The Status of Pattern Cutting

Abstract
This commentary documents the journey of several research initiatives, which focused upon creative pattern cutting. Instigated by a peer-reviewed, journal paper entitled, *Insufficient Allure: The Luxurious Art and Cost of Creative Pattern Cutting* (Almond, 2010), the endeavors attempted to elevate concepts of tacit knowledge and the making process as a form of legitimate, academic enquiry. The projects culminated in the first peer-reviewed conference dedicated to the discipline: *The First International Symposium for Creative Pattern Cutting*, held at University of Huddersfield in the UK, in February 2013. To trace the impact of the research initiatives, I consider how the skills of the pattern cutter, clothe the body with a myriad of shapes and silhouettes. I discuss this in relation to the different pattern cutting techniques that can be utilized to realize three-dimensional form and ways in which the research enterprises have arguably elevated the professional position of the cutter in terms of esteem and remuneration. In order to assess the impact of these initiatives, both within the fashion industry and in the emerging arena of fashion research, I identify some of the different research approaches utilized in practice-based enquiry and how results can be arrived at from hands-on experience, inspiring us to develop new ways to pattern cut.

Key Words: Creative, Pattern Cutting, Research, Body, Tacit Knowledge, Making, Practice, Theory

Introduction
In the fashion industry, the pattern cutter essentially creates the shapes from which the parts of a garment are traced onto fabric, before being cut out and sewn together. Patterns are usually made of paper or tracing paper, and are sometimes made of tougher materials like cardboard if they need to be stronger to withstand repeated use. The status of pattern cutting in both the fashion industry and education has been the focus of a resurgence of interest in recent years, both as a practical application and as a focus for research. This has greatly developed awareness of the key position of pattern cutting in interpreting and manifesting a designer's concept and vision. The pattern cutter uses skills, knowledge, experience and judgment, often with untested and unfamiliar combinations of elements that require intellectual, practical and tacit knowledge and synthesis to interpret and resolve in a feasible manner. In the UK, this has been recognized within academia, with the introduction of creative pattern cutting in the curriculum at University of the Arts London, with two Post-Graduate Certificate courses at both London College of Fashion and Central Saint Martins. There are also two Post-Graduate Masters courses available at both, Doncaster College and University of Huddersfield. These courses distinguish the more creative applications in designer level fashion as opposed to the high volume low cost applications that require less radical, complex and costly solutions. The British Fashion Council annually hosts their Creative Pattern Cutting Seminar, which emphasizes the importance of the technical skills involved in creative pattern cutting at graduate and post-graduate level. It also demonstrates the opportunities and excitement for creative career paths in this area. This progression in the teaching of pattern cutting has been complemented by the growth of research in the discipline and the development of ideas about what constitutes research in this field of practice. The development of the research initiatives discussed and in particular the research papers presented at *The First International*
Symposium for Creative Pattern Cutting, have begun to identify ways in which practical skills in fashion can be researched in order to develop new and exciting ways to design and cut and in so doing, improve design development.

The Research Initiatives in Pattern Cutting
In the journal paper, *Insufficient Allure: The Luxurious Art and Cost of Creative Pattern Cutting* (Almond, 2010) I suggested ways in which to rebalance the fashion industry’s perception of the roles of the pattern cutter and designer. The analysis built upon a limited amount of existing enquiry (British Fashion Council, 2000; Fischer, 2008; Hollingworth, 1996; Joseph-Armstrong, 2008; Karimzadeh 1999) and contributed to the field of pattern cutting by suggesting that creative cut is an interpretation of the designer’s vision and is therefore equitable with the position of the designer, in terms of esteem and remuneration. The subsequent curated exhibition at Huddersfield Art Gallery, *Insufficient Allure: The Art of Creative Pattern Cutting* (Almond and Brennand, 2012), emphasized a series of clothing compositions in crème calico and corresponding photographs, which showed complex pattern cuts placed onto the body to create accentuated forms (Figure 1). The exhibition provided a critical review of the pattern cutter’s position as being integral to creative design. The impact of this exhibition on its visitors can be assessed through the comments they left. As the fashion journalist, Brenda Polan, described in her exhibition review, “Along with some fairly repetitive superlatives – fantastic, amazing, stunning, breathtaking – gallery-goers use the words insight, illuminating, inspired, and inspiring, intricate, whimsical, subtle, complex, challenging, eclectic, weird, dramatic and sculptural” (Polan, 2013, p. 14). Arguably, a small gallery in the West Yorkshire, industrial town of Huddersfield, UK, could be considered an incongruous destination for an exhibition, which documented the art of pattern cutting. However its geographical placement allowed the general public, the consumers of fashion, to have an, insiders glance into the technical wizardry involved in producing fashionable clothes. This ranged from, “….the disciplined mastery of line and volume, to the measuring and pinning, to the problem solving, rule breaking and innovation that turns concepts into clothes” (Polan, 2013, p.14). An anonymous gallery goer’s comments in the visitors book summed this up, “A fascinating exhibition. I know nothing about fashion and this work is very impressive even for an ignoramus” (anonymous, 2013).
Figure 1. Calico toiles and photographs from the Insufficient Allure exhibition, 2012. Photograph courtesy of Kevin Almond.

Figure 2. Making an appearance at The First International Symposium for Creative Pattern Cutting, held at the University of Huddersfield were (left to right) Betty Jackson CBE, Wendy Dagworthy OBE, Jenni Murphy, Kevin Almond, Mark Powell, Sylvia Ayton MBE and Anne Tyrrell MBE. Photograph courtesy of University of Huddersfield.¹

The conference, which followed the exhibition, The First International Symposium for Creative Pattern Cutting (Almond, 2013), attracted an international coterie of 160 delegates from both the fashion industry and education (Figure 2). They heard 36 full papers chosen from over 80 abstracts. These were streamed into four definitive themes, which investigated digital technology, eco-sustainable, pedagogical and fashioned approaches to creative pattern cutting. The symposium gave researchers and practitioners a platform to share new techniques, ideas and direction with their peers in education and industry. Presentations

¹ Dr. Betty Jackson CBE, British fashion designer. Winner of numerous awards including; British Designer of the Year award, 1985 and International Linen Council Fil d’Or award, 1985, 1989. Honorary Doctor, University of Huddersfield, 2011.
Wendy Dagworthy OBE, British fashion designer and academic. During her career she was Professor of Fashion at the Royal College of Art and Head of Fashion at Central Saint Martins. As an influential designer in the 1970s and 1980s, with the Wendy Dagworthy label, she one of the founders of London Fashion Week.
Jenni Murphy, is Marketing Manager for Lectra, who sponsored The First International Symposium for Creative Pattern Cutting.
Dr. Kevin Almond, is Head of Department of Fashion and Textiles, University of Huddersfield. He was the organizer of The First International Symposium for Creative Pattern Cutting.
Mark Powell, is Fashion Solution Specialist for Lectra, who sponsored The First International Symposium for Creative Pattern Cutting.
Anne Tyrrell MBE (1938 – 2015), was a British Fashion Designer. She was founder and director of Anne Tyrrell Design and formally Director of Design at John Marks with own label Anne Tyrrell.
ranged from creating patterns for the human head; generating pattern blocks for the mobile body; to the use of digital sculpture and modeling software to create 3D garments, exported to flat patterns and reproduced in fabric. One of the most contesting events at the conference emerged when a delegate challenged a paper presentation from the floor. The delegate questioned the validity of the research and that of other papers delivered at the conference, claiming the majority of presentations only served to describe interesting ideas and discussions of new methods and techniques in pattern cutting. This intervention provoked an impassioned discussion amongst all delegates, the majority of whom disagreed. It highlighted the challenges academics face in justifying fashion related research in academia where it “….is often considered not serious enough and is treated as a marginal area of research and thus, it does not deserve any intellectual considerations” (Kawamura, 2011, p. 1).

As supported by the bulk of conference delegates, I would argue that the majority of papers presented at the symposium, embraced research however it is worth noting that not all practice is research. The Oxford Dictionary describes practice as; “The actual application or use of an idea, belief, or method, as opposed to theories relating to it” (2015, p.1), and although many results were arrived at from practical experience, the presenters were able to discuss and analyze the different research approaches adopted, in order to develop ideas. These included the historical and theoretical as well as the practical. Eight papers were selected for publication in a special edition called, Creative Cut, in, The International Journal of Fashion Design, Technology and Education (Almond, 2013). These ranged from a study of the development of zero waste pattern cutting to a hypothetically based enquiry, which explored interactions between “….the ‘new’ knowledge of design technology and ‘traditional’ knowledge of sartorial culture” (Cambridge, 2013, p. 121). Two papers focused upon new technological developments, considering how to teach pattern cutting to the iPod generation and ways in which, “Technology has the potential to change and innovate design and technology” (Page, 2013, p. 89), investigating how fashion designers have integrated three-dimensional software packages into creative practice. All papers in the journal edition were double blind reviewed by a panel that ranged from fashion designers such as Betty Jackson and Sylvia Ayton, to the pattern cutting authors, Winifred Aldrich and Janice Mee, as well as a range of academics and industrialists whose expertise ranged from historical to practical.

A review of contemporary literature dedicated to pattern cutting reveals a large increase in publications within a ten-year period, to date. The majority of literature focuses upon technical manuals that demonstrate how to create patterns. There is less evidence however of historical or theoretical research into pattern cutting. In her Masters by Research thesis, which explored the development of contoured pattern cutting, the costume designer, Liz Garland said, "There are several books dedicated to reproducing patterns of historical clothing and details regarding historical clothes (Arnold, 1989; Salen, 2012; Tilke, 1956; Waugh, 1968), however it appears very little is known about the development of pattern cutting and how patterns were achieved pre 1760" (2014, p. 6). Obligatory school attendance only became common in parts of Europe during the 18th century therefore it is doubtful tailors, stay maker’s or seamstress’s would have been able to read and write. It is reasonable to assume that techniques were learnt and passed on through the guilds, by hand or by word of mouth. Technical instruction manuals began to appear throughout the nineteenth century and were initially developed by tailors (Compaing, 1828; Giles, 1887; Hearn, 1821; Wampen, 1837; Wampen, 1864). They taught
practitioners about pattern drafting formulas such as *Old-Thirds* and the *Direct Measure System* and were used to realize garment styles. There has been a recent shift from such technically orientated literature, which although proficient often appears divorced from a sense of contemporary fashion, as the illustrations and styles can look dated. (Aldrich, 2002 and 2008; Bray 1986; Joseph- Armstrong, 1999). Arguably it is also difficult to combine a sense of style with technical instruction and often a bland evocation of the different types of garments illustrated in pattern cutting manuals, needs to be adapted by the pattern cutter in order to realize a fashion orientated look. More recent publications combine an enhanced sense of aesthetics and style with technical instruction and promote more creative and experimental pattern cutting (Kiisel, 2013; Nakamichi, 2010 and 2011, Zaman, 2014).

There is little literature devoted to practice based, scholarly research in pattern cutting. The majority of practice based research relates to the fashion design process, detailing the model which develops, beginning with the research question; establishing issues; collecting data; analyzing data; taking action; evaluating the results of the action; formulating new questions. As I discussed in *Raiding the past, Designing for the Future*, “New knowledge or artifacts can be developed through the visual solution. In fashion this constitutes new and innovative products for the consumer and products that will move fashion forward” (Almond, 2013, p. 115). Fashion can be studied theoretically and empirically. Arguably theory can appear at the end point of a qualitative study, emerging from the collection of the data and its subsequent analysis. In my introduction to the journal edition, which published selected papers from the pattern cutting conference I emphasized, “….how we shouldn’t underestimate tacit knowledge and the making process as a form of enquiry. This is important in the drive to heighten awareness of fashion practice as a viable academic research topic” (Almond, 2013, p. 71). I also discussed how the published papers, “….base their understanding on evidence from observation, participation and investigation of pattern cutting practice, pattern cutters at work and interviews with pattern cutters” (Almond, 2013, p. 71). I suggested this gives greater credibility to practice based research in fashion because the results (including the theory or the ideas) are arrived at from hands-on experience. The Oxford online dictionaries, describe a theory as, “A supposition or a system of ideas intended to explain something, especially one based on general principles independent of the thing to be explained” (2014, p.1). Theory in pattern cutting can therefore evolve from visual ideas and the methods utilized in order to create the three dimensional shape, which becomes a garment. These practical ideas and methods arise from empirical study verified by observation, experience and practice as opposed to theory or logic.

**Questionnaire to delegates from; The First International Symposium for Creative Pattern Cutting**

A questionnaire was issued to delegates from the pattern cutting conference in order to gauge its impact from both a research and practice based perspective. Responses were requested to the five questions detailed below.

Do you think the conference helped to:

- Promote equity for the roles of the creative pattern cutter and the fashion designer in terms of esteem and remuneration?
- Develop ways in which the fashion industry promotes pattern cutting as a career emphasizing its creative integrity and magnetism?
- Enhance ways in which tacit knowledge and the making process is considered a legitimate form of research enquiry?
- Balance debates about the knowledge and practical experience of traditional processes in the context of technological and digital development?
- Introduce and discuss new methods and techniques, inspiring technical and design innovation in pattern cutting?

Responses to the questions are discussed in relation to the shaping of the human body with clothes. This is made possible by the interpretive skills of the pattern cutter, who can enhance contours and transpose different silhouettes on to the natural form. The body has been likened to a semiotic object in motion (Calefato, 1997, p. 70). When decorated with the various components that make up clothing, it becomes essentially performative, communicating a stylistic, visual language. Arguably pattern cutting is the key to this language because it is an essential part of clothing construction. I therefore analyze the responses from the conference delegates and measure them in relation to the overall impact of the pattern cutting initiatives. As discussed one of the aims of the conference was to forge an intellectual relationship between scholarly enquiry and the making process in order to conduct legitimate research. Skills and techniques that realize three-dimensional shapes need to be fully utilized in order to interpret a design. Both design and pattern cutting can therefore be described as intellectual because they require the practitioner to engage in critical study, thought, and reflection in each stage of clothing production. Many of the conference presentations supported this approach and engendered lively discussion about the merits and issues related to this type of research.

The first question, considered if any of the conference papers had promoted equity for the roles of creative pattern cutter and fashion designer in terms of esteem and remuneration. Traditionally the fashion industry has remunerated the designer more through financial reward and recognition than the technical staff, involved in garment construction. Questions arise about why this is so and who makes this judgment, the consumer or the fashion industry professional? A questionnaire respondent from the United States considered the focus on technology evident in many of the conference presentation’s, was in some ways contrary to increases in esteem for the position of the pattern cutter. Although use of technology is valued, it is still not considered a creative activity in the same way as fashion design. Interestingly, remuneration for patternmakers in the US was noted as being higher than all but the very top tier of fashion designers. In contrast a UK respondent considered this a large obstacle to overcome as the role of the designer is still at the forefront of any design team. The majority of respondents felt the conference did go some way, towards celebrating the essential creativity required in the role of the pattern cutter and to value this role as a huge part of the DNA of creative process. One respondent from The Netherlands, considered this a challenging subject as, “Everyone wants to be a designer. The technical designer/creative pattern cutter is an important and interesting area between designing and producing. I have the feeling the technical design aspect is more addressed in the UK than in the Netherlands. Even in France and Italy, although they still have a strong make industry, there is a tendency to aim for the design job also in Germany where people are very proud of their skills and handcraft work, this shift is emerging” (2014, questionnaire respondent). One respondent felt it was difficult to assess how much influence the conference had in the context of a wider world, as the delegates were in many ways, a converted congregation. By bringing together such a like-
minded group of people, it gave the converted an opportunity to express their thoughts and discuss them with a concurrent group where everyone had the confidence to talk about ideas related to pattern cutting. Overall respondents considered it would benefit design brands and the fashion industry if the roles of the technical designer/creative pattern cutter were leveled in terms of esteem and remuneration as this could promote the value of a merged creative and technical, fashion professional. Several acknowledged that the title designer has the edge but in terms of remuneration sometimes companies pay more for the skills of the pattern cutter.

The second question, considered if the research presentations addressed ways in which the fashion industry promotes pattern cutting as a career, emphasizing its creativity. Arguably through the craft and skill of pattern cutting, the fashionable body is adorned in visual and stylistic messages that promote creativity and innovation. Some of the delegates felt the conference was inspirational and informative in this respect and that the research raised the self-esteem of the pattern cutter, encouraging the industry to promote the role. One respondent found the question challenging and considered the majority of people who choose to study fashion, want to be designers. The role of the technical designer/creative pattern cutter was understood to be an important and interesting role, pitched between designing and producing. Delegates from the majority of educational institutions attending, discussed how they teach students about the importance of this role and believed students will take this with them when they enter industry. Many respondents thought the creative approaches to cutting discussed, were as diverse and charismatic as those in design and the majority of the sessions were more academic in focus, therefore connections between the excitement of pattern cutting and promoting it as a career was not explicitly made. Some delegates considered that a session where career opportunities within pattern cutting were discussed, would have balanced the proceedings, demonstrating how the platform of academia can lead as a path into industry.

In general the questionnaire respondents varied in their replies to question three, which measured the ways in which tacit knowledge and the making process could be considered a legitimate form of research enquiry. Several thought it could take time to elevate the tacit and craft aspects of pattern cutting research in order compare with more scientific and empirical inquiries. The conference allowed the speakers to discuss how they could organize and present their work in a way that others in the academic world would begin to value as scholarship. Although it was noted that this was in the supportive environs of the symposium, the real test would be impact in the wider academic arena. One respondent noted that the conference was referenced at their institution (Parsons, The New School for Design, New York) during an internal development, workshop series about the peer review process. They noted, “There is an international conversation going on right now about what is research in fashion and the creative cutting conference is one of many instigators in that conversation” (2014, questionnaire respondent). The respondent continued by identifying almost no opportunities for practice based doctoral study in the United States, which they felt spoke volumes in relation to narrow views about what constitutes practice based research.

Many respondents to question four, believed the conference failed to balance debates about the knowledge and practical experience of traditional processes in the context of technological and digital development. Some however considered it raised extraordinary questions and opened up some enjoyable discussion. As one respondent said, “The conference was filled
with so many like minded individuals that it was more about trading great ideas and less about debating controversial ideas" (2014, anonymous respondent). Others considered that digital developments in cutting needed a stronger emphasis. One respondent felt, “The conference saw some interesting presentations related to digital pattern cutting however it would have been more interesting to have a stronger focus on this topic and to view it from points such as creative improvement of fit, new business models etc” (2014, anonymous respondent). Many supported the concept that the creative individual can utilize technology in ways that add to knowledge about the discipline yet a balance was also important because an understanding of the traditional, manual ways of pattern making can act as a foundation for developing relevant and effective uses for new technologies, in the fashion industry.

The sociologist, Joanne Entwistle proposed, “….the idea of dress as situated bodily practice, as a theoretical and methodological framework” (2000, p. 11). Within a research context, the notion of creating three-dimensional shapes on a body suggests that new methods of enquiry can be utilized to develop ideas related to creativity in cut. Question five, enquired whether themes from the conference introduced and discussed new methods and techniques, inspiring technical and design innovation through pattern cutting. The majority of respondents considered they had although some felt there was a lack of innovation in this area and a future conference should specifically ask for papers on this topic, perhaps listing it first in the call for greater emphasis. Several noted how some presentations discussed more traditional methods, which risked being lost in the digital world. It was noted that pattern cutting research should not exclude case studies such as these, or exploration of ways in which traditional and new methods can be merged. Perhaps the overall significance of the first conference could be summed up in the following comment, “I believe that moving forward we will see more debate because the community is forming and there is an environment where it is now safe to disagree with colleagues. I look forward to those challenging questions being raised” (2014, anonymous respondent).

The Way Forward
The conference culminated with a short session, in which delegates agreed that a community had been formed. As the fashion academic, Charlotte Goldthorpe, said in her review, “The symposium came to a close with a positive plenary session, discussing the value of such a conference emphasizing the importance of tacit knowledge in the research process” (Goldthorpe, 2013, p. 296). There was unanimous support for a succession of further conference events, which would serve as a platform to develop ideas as well as continue reinforcing notions of what constitutes practice based enquiry and the value of tacit knowledge (in this case creative pattern cutting), within a research context. The cut and construction of clothing thatembellishes the human body, would remain the overarching discourse. From a creative pattern cutter’s perspective, such interest in figurative formations and human scale would continue to be explored as a default position of representing the body three-dimensionally, a representation that takes place in social settings as much as in a physical space. It is hoped that new ideas discussed at successive conferences and through further pattern cutting initiatives, would continue to direct future research within the discipline. This would also expand the literature devoted to practice based, scholarly research in pattern cutting and ways in which it can be explored, much further through the intellectual relationship between theory and practice.
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