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The Progress of Creative Pattern Cutting

Almond, K and Power, E.J.

Abstract

This paper 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 endeavours 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, the skills of the pattern cutter which clothe the body with a myriad of shapes and silhouettes are considered. This is discussed 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, We 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 creates the shapes from which parts of a garment are traced onto fabric, before being cut out and sewn together. Patterns are usually made of 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 over the past twenty years, both as a practical application and a focus for research. The pattern cutter uses skills, knowledge, experience and judgment, often with untested and unfamiliar combinations of elements that require intellectual, practical 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. There are also two 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 Pattern Cutting Initiatives

In the journal paper *Insufficient Allure: The Luxurious Art and Cost of Creative Pattern Cutting* Almond (2010) 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 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 cr me calico and corresponding photographs, which showed complex pattern cuts placed onto the body to create accentuated forms. 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). The exhibition 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).

The conference, which followed the exhibition, attracted an international coterie of 160 delegates from both the fashion industry and education. 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 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" (2014, p.1), and although many results were arrived at from practical experience, the presenters discussed and analyzed the different research approaches adopted, in order to develop ideas. 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.

There has been a recent shift from such technically orientated literature, which although proficient appears divorced from a sense of contemporary fashion, as the illustrations and styles look dated. 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. 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 the introduction to the special journal edition, publishing selected papers from the pattern cutting conference it was 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). It 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). It suggested this gives greater credibility to practice based research in fashion because the results are arrived at from hands-on experience. These practical ideas and methods arise from empirical study verified by observation, experience and practice as opposed to theory or logic.

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 five questions.

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 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 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 went some way, towards celebrating the essential creativity required in the role of the pattern cutter and to value this role as part of the DNA of creative process. One respondent from the, Netherlands, considered this a challenging subject as, “Everyone wants to be a designer. 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” (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. Bringing together such a like-minded group of people gave an opportunity to express thoughts and discuss them with a concurrent group who had the confidence to talk about pattern cutting.

The second question considered if the research presentations addressed ways in which the fashion industry promotes pattern cutting as a career, emphasizing its creativity. 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, discussed how they teach students about the importance of this role. 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 were not explicitly made. Some delegates considered that a session where career opportunities within pattern cutting were discussed, would have balanced the proceedings.

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 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 justified 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 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” 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”. 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.

Question five enquired whether themes from the conference discussed new methods and techniques, inspiring innovation through pattern cutting. The majority of respondents considered they had although some felt there was a lack of innovation 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).

Final Word

Last years conference culminated with a short session, in which delegates agreed that a community had indeed been formed. One reviewer noted that, “The symposium came to a close with a positive plenary session, discussing the value of tacit knowledge in the research process”. 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 would remain the overarching discourse. From a creative pattern cutters 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 was 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 through the intellectual relationship between theory and practice.

So what did this year’s conference bring? The 2016 creative cut conference provided a mirage of ideas and novel concepts in creative pattern cutting, which upstaged the previous gathering both in terms of theoretical rigour and innovative practice. There were four tracks which covered the board areas of: new technology, pedagogic intervention, fashioned developments and sustainable initiatives. The conference highlighted some re-occurring themes such as the

use of unconventional methods to create 3D forms. This was supported from both a pedagogical perspective by Hardingham (2016) and Tan et al. (2016) and by theorising practice based approaches by Lindqvist (2016), James et al (2016), Dove (2016) and McKinney et al..

A few highlights include Hardingham's (2016) analysis of how a box can become a garment. The presentation identified the frustration of design students when learning technical patternmaking skills and expressed the view that new styles of learning are required to ensure talented creative students reach their potential using an array of pattern construction techniques including those that are deemed to be non-traditional and unorthodox. Many authors (Tan et al., 2016; Hardingham's, 2016; Almond, 2011) called for an exposure to a variety of creative pattern techniques as standard in fashion design education; since learner will find a method, technique that resonates and underpins later theoretical development. Such approaches in creative pattern cutting have been presented by Lindqvist (2016), James et al. (2016), Dove (2016) and McKinney et al. (2016) during the conference.

Here are a few highlights Lindqvist (2016) presented the "kinetic garment construction theory" which challenged the conventional tailoring mix. This newly developed theory studied the intersection between fabric and the human form, using the grain of the fabric ingeniously to take creative pattern cutting to the next level. The work was based on the "Langer Lines" model used in surgery, thus crossing discipline boundaries and creating a nexus between health, engineering and creative design. The work presented by Dove (2016) supports Lindqvist's (2016) in many ways. It highlights the pressing issue of inconsistencies in the sizing of fashion and apparel and identifies this as one of the most influencing factors in clothing dissatisfaction, often leading to high levels of garment returns. Dove (2016) highlights the over-reliance on material properties to solve fit issues. She criticises the over-use of stretch fabrics to disguise fit issues, which could be solved using creative pattern techniques. An approach was presented whereby manipulating the bust dart dimensions, garments can be produced that better conform to specific cup sizes, resulting in better fit and comfort for the wearer (Dove, 2016). James et al (2016) paper explores the recent growth in zero-waste construction. Her work presents a practitioner enquiry using a variety of garment forms. A case study methodology is used to ascertain if the zero-waste approach is transferable to commercial production in different sectors. It is of no surprise that in this presentation the relationship between the designer and pattern cutter was discussed in some detail regarding creative ownership and equity. The paper quite rightly recognised the creative contribution of both, and suggests that new methods of creative pattern cutting such as zero-waste require a creative partnership with new epistemologies emerging.

In Tacit Magic (McKinney et al., 2016) the authors explore traditional construction techniques used by Japanese designers including, deconstruction, origami and asymmetry (to name a few). These techniques were explored through the concepts made explicit in the book pattern magic by Nakamichi (2011) and compared to conventional western pattern cutting techniques. This resulted in a new understanding and theoretical perspective in creative design and an appreciation of different cultural approaches. Other authors (Tan et al., 2016) presented the argument that creative pattern cutting should be a specialism and not part of a broader design curriculum, a view gaining esteem with some universities now offering this as an academic

discipline. Tan et al.'s work presented a case-study which focused on the growth in the Southeast Asia for creative pattern cutters and Lasalle College's (Singapore) philosophy to address this. The arguments support James et al. (2016) in that a seamless integration is needed between the designer and pattern cutter to reach new heights in apparel, fashion and clothing construction.

One of the prevailing themes in this year's conference was the value of "learning by doing" (active learning) and the art of reflection. This was embedded into all the tracks through professional practice, pedagogical developments and engaging research. The networks developed through the conference underpin some of the strengths of peer learning and moving forward the benefits of interdisciplinarity as a means of creative development will be an emerging theme, leading to the introduction of new skills, epistemologies, and creative impact leading to a new era in fashion design.

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