Abstract

This research paper discusses processes of garment making, which are ordinarily tacit, from the perspective of the fashion designer-maker. The paper draws on Ph.D. by Project, *Metamorphoric fashion: a transformative practice* nearing completion at RMIT University. In fashion design, a critical consideration of the status of the made garment reveals its elision by the represented garment and its semiotics. While more broadly material thinking is developed in related disciplines of design, art, and craft, fashion design is largely disassociated from material transformation.

While fashion making processes lack visibility, a revaluation seems only possible if such methods gain transparency and reaffirm their proximity to hand-crafted-ness, which in the past was more widely acknowledged. When a fashion designer is also a maker, garment making processes can be a creative and empowering means of coaxing the unknown into existence. A critical reappraisal of processes of fashion making is, therefore, timely.

Reflection on making processes reveals discontinuity, chance encounters and discovery, the fragmentary and partially formed. This experience involves negotiating ambiguity which for a designer must be embraced to be transformed. When valued as generative, newly fashioned outcomes can emerge.

The research develops methods to articulate fashion design making as transformative, using a creative practice methodology. The subjective positioning of the researcher's experience and tacit knowledge is acknowledged and surfaced. An intimate perspective of engagement between self and material is partially revealed using video methods, to convey the complex interlinking of concept and material involved in fashioning change.

Keywords

fashion design practice, creative practice research, fashion making

Introduction

This research paper discusses processes of garment making, which are ordinarily tacit, from the perspective of the fashion designer-maker. This draws from creative practice doctoral research titled, *Metamorphoric fashion: a transformative practice* nearing completion at RMIT University. In fashion design, the made garment, considered as a material process of design, is largely invisible from a critical and creative perspective. Surveys of literature which relate the making of garments, mostly rely on describing and visualizing processes using step-by-step methods, to achieve pre-determined outcomes for finished garments. Rarely are processes included which evidence methods used by fashion designers to generate future or unknown design outcomes through making. Such methods are described as transformative when they are used to develop new approaches for fashion design.

In this paper, I introduce a range of theoretical issues which have been considered as this research progressed, and together identify the importance of developing material thinking for fashion design practice research. In my experience as a fashion design practitioner, the Ph.D. research has enabled a critical perspective to form, which draws into relief habitual methods of practice and stasis between design, pattern cutting and making garments. This research demonstrates how design through making can be activated to achieve transformation in practice, with significance for creativity and innovation in fashion design and creative practice research.

When a fashion designer is also a maker, garment making processes can be a creative and empowering means of coaxing the unknown into existence. Fashion designing through making happens within peripersonal space, with the body of the designer interacting with materials close at hand, as a process over time. Peripersonal space describes the space surrounding the body [Serino et al. 2015], and neurophenomenological research suggests that we make sense of what is within our reach partly by anticipating how we can interact with it [Jackson 2014] using skillful action. At times when making, what is grappled with is unknown using language and visual thinking, instead, understanding emerges while interacting with materials and methods. Using multiple sensory perception, ideas are experienced, felt or sensed as fragments which hint towards something else. Aiming to account for fragmentary experiences, requires an individual creative methodology to account for peripersonal interactions.

Systemic garment identification

The dominant theoretical perspectives which link fashion studies to linguistic, structuralist, origins [Thornquist 2014; Woodward & Fisher 2014], and the linguistic turn [Rocamora & Smelik 2015] foreground some types of knowledge more than others. Such perspectives draw focus to the represented, and immaterial garment [Sykas 2013] through word and image. The development of material culture studies attempts to redress [Woodward & Fisher 2014] the elision of materiality which this entails. However, the focus on finished artefacts has resulted in a whole range of experiences connected to the process of making to be neglected [Ingold 2013].

This background implicitly influences methods of designing fashion, in a market-led context. Garments are identified through named categorisation of styles and details; reinforced through drawings, specs, photographs, and colloquial experience of garment styles circulated in images and through wear. Such identifiers pre-code the understanding of spatial attributes and properties of garments, forming a professional language for fashion designers, with a focus on textual and visual communication. Consider for example, an arbitrary selection of the following garments and details:

Pant (trouser, cargo, jeans); Top (blouse, cami, t-shirt); Pocket (patch, side, welt)

What I mean is that such names conjure an image which pre-codes their identification. This is more pronounced for fashion designers, who navigate a large vernacular of garment terminology, and representations of garment styles and details.

The influence of semiotics and systems is evidenced in the majority of texts which introduce methods to make garment forms for fashion designers. For example, textbook style publications which introduce pattern cutting techniques [Aldrich 2015; Joseph-Armstrong 2013; Joseph-Armstrong 2013] are organised by garment categories. These present step-by-step methodologies to create named garment styles. While necessary to introduce industry conventions, such approaches can limit a fashion designer's creativity. This is discussed in the study of knitwear design by Landahl who identifies the most common way of describing garment form is by garment type and silhouette [Landahl 2015, p. 13].

Fashion design creativity and making

Research which considers creativity in the fashion design process [Black, Freeman & Stumpo 2014] frequently overlooks the material dimension of creativity for fashion designers. To build disciplinary knowledge in fashion design, Thornquist argues for the necessity of basic research into propositional knowledge of fashion design as an art-form, with a focus on ontology [Thornquist 2014]. Rocamora & Smelik [2015] evidence that more broadly, the material-turn draws focus to how knowledge emerges from singular, embodied experiences involving agency [Rocamora & Smelik 2015]. Both views indicate short-comings of post-structuralist approaches in the field. Considering how knowledge emerges from interactive encounters between individuals, materials and methods requires a different theoretic account.

Research shows that fashion design processes are linked to specific physical locations [Eckert & Stacey 2000] and accounts of tacit knowledge by fashion designers have been minimal [Finn 2014; Norris-Reeves 2015]. More flexible descriptions of what fashion practice is, are necessary to account for experimental, conceptual, and interdisciplinary modes of practice [Bugg 2006; 2009]. Communities of practice such as slow fashion [Fletcher 2010] and artisanal fashion [Aakko 2013] evidence increasing critique by fashion designers towards massmanufacturing. Meanwhile, research in creative pattern cutting shows that design occurs through pattern cutting [Rissanen 2013; Roberts 2013; Rissanen & McQuillan 2016] and simultaneous approaches [Townsend 2004]. While contemporary craft research foregrounds experimental forms of making and thinking [Bailey & Townsend 2015], this is undeveloped in fashion design research. Through this positioning, I identify my fashion design practice as an experimental and critical artisanal practice. Throughout this research process, it has been actively transformed.

Fashion designers elude to the movement involved when designing fashion through making. Miyake describes how this process emerges; 'my clothes are born out of the movement of my hands and body' [Miyake 1983, p. 103]. Roberts emphasizes the physicality of the fashion design and pattern cutting process as activities connecting bodily movements to the mind and perceptive spatial awareness [Roberts 2013, p.13]. While designers evidence that change is a persistent quality when making garments, many admit they just don't know [Owens 2014] how the design process happens, there is rarely time for sustained analysis or reflection; 'one just does it' [Aldrich 1990, p. 17]. There are many opportunities for fashion designers to contribute towards creative practice research development for the field. This is an important area of research for fashion design, because it is necessary to make more explicit how fashion design occurs through making and to evidence diversity and variability in fashion design methods as they are practiced. This is critical to develop specific research methods which are appropriate for studying fashion design practice, in order to share this knowledge.

As fashion designers work in highly individual ways at the most innovative ends of the market, typically these processes may be hidden from view. Reconsidering the value of fashion making

seems only possible if such methods gain transparency and reaffirm their hand-crafted-ness, which was in the past more widely acknowledged as the couture system connected the materiality of fashion design to craft and textiles more closely [Bugg 2006]. While such techniques still exist and distinguish a level of skill and quality, limited research demonstrates the creative contribution of making in the fashion design process, and limited sharing of this knowledge. Distinct from the representation of making processes which link designer to consumer, such methods require an attitude of curiosity, combined with careful observation, material investigation, and experimentation. A critical approach to reflection, documentation, articulation, and communication is necessary.

A metaphoric creative strategy for fashion design

This research uses a creative practice methodology, offering a case study of how making operates within an individual practice of fashion design. Such a design process takes time to emerge and develops through combining different types of skills and knowledge. Formed in the intimate micro-actions when manipulating materials, tacit knowledge merges with design intention, and an encounter with the unknown. Some research evidences there is a need to account for transformative experiences involved in making as a creative process, highlighting emergent qualities [Ingold 2013]. In this research various making trajectories emerge, hybridize and synthesize. The result of this research is a new technique for designing garments directly through making them.

A series of experimental garments were made throughout the course of the Ph.D. The concept which grounds the experimentation developed from a study of metamorphosis. By creating a body of primary and secondary source material, I aimed to draw into relief tacit understanding in the fashion design process, by a corresponding study of something unfamiliar. In this way, I hypothesized that change might be effected in practice I recognized was systematic. One way this was expressed, was in the pre-coding of garment styles and details through activities of drawing, naming and costing, for seasonal fashion collection development.

Adapting source material for the purpose of garment design is a method used in habitual practice to provide a narrative for seasonal collections. Before this research, I didn't have a useful way to describe how the translation of concept to material occurred when designing. It just seemed to happen. What emerged as the research progressed suggested that to convey fashion design through making it is necessary to explore methods for articulation of fragmentary experiences and peripersonal interactions.

At first, close observation of metamorphosis was achieved through becoming a lepidopterist and growing butterflies. Daily methods involving observation and documentation were established which included macro photography, watching, note-taking, drawing and blogging. A large repository of primary research data, was revisited often as the research progressed. Figure 1 includes some photographs taken of the chrysalis formation, which were revisited at various stages. Figure 2 includes stylistic drawings which developed over a period of weeks, while waiting for the chrysalides to emerge.



Figure 1. Documentation of observed chrysalis formation













Figure 2. Drawings of the chrysalides

The drawings act as prompts and reminders of the close encounter with the insects as time went by. When drawing this series of repetitive marks on paper, it was as if I was touching the chrysalis. As I closely analysed the contours of the shapes with my eye, these translated to repetitive marks on paper, and I dwelled, thinking through possibilities for how subtle contours could become garments. Through drawing, a process of thinking toward future making activities, while observing, was being enacted, as if touching through watching.

Metamorphosis, as a metaphoric strategy underpinning the creative methods of the research, becomes a way to shift systemic habits, through critical reflection and correspondence. While metaphor is conventionally described as a linguistic or visual strategy of substitution, in the context of practice, it can more broadly be a creative strategy for transformation [Schön 1983; Singer 2011] and a mode of thought [Ox & Elst 2011]. As a design strategy for 'crossdomain mapping' [Lakoff 1993, p. 203] explicit use of metaphor can enable a creative correspondence to be formed between a known domain and an unknown target domain.

As this research progressed, focus was drawn through this strategy to design garment forms, which did not rely on semiotic or representational garment identifiers, such as conventional named garment styles and silhouettes. As I slowly gained more knowledge of metamorphosis and lepidoptery, this enabled me to form a critique of habitual practice, to unlearn habits which pre-empted design outcomes, and transform a method for designing fashion through making.

Coaxing the unknown into existence

While a process in the most direct sense can be considered as a continuous course of actions, events or changes, reflection on making processes, reveals something different. Evident are encounters with discontinuity, failures, synchronicity, and discovery, as the result of coaxing what is unknown into existence.

A finding from the research indicates that to consider how movement operates through making, a different way of identifying what it is that is being made, what is being *fashioned*, is useful for the designer. Fashion can be understood as a way to bring an idea into being, 'as a process of materialization' [Woodward & Fisher 2014, p. 16]. This shifts thinking about what fashion is to how it comes to be. This has relevance for the designer who makes, because, in bringing new garments into being, there is a continuous imaginative projection forward towards that which does not yet exist or cannot yet be named.

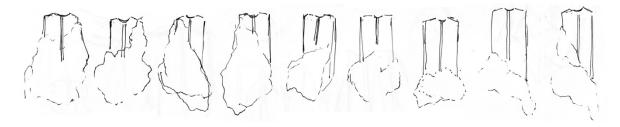


Figure 3. Drawing a sense for movement anticipated in the making

Early on, when trying to think through how the concept of metamorphosis may be expressed in garment form, a series of quick sketches (Figure 3) aimed to convey the sense of movement observed in the chrysalis formation. These drawings indicate a type of not-knowing. Rather than define exactly how and where the garment design will be cut, they suggest a gap; a series of movements that are anticipated through handling the textile, cutting and assembly.

Using the metaphoric strategy, I first identify the qualities I aim to evolve in the making process by a conceptual interpretation of the primary and secondary research, and let this guide the design outcomes. The metaphoric strategy involves substituting a chrysalis for the garment in the design process development. But more than this, it focuses attention on movement, and change, which defines the process of metamorphosis as transformative. This strategy helps to focus thinking about physical properties which can be explored through making, without the need to identify what they necessarily have to be (yet). They are *becoming*. An imaginative, conceptual mapping, drawn from qualities observed in metamorphosis, was transferred to the fashion design context. This shifts habitual thinking in terms of garment styles.



Figure 4. Dynamic dress experiments

Through making I demonstrate that the surface of the garment can be designed at the same time as its form, and co-evolve patternmaking, design and garment construction; this method of fashioning garments relies on exploring opportunities between methods of fashion design and making textiles. This method is represented in Figure 4, and draws directly on my tacit knowledge and skilled making, however, repurposes these for a new method of dynamic garment making.

When designing the surface of the garment at the same time as its form, there are not necessarily adequate words to describe how the form transitions through different expressions, before it is identifiable as a garment. Although each garment form expressed in Figure 4 is a dress, the variations expressed in the iterations of this dress in the round, are inadequately described by the word dress.

New insights arise as a result of experimenting with methods to capture the evolution of process, using a variety of techniques, including photography, video, writing and making.

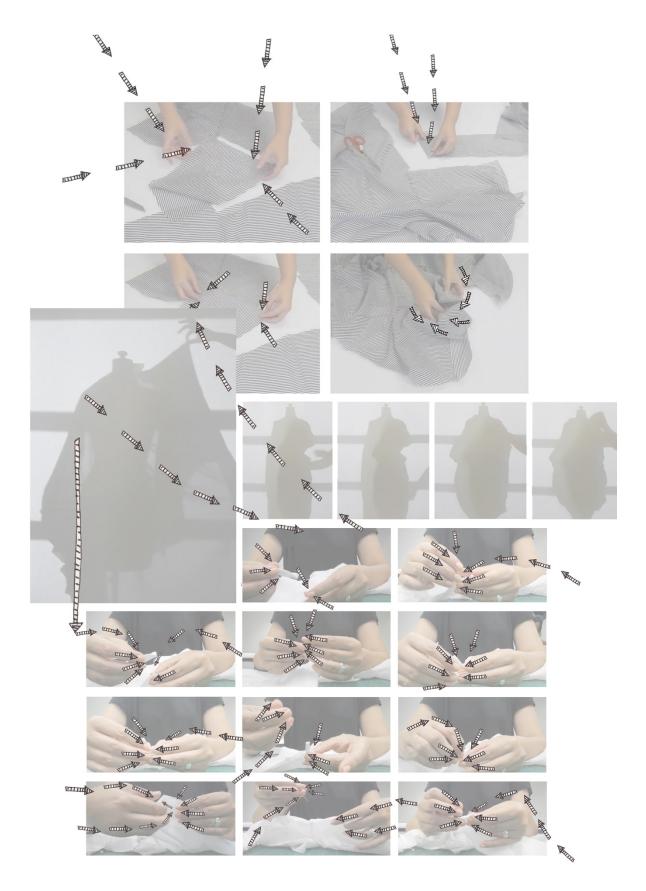


Figure 5. Making movements visible

The movement between different skills and knowledge used to fashion garments becomes more evident through mixed methods. These give account to both finished and fragmentary forms which express the making process as a process of movement. While the current outcomes of this design method are dresses, the approach to making them evolved directly through the cutting and combining of cloth, not through a pre-determined identification. They could have been other kinds of artefacts, and this making process was used to create interior textile outcomes as well.

In the research process, video methods are used to record various activities when designing through making. The purpose of making the videos was to document the transitions of the garment development, as it is becoming a garment. The videos are useful to generate reflection on processes of making, as they emerged, and as they evolved over time. The aim in these processes is to gently coax the form of the garment, through the intimacy of sensing that occurs in the process of working with materials, their properties, and a concept of change within a peripersonal space.

While representation through imagery and video are effective means to promote the represented garment, they can also be used to improve the processes and understanding of designing garments through making, when approached dynamically. Mixed media can more adequately express the range of perceptual experiences in creative practice for the purpose of reflection, critique, communication and dissemination. When constructed as research methods alongside a practice, this reveals a journey of trials and errors, aims and chance encounters. The interlinking of material and concept is shown as complex and nuanced. This complexity embeds fits and starts, successes and failures, which more adequately conveys the experience of the fashion design making process.

Conclusion

The metaphoric method proved useful as a means to shift habits in fashion design practice and evolve critical reflection for practice and research. I found that by shifting the garment identification to an alternate source domain, such as the chrysalis, a sustained line of questioning developed which focused on rethinking what a garment is, how it is identified, and what it can be. These questions were explored in the making of experimental garments, and come to be reflected through a changed approach to making them, and their changing forms. This drew focus to thinking through making which happens as ideas are trialled, materials are fumbled with, cut out, sewed together, played around with, and turned back and forth.

By taking the time necessary to observe, document and draw out this process, through sustained reflection, a different perspective emerged which evidenced the importance of materializing design ideas, and the need for alternate methods of identification and description. In the research process, the garment shifts its identity and reflects a change in thinking, from a product associated with market-led conventions to an artefact of process. The research revealed that a different way of describing and relating the practice was necessary to convey the fragmentary, formative and generative garment making methods in a way that habitual practice could not. Through a series of experimentations, trials, and errors, various methods to record processes, and to represent them were developed, which aimed to more adequately convey the richness of this experience, its subtleties and ambiguities.

The findings which emerge through a closer examination and development of fashion design through making, reveals how the semiotic representation of garments, can be shifted in practice, by drawing attention to the nuanced experience of designing through making through an individual designer concept approached metaphorically. This expands the application of methods already used in fashion practice, and repurposes them towards criticality.

A focus on fashion design as a holistic practice integrating hybrid methods, could assist to support research development more broadly which involves designing through making. A reconsideration of making as transformative, rather than instrumental for fashion design is a key way the discipline can develop contemporary research which connects to broader research communities in material thinking, craft, design, and creative practice. Fashion designers have a unique contribution to make within this transdisciplinary area of research, considering our methods can be particularly highly engaged with material transformation. Making such methods more explicit will assist to transform tacit knowledge to shared knowledge for the field.

References

- Aakko, M. 2013, 'Artisanal and slow: the case of Anna Ruohonen', in K. Niinimaki [ed] *Sustainable Fashion: New Approaches*, Aalto University, Aalto.
- Aldrich, W. 1990, 'New technology and clothing design: Effects of new technology on design in clothing manufacture and the potential problems of colleges training designers for an industry undergoing fundamental changes', Ph.D. Thesis. Nottingham Polytechnic. Nottingham.
- Aldrich, W. 2015, *Metric pattern cutting for women's wear*, 6th Edn, John Wiley & Sons, West Sussex.
- Bailey, R. & Townsend, K. 2015, 'Craft and the handmade: Making the intangible visible', *Craft Research*, vol. 6, no. 2, pp. 157–163.
- Black, C. Freeman, C. & Stumpo, G. 2014, 'Conceptual model and strategies for creative thinking in fashion design', *International Journal of Fashion design, Technology and Education*, vol. 8, no. 2, pp. 131-138.
- Bugg, J. 2006, 'Interface: concept and context as strategies for innovative fashion design and communication: an analysis from the perspective of the conceptual fashion design practitioner', Ph.D. Thesis, The University of the Arts London, London.
- Bugg, J. 2009, 'Fashion at the interface: designer wearer viewer', *Fashion Practice*, Vol. 1, Iss. 1, pp. 9-32.
- Eckert, C. & Stacey, M. 2000, 'Sources of inspiration: a language of design', *Design Studies*, vol. 21, pp.523–528.
- Finn, A. 2014, 'Designing fashion: an exploration of practitioner research within the university environment', Ph.D. Thesis, Creative Industries Faculty, Queensland University of Technology, Brisbane.
- Fletcher, K. 2010, 'Slow fashion: an invitation for systems change', *Fashion Practice: The Journal of Design, Creative Process & the Fashion Industry*, vol. 2, no. 2, pp.259-266.
- Ingold, T. 2013, *Making: Anthropology, Archaeology, Art and Architecture*, Routledge, London.
- Jackson, G. 2014, 'Skillful action in peripersonal space', *Phenomenology and the Cognitive Sciences*, vol. 13, iss. 2, pp. 313-334.
- Joseph-Armstrong, H. 2013, *Draping for apparel design*, 3rd Edn, Fairchild Books, New York. Joseph-Armstrong, H. 2013, *Patternmaking for fashion design*, International Edn. of 5th revised Edn, Pearson Education Limited, USA.
- Lakoff, G. 1993, 'The contemporary theory of metaphor', in *Metaphor and Thought*, A. Ortony [ed.], Cambridge University Press, Cambridge.
- Landahl, K. 2015, 'The myth of the silhouette: on form thinking in knitwear design', Ph.D. Thesis. Swedish School of Textiles, University of Borås, published in *University of Borås Studies in Artistic Research*, no. 16, Borås.
- Miyake, I. 1983, in *Bodyworks* S. Tsurumoto [ed], Shogukukan Publishing Co Ltd, Tokyo. Norris-Reeves, S. 2014, 'Constructing a narrative of fashion practice as inquiry', Ph.D. Thesis, The Royal College of Art, London.
- Owens, R. Interviewed by: The Talks. *Rick Owens: "I never had that much to lose,"* Interview Directory, *The Talks*, (8 October, 2014), viewed 10 December 2014, http://the-talks.com/interview/rick-owens/>.
- Ox, J. & Van der Elst, J. 2011, 'How metaphor functions as a vehicle of thought: creativity as

- a necessity for knowledge building and communication', *Journal of Visual Art Practice*, vol. 10, no. 1, pp. 83–102.
- Polyani, M. 2009, *The tacit dimension*, revised edn, The University of Chicago Press, Chicago.
- Polanyi, M. 1966, The tacit dimension, Doubleday, New York.
- Rissanen, T. 2013, 'Zero-waste fashion design: a study at the intersection of cloth, fashion design and pattern cutting', Ph.D. Thesis, University of Technology Sydney, Sydney.
- Rissanen, T. & Mcquillan, H. 2016, Zero waste fashion design, Bloomsbury, London.
- Roberts, J. 2013, *FREE CUTTING*, viewed 20 August 2016, http://subtractioncutting.tumblr.com.
- Rocamora, A. & Smelik, A. 2016, 'Thinking through fashion: an introduction', in A. Rocamora & A. Smelik [eds], *Thinking Through Fashion: A Guide to Key Theorists*, I.B.Taurus, London, pp. 1-27.
- Schön D. 1983, *The reflective practitioner: how professionals think in action*, Basic Books, USA.
- Serino, A., Noel, J-P., Galli, G., Canzoneri, E., Marmaroli, P., Lissek, H. & Blanke, O. 2015, 'Body part-centered and full body-centered peripersonal space representations', *Scientific Reports*, no. 5, art. 18603, viewed 20 August 2016, http://www.nature.com/articles/srep18603>.
- Singer, I. 2011, *Modes of Creativity: Philosophical Perspectives*, The MIT Press, Cambridge. Sykas, P.A. 2013, 'Investigative methodologies: understanding the fabric of fashion', In S. Black, A. De la Haye, J. Entwistle, A. Rocamora, R. Root & H.Thomas [eds], *The handbook of fashion studies*, Bloomsbury, London, pp. 235–267.
- Thornquist, C. 2014, 'Basic research in art: foundational problems in fashion design explored through the art itself', *Fashion Practice: The Journal of Design, Creative Process & the Fashion Industry*, vol. 6, no. 1, pp. 37–58.
- Townsend, K. 2004, 'Transforming shape: hybrid practice as group activity', *The Design Journal*, vol. 7, no. 2, pp. 18–31.
- Woodward, S. & Fisher, T. 2014, 'Fashioning through materials: material culture, materiality and processes of materialization', *Critical Studies in Fashion and Beauty*, vol. 5, no. 1, pp. 3–23.