 49-64.
- Steele, V. (1997). Letter from the editor. *Fashion Theory: The Journal of Dress, Body & Culture, 1*(1), 1-2.
- Steele, V. (1998). A museum of fashion is more than a clothes-bag. *Fashion Theory*, 2(4), 327-335.
- Sturken, M., & Cartwright, L. (2001). *Practices of looking: An introduction to visual culture*. Oxford/New York: MIT Press.
- Style.com. (2000). The Top Ten Collections Retrieved 10th September, 2010, from <u>http://www.style.com/trendsshopping/stylenotes/090710_Top_Ten_Collections/sl</u> <u>ideshow/?play=false</u> Accessed 23/09/2010.
- Styles, J. (1998). Dress in history: reflections on a contested terrain. *Fashion Theory*, 2(4), 383-389.
- Sullivan. (2005). Art practice as research : inquiry in the visual arts. Thousand Oaks, California: Sage Publications.
- Sullivan, E. J. (2002). Top 10 reasons a manuscript is rejected. *Journal of Professional Nursing, 18*(1), 1-2.
- Sullivan, G. (2006a). Artefacts as evidence within changing contexts. *Working papers in art and design, 4*, 1466-1449.
- Sullivan, G. (2006b). Research Acts in Art Practice. [Article]. *Studies in Art Education*, 48(1), 19-35.
- Svensson, T. G. (2008). Knowledge and Artifacts: People and Objects. *Museum anthropology*, *31*(2), 85-104.
- Swann, C. (2002). Action research and the practice of design. Design Issues, 18(1), 49-61.
- Tarrant, N. E. (1994). The development of costume. London: Routledge.
- Taylor, L. (1998). Doing the laundry? A reassessment of object-based dress history. *Fashion Theory*, 2(4), 337-358.
- 'Teresa'. (2008). Art of Crochet by Teresa Crochet Pansy Flower Variation 1 from <u>http://www.youtube.com/watch?v=WYh88Rh_PwM</u> Accessed 14/02/2011.
- Thompson, J. (2005). Art education: from Coldstream to QAA. *Critical Quarterly*, 47(1-2), 215-225.
- Till, J. (2001). Research and design in academia. *arq: Architectural Research Quarterly*, 5(01), 5-9.
- Till, J., Mottram, J., & Rust, C. (2005). Adapting research activity AHRC review of practiceled research. *arq: Architectural Research Quarterly*, 9(02), 103-104.
- Tomes, A., & Armstrong, P. (2003). Design, Words and History. *The Design Journal*, 6(1), 14-22.
- Tseëlon, E. (1991). The Method is the Message. Theory & Psychology, 1(3), 299-316.

- Tseëlon, E. (2001). Fashion Research and Its Discontents. *Fashion Theory: The Journal of Dress, Body & Culture, 5*(4), 435-451.
- Tseëlon, E. (2010). Outlining a fashion studies project. *Critial Studies in Fashion and Beauty*, *1*(1), 3-53.
- Usher, R. (2002). A diversity of doctorates: fitness for the knowledge economy? *Higher Education Research and Development, 21*(2), 143-153.
- V&A Museum. (2007). V&A The Golden Age of Couture Exhibition. Explore Houses and Designers Retrieved 1st September, 2010, from <u>http://www.vam.ac.uk/vastatic/microsites/1486_couture/explore.php</u> Accessed 10/10/2010.
- Veblen, T. (1899). *The theory of the leisure class: An economic study in the evolution of institutions*. New York: Macmillan.
- Vries, M. d., Cross, N., Grant, D. P., & North Atlantic Treaty Organization. Scientific Affairs Division. (1993). Design methodology and relationships with science. Dordrecht Boston: Kluwer Academic Publishers.
- Wagner, R. K., & Sternberg, R. J. (1985). Practical intelligence in real-world pursuits: The role of tacit knowledge. *Journal of personality and social psychology*, 49(2), 436.
- Weiss, B. (2004). Knowledge of Meaning. *Proceedings of the Aristotelian Society*, 104(1), 75-92.
- Weller, S. (2007). Fashion as viscous knowledge: fashion's role in shaping trans-national garment production. *Journal of Economic Geography*, 7(1), 39-66.
- Weller, S. A. (2004). Fashion's influence on garment mass production: Knowledge, commodities and the capture of value. Victoria University.
- Williams, M. (2000). Interpretivism and generalisation. Sociology, 34(2), 209-224.
- Wilson, E. (2007). Feminism and Fashion. In Welters, L & Lillethun, A. (Eds.), *The Fashion Reader*, (203-211). Berg, Oxford. (Original work published 1985, Reprinted 2003).
- Wison, E. (1992). Fashion and the postmodern body. In Ash, J., & Wilson, E. (Eds.), *Chic thrills: a fashion reader*, (3-16). London: Pandora Press.
- Winakor, G. (1988). Research in Fashion Merchandising The Need for a Theoretical Base. *Clothing & Textiles Research Journal*, 7(1), 31-35.
- Wood, J. (2000). The culture of academic rigour: does design research really need it? *The Design Journal*, *3*(1), 44-57.
- Wood, J. (2007). Relative Abundance: Fuller's discovery that the glass is always half full. In J. Chapman, N. Gant & C. Ebooks (Eds.), *Designers Visionaries and Other Stories : A Collection of Sustainable Design Essays*. London: Earthscan.
- Wood, N., Rust, C., & Horne, G. (2009). A Tacit Understanding: The Designer's Role in Capturing and Passing on the Skilled Knowledge of Master Craftsmen. *International Journal of Design*, 3(3), 65-78.
- Yates, L. (2006). Is impact a measure of quality? Producing quality research and producing quality indicators of research in Australia. *Counterpoints on the quality and*

impact of educational research: Review of Australian research in education, 119-132.

- Yerkey, A. N. (1991). Information as Thing Journal of the American Society for Information Science, 42(10), 758-758. Retreived from <u>http://search.proquest.com.ezproxy.aut.ac.nz/docview/743323176?accountid=844</u> <u>0</u> Accessed 26/06/2013.
- De Zeeuw, G. (2005). The acquisition of high quality experience. *Journal of Research Practice*, 1(1), Article M2.
- Zeisel, J. (1984). *Inquiry by design: Tools for environment-behaviour reserach*. Cambridge: Cambridge University Press.

Appendix 1: PLR Thesis Summary

Methodology used for practice-led theses in fashion research

Au	ithor (year)	Title (Thesis Type)	Methodology	Source
1.	Godamunne, Nadeesha (Godamunne 2010).	Illustration as Inquiry: a visual response to New Zealand Fashion Week	Action research	Scholarly Commons
2.	Fraser, Kim (Fraser 2009).	ReDress — ReFashion as a solution for clothing (un) sustainability	Reflective practice	Scholarly Commons
3.	Yungnickel, Glenn (Yungnickel 2013).	Designer-Maker: exploring an alternative approach to fast fashion	Action research	Scholarly Commons
4.	Smitheram, Miranda Joy (Smitheram 2013).	The superfluous and the ephemeral: consumerism, globalisation and future fashion systems	Reflective practice	Scholarly Commons
5.	Bhattacharjee, Samita (Bhattacharjee 2007).	Poly'nAsia: a fashionable fusion of Tongan & Indian textile traditions	Indigenous methodologies (Reflective practice/action research) ⁴³	Scholarly Commons
6.	Jones, Linda Elanor (Jones 2011).	Raincoat: a creative consideration of urban rainwear	Action research	Scholarly ommons
7.	Laraman, Debra (Laraman 2009).	Re-fabricate: evolving design through user interaction	Heuristics/ Reflective practice	Scholarly Commons
8.	Hillenaar, Kareen Elese (Hillenaar 2009).	Social fabric: a sustainable social-entrepreneurial fashion collaboration with female refugees in New Zealand	Multi-method / participatory action research	Scholarly Commons
9.	Evans-Mikellis, Sharon (Evans- Mikellis 2011).	Future forms: a methodological investigation for garment shape innovation in knitwear design	Action research	Scholarly Commons

⁴³ Where methodological approaches are listed in brackets, the methodology has not been explicitly stated but is utilising the method of reflecting on creative or design practice as the main research method.

Author (year)	Title (Thesis Type)	Methodology	Source
10. Mikellis, Andreas Michael (Mikellis 2011).	A manual for Sartorial Disruption	Action research	Scholarly Commons
11. Rissanen, Timo Ilmari (Rissanen 2013).	Zero-waste fashion design: a study at the intersection of cloth, fashion design and pattern cutting	Fashion design practice (Reflective practice)	UTS ePress
12. Morley, Jane (Morley 2013).	Conceptual fashion: design, practice and process	Fashion design practice / Creative practice (Reflective practice)	Trove – QUT ePrints
13. Dunlop, Paula Louise (Dunlop 2011).	Unravelling design: fashion, dressmaking, ethos	Reflective practice	Trove – QUT ePrints
14. Gully, R (Gully 2011).	Material memorialisation: new narratives from old	Fashion design practice (Reflective practice)	Trove – RMIT ResearchBa nk
15. Brough, Dean McGregor (Brough 2008).	Neo-dandy: wearability, design innovation and the formal white dress shirt for men	Fashion design practice / Reflective practice	Trove – QUT ePrints
16. Revell, L (Revell 2012).	A decorative effect	Fashion practice (Reflective practice)	Trove – RMIT ResearchBa nk
17. Campbell, M (Campbell 2010).	The development of a hybrid system for designing and pattern making in-set sleeves	Multi-method / Reflective practice	Trove – RMIT ResearchBa nk
18. Barton, M (Barton 2012).	Sketching millinery in three dimensions: a journey between physical and digital spaces	Design practice / Reflective practice	Trove – RMIT ResearchBa nk
19. Paleologos, E (Paleologos 2009).	Exploration of new processes and products for knitted textiles	Design practice / Reflective practice	Trove – RMIT ResearchBa nk

Author (year)	Title (Thesis Type)	Methodology	Source
20. Kennedy, K (Kennedy 2009).	The body as separates: an exploration in women's size definitions for mass market apparel based on the body as separate parts	Multi-method (Action research / Reflective practice)	Trove – RMIT ResearchBa nk
21. Clements, Nicholas (Clements, 2011).	Revival: The Aesthetics of Revival Subcultures and Re- enactment Groups Explored Through Fashion Image- making	Multi-method / Reflexive practice	RCA – researchonli ne
22. Bugg, Jessica (Bugg 2006).	Interface: concept and context as strategies for innovative fashion design and communication: an analysis from the perspective of the conceptual fashion design practitioner	Multi-method / Reflective practice	British Library, Electronic Thesis Online Service EThOS
23. Von Busch, Otto (Busch 2008).	FASHION-able hacktivism and engaged fashion design	Action research / Reflective practice	Trove – University of Gothenburg
24. Neighbour, Mark (Neighbour 2008).	The Male Fashion Bias	Design practice / creative studio practice (Reflective practice)	QUT – ePrints
25. Pears, Katherine (Pears 2006)	Fashion re-consumption: developing a sustainable fashion consumption practice influenced by sustainability and consumption theory	Action research	RMIT ResearchBa nk

Appendix 2: Summary of articles published in *Fashion Practice*

Volume 1, Number 1, May 2009

Editorial

pp. 141-146(6) Author: DeLong, Marilyn

Research Article

The Sweatshop, Child Labor, and Exploitation Issues in the Garment Industry pp. 147-162(16) Author: Smestad, Liat

Engaged Design and the Practice of Fashion Hacking: The Examples of Giana Gonzalez and Dale Sko pp. 163-186(24)

Author: Otto von, Busch

A Case Study of the Strategic Role of Design Processes in Brand Name Development in Turkey pp. 187-214(28)

Author: Berk, Gozde Goncu

Phashion: A Brief History and Design Philosophy pp. 215-226(12) Author: Thorogood, Simon

Multiple Systems and Composite Identities in New York Fashion: An Interview with Mary Ping pp. 227-238(12)

Author: Granata, Francesca

Designer Hussein Chalayan in Conversation with Sandy Black pp. 239-250(12) Author: Black, Sandy

Exhibition Review

Hussein Chalayan: From Fashion and Back pp. 251-258(8) Author: Bugg, Jessica

Festival Review

Internationalizing and Industrializing Fashion: Shanghai International Fashion Culture Festival (SIFCF) Review pp. 259-266(8) Author: Wu, Juanjuan

Book Review

Eco-Chic: The Fashion Paradox by Sandy Black (Black Dog Publishing, 2008) pp. 267-270(4) Author: *Root, Regina*

Sustainable Fashion and Textiles: Design Journeys by Kate Fletcher (Earthscan, 2008) pp. 271-280(10) Author: Boone, Tonya

Volume 1, Number 2, May 2010

Editorial pp. 5-12(8) Author: Black, Sandy

Research Article

⁽Doing' Danish Fashion: On National Identity and Design Practices of a Small Danish Fashion Company pp. 13-40(28)

Author: Melchior, Marie Riegels

Smart Clothing in Practice: Key Design Barriers to Commercialization pp. 41-66(26)

Author: Dunne, Lucy

Challenges Facing Apparel Traders in Nairobi, Kenya, and Strategies for Flourishing in a Liberalized Market

pp. 67-84(18)

Authors: Imo, Beatrice Elung'ata; Mugenda, Olive; Mburugu, Keren

Co-design Communities Online: Turning Public Creativity into Wearable and Sellable Fashions pp. 85-104(20)

Author: Wu, Juanjuan

Reconciling Electronics and Fashion: Cute Circuit's Francesca Rosella and Ryan Genz in Conversation with Sandy Black pp. 105-120(16)

Author: Black, Sandy

Making Sustainability Fashionable: Profile of the Danish Fashion Company Noir pp. 121-128(8)

Authors: Black, Sandy; Anderson, Stacy

Exhibition Review

SHOWstudio: Fashion Revolution

pp. 129-132(4) Author: Bancroft, Alison

Book Review

Book Review pp. 133-136(4) Author: Hancock, Joseph H.

Volume 2, Number 2, November 2010

Editorial pp. 141-146(6) Author: DeLong, Marilyn

Research Article

Mass-customized Target Market Sizing: Extending the Sizing Paradigm for Improved Apparel Fit pp. 147-174(28)

Authors: Ashdown, Susan; Loker, Suzanne

Leveraging Niche Fashion Markets through Mass Customization, Co-design, Style Advice, and New Technology: A Study of Gay Aesthetics and Website Design pp. 175-198(24) Author: *Ross, Frances*

Technology, Tradition, and Creativity in Apparel Designers: A Study of Designers in Three US Companies

pp. 199-222(24) Authors: Bye, Elizabeth; Sohn, MyungHee

Designing from Dumpsters: Cambodians Start at Grassroots with Fashion pp. 223-248(26)

Author: Medvedev, Katalin

Immersed in the Creative Process: Robert Hillestad is Interviewed by Marilyn DeLong pp. 249-258(10)

Author: DeLong, Marilyn

Comment

Slow Fashion: An Invitation for Systems Change pp. 259-266(8) Author: Fletcher, Kate

Book Review

Book Review pp. 267-272(6) Author: *Wu, Juanjuan*

Volume 3, Number 1, May 2011

Editorial pp. 5-10(6) Author: Black, Sandy

Research Article

PLEET: Light-emitting Electronic Garment pp. 11-28(18) Authors: Berzowska, Joanna; Laflamme, Anne-Marie

Sustainable Apparel Product Development: In Search of a New Dominant Social Paradigm for the Field Using Sustainable Approaches pp. 29-62(34)

Authors: Armstrong, Cosette M.; LeHew, Melody L. A.

A Consumer Vision for Sustainable Fashion Practicepp. 63-84(22) Authors: Reiley, Kathryn; DeLong, Marilyn

Creating an American Mythology: A Comparison of Branding Strategies in Three Fashion Firms pp. 85-110(26)

Author: Manlow, Veronica

A Deconstructionist Perspective on Menswear: A Conversation with Siki Im

pp. 111-122(12)

Author: Hancock II, Joseph H.

Maison Martin Margiela 20 pp. 123-130(8)

Author: Cambridge, Nicolas

Book Review

Book Review pp. 131-136(6) Author: Cohn, Caitlin Starr Book Review pp. 137-142(6) Author: *Tsui, Christine*

Volume 3, Number 2, November 2011

Editorial pp. 149-152(4)

Author: DeLon, Marilyn

Research Article

Buyer-Supplier Partnerships in the Global Apparel Industry: A Study of US Buyers and Indian Suppliers

pp. 153-174(22)

Authors: Singh, Kamlesh; Hodges, Nancy

Sustainability in Retail: The Failed Debate around Plastic Shopping Bags pp. 175-196(22)

Author: Chida, Meriem

Restructuring Plans for the Textile and Clothing Sector in Post-industrial Belgium and Spain pp. 197-224(28)

Author: Gimeno-Martínez, Javier

The Mood Board Process Modeled and Understood as a Qualitative Design Research Tool pp. 225-252(28)

Author: Cassidy, Tracy

Interview with Designer Sabyasachi Mukherjee

pp. 253-264(12) Author: Bhandari, Vandana

Designer Alexander van Slobbe Talks to Nanda van den Berg pp. 265-284(20) Author: van den Berg, Nanda

Author: van den Berg, Nanda

Book Review

Book Review pp. 285-288(4) Author: *Bugg, Jessica*

Volume 4, Number 1, May 2012

Editorial pp. 5-12(8) Author: *Wu, Juanjuan*

Research Article

The Future of Chinese Fashion pp. 13-40(28) Authors: Welters, Linda; Mead, Arthur C.

Chinese Fashion Designers: Questions of Ethnicity and Place in the Twenty-First Century pp. 41-56(16)

Author: Clark, Hazel

The Identity of Fashion in Contemporary China and the New Relationships with the West pp. 57-70(14) Author: Segre Reinach, Simona

Branding 'Created in China': The Rise of Chinese Fashion Designers pp. 71-94(24)

Authors: Ferrero-Regis, Tiziana; Lindgren, Tim

Dye for Two Tones: The Story of Sustainable Mud-coated Silk pp. 95-112(18)

Authors: Lin, Shu Hwa; Mammel, Kelly

Imagination + Life: Wang Yiyang's Design Core pp. 113-126(14) Author: Wu, Juanjuan

Exhibition Review

Mao to Now: Chinese Fashion from 1949 to the Present pp. 127-134(8) Author: Campbell, Kathleen E.

China through the Looking Glass: WESSIELING's National Dress and Fashion Chess pp. 135-144(10) Author: *Loscialpo, Flavia*

Volume 4, Number 2, November 2012

Editorial pp. 149-152(4) Author: Black, Sandy

Research Article

Fashion Thinking: Towards an Actionable Methodology pp. 153-176(24) Authors: Nixon, Natalie W.; Blakley, Johanna

Customer Perspective on Mass-customized Knitwear pp. 177-196(20) Author: Larsson, Jonas

A Study of How Small and Medium-sized Enterprise Tailors Utilize e-Commerce, Social Me dia, and New 3D Technological Practices pp. 197-220(24)

Author: Ross, Frances

Durability, Fashion, Sustainability: The Processes and Practices of Use pp. 221-238(18) Author: *Fletcher*, *Kate*

The Rise of Vintage Fashion and the Vintage Consumer pp. 239-262(24)

Authors: Cassidy, Tracy Diane; Bennett, Hannah Rose

Footwear Designer Ross Barber in Conversation with Sandy Black pp. 263-270(8)

Author: Black, Sandy

Volume 5, Number 1, May 2013

Editorial pp. 5-8(4) Author: Dunne, Lucy **Expressive Prostheses: Meaning and Significance** pp. 9-32(24)

Authors: Hall, Martha L.; Orzada, Belinda T.

Inclusively Designed Womenswear through Industrial Seamless Knitting Technology pp. 33-58(26)

Adolescents' Aesthetic and Functional View of Hearing Aids or Cochlear Implants and Their Relationship to Self-Esteem Levels

pp. 59-80(22)

Authors: Ellington, Tameka; Lim, Stacey

Preliminary Investigation of the Limitations Fashion Presents to Those with Vision Impairments pp. 81-106(26)

Authors: Williams, Michele A.; Neylan, Callie; Hurst, Amy

Fashioning Bodily Knowledge: BodyMedia's Pervasive Body-monitoring Portal pp. 107-116(10)

Author: Dunne, Lucy

Eyewear, Fashion, Design, and Health pp. 117-128(12) **Author:** *DeLong, Marilyn*

Exhibition Review: Framed!: Contemporary Eyewear in Fashion

pp. 129-136(8) Author: Black, Sandy

A User-centered Approach to the Redesign of the Patient Hospital Gown pp. 137-152(16)

Designing a New Type of Hospital Gown: A User-centered Design Approach Case Study pp. 153-160(8)

Authors: Black, Sandy; Torlei, Karina

Volume 5, Number 2, November 2013

Editorial

pp. 165-170(6) Authors: Peirson-Smith, Anne; Hancock, II, Joseph H.

Research Articles

Wishing on a Star: Promoting and Personifying Designer Collections and Fashion Brands pp. 171-202(32)

Author: Peirson-Smith, Anne

Third World No More: Rebranding Indonesian Streetwear pp. 203-228(26) Author: Luvaas, Brent

The Maturation of Hip-Hop's Menswear Brands: Outfitting the Urban Consumer

pp. 229-244(16) Authors: Lewis, Tasha; Gray, Natalie

Making the Marque: Tangible Branding in Fashion Product and Retail Design pp. 245-264(20)

Authors: Wigley, Stephen M.; Nobbs, Karinna; Larsen, Ewa

Book Review

Book Review pp. 265-268(4) Author: Eicher, Joanne B

Appendix 3: Summary of mapping data

Fashion publications as at 10 January 2010	Date range	EbscoHost Academic Search Premiere	Peer-reviewed journal publications
Search Terms = SU (Subject Terms)	1985–1990		
fashion			13
fashion AND history			1
Fashion AND clothing			1
fashion AND manufacturing			0
fashion AND design			1
fashion AND design AND history			0
fashion AND design AND manufacturing			0
fashion AND art			3
fashion AND marketing			0
fashion AND business			0
Search Terms = SU (Subject Terms)	Date range	EbscoHost Academic Search Premiere	Peer-reviewed journal publications
	1991–1995		
fashion			27
fashion AND history			2

fashion AND clothing			3
fashion AND manufacturing			1
			1
fashion AND design			1
fashion AND design AND history			0
			Č
fashion AND design AND manufacturing			0
fashion AND art			2
fashion AND marketing			1
fashion AND business			0
Search Terms = SU (Subject Terms)	Date range	EbscoHost Academic Search Premiere	Peer-reviewed journal publications
	1996–2000		
fashion	1996–2000		57
fashion fashion AND history	1996–2000		57
	1996–2000		
fashion AND history	1996–2000		4
fashion AND history fashion AND clothing	1996–2000		4 3
fashion AND history fashion AND clothing fashion AND manufacturing	1996–2000		4 3 0
fashion AND history fashion AND clothing fashion AND manufacturing fashion AND design	1996–2000		4 3 0 4

fashion AND art			6
fashion AND marketing			1
fashion AND business			0
Search Terms = SU (Subject Terms)	Date range 2001–2005	EbscoHost Academic Search Premiere	Peer-reviewed journal publications
	2001-2003		
fashion			130
fashion AND history			13
fashion AND clothing			35
fashion AND manufacturing			0
fashion AND design			7
fashion AND design AND history			1
fashion AND design AND manufacturing		0	
fashion AND art		8	
fashion AND marketing		0	
fashion AND business		3	
Search Terms = SU (Subject Terms)	Date range	EbscoHost Academic Search Premiere	Peer-reviewed journal publications
	2006–2010		

fashion			237
fashion AND history			37
fashion AND clothing			78
fashion AND manufacturing			0
fashion AND design			52
fashion AND design AND history			3
fashion AND design AND manufacturing			0
fashion AND art			34
fashion AND marketing			4
fashion AND business			5
Subject/Artist = Fashion and Clothing	Date range	Design and Applied Arts Index	Peer reviewed
	1985–1990		
fashion and clothing		217	0
AND history		18	0
AND design		190	0
AND manufacturing		3	0
AND art		0	0

AND business		0	0
AND marketing		0	0
AND JN= 'Fashion Theory'			
Subject/Artist = Fashion and Clothing	Date range	Design and Applied Arts Index	
	1991–1995	Journals	Peer reviewed
fashion and clothing		179	3
AND history		4	2
AND design		145	1
AND manufacturing		0	0
AND art		1	0
AND business		0	0
AND marketing		0	0
AND JN= 'Fashion Theory'		0	0
Subject/Artist = Fashion and Clothing	Date range	Design and Applied Arts Index	
	1996–2000	Journals	Peer reviewed
fashion and clothing		241	15
AND history		8	6

AND design		161	1
AND manufacturing		1	1
AND art		9	0
AND business		0	0
AND marketing		2	0
AND JN= 'Fashion Theory'		9	9
Subject/Artist = Fashion and Clothing	Date range	Design and Applied Arts Index	
	2001–2005	Journals	Peer reviewed
fashion and clothing		1201	75
AND history		7	4
AND design		270	3
AND manufacturing		4	1
AND art		20	4
AND business		2	0
AND marketing		7	0
AND JN= 'Fashion Theory'		43	43
Subject/Artist = Fashion and Clothing	Date range	Design and Applied Arts Index	

	2006–2010	Journals	Peer reviewed
fashion and clothing		2243	94
AND history		13	7
AND design		422	13
AND manufacturing		11	6
AND art		52	5
AND business		29	11
AND marketing		20	5
AND PU= 'Fashion Theory'		40	40

Appendix 4: NVivo[®] Visualisations from keyword mapping

accessories aesthetics aided anthropology architecture archives art brand case childrenswear

cities class Clothing collaboration collections computer consumerism costumes crafts creativity cross Culture denim

design ethics exhibitions feminism festivals films firms footwear galleries gender globalisation history homosexuals identity indigenous industry influences innovation installations interior internet literature magazines marketing mass men menswear methodology military museums painting photography popular portraits process product psychology ready recycled responsibility retail roles shopping silk sizing social society sociology software students Studies sustainability symbolism technology theory towns trends Uniforms universities video weaving women womenswear youth

Fashion journal topics based on NVivo® evaluation of journal descriptors

art buildings burlington communication costume craft culture de dergisi

design documentation dress enquiry gardens glass harvard higher

history international landscapes libraries magazine management

marketing méxico mimarlik modern münster museum object oxford practice quarterly rsa scandinavian **Studies** technology textile theory uncoverings visual

Key words from ERA defined fashion journals published in 2011

Appendix 5: Summary of non-traditional research outputs in ERA national report 2010 (ARC, 2011a)

The majority of the outputs submitted were journal articles (62%) followed by conference papers (22%). Non-traditional research outputs (NTRO)⁴⁴ constituted approximately four per cent (4%) of the outputs submitted to ERA. (Australian Research Council, 2011a, p.36)

10 from 1537 NTRO in design and built environment 5 in 1202 and 5 in 1204 (Australian Research Council, 2011a, p.152)

1187 from 5389 NTRO for building p.158

94 from 16669 for education p.164

104 from 20612 Commerce management and tourism services p.176

36 from 1649 studies in human society p.183

100 from 8366 law and legal studies p.198

Studies in Creative Arts and Writing 10902 from 15247 p.204

217 from 10366 in Humanities and Creative Arts p.210

Communication and media studies 153 from 6202 p.216

56 from 5068 in philosophy in humanities and creative arts p.222

⁴⁴ Non-traditional research outputs include: curated or exhibited event, live performance, original creative work, recorded rendered work.