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DISRUPTING EXPECTATONS: THE CASE OF AN EXPERIMENTAL PATTERN CUTTING WORKSHOP

Rompendo Expectativas: o Caso de um Workshop em Modelagem Experimental

Valle-Noronha, Julia; MA; Estonian Academy of Arts, julia.valle@artun.ee[1]
Soares, Julia. A. B.; BA; Universidade do Estado de Minas Gerais, julia.sbaj@gmail.com [2]

Abstract: This article investigates an experimental pattern cutting workshop. In the workshop, participants are invited to explore personal experiences as the informant to a research-based process. The produced outcomes present experimental design approaches, open to successful encounters but also to failure, chance and disruptions. The interpretation of collected data brings forth understanding of the roles played by expectations in pattern cutting activity.
Keywords: fashion design education, experimental pattern cutting, fashion design

Resumo: Este artigo investiga um workshop em modelagem experimental. No workshop, participantes são convidados a explorar experiências pessoais como informantes de um processo criativo baseado em pesquisa. Os resultados produzidos mostram abordagens experimentais em design abertos a encontros bem sucedidos, falhas, sorte e disrupções. A interpretação dos dados coletados avança o conhecimento sobre o papel de expectativas na atividade de modelagem.
Palavras-chave: educação em moda, modelagem experimental, design de moda

[1] Julia Valle-Noronha is Associate Professor in Fashion at the Estonian Academy of Arts (Estonia), Department of Design and doctoral candidate in Design at Aalto University (Finland). She holds an M.A. in Fine Arts (UFRJ /Brazil) and a Bachelor's degree in Social Communication (UFMG/Brazil). Her research interests are experimental fashion and the material agency of clothes.

[2] Julia de Assis Barbosa Soares is currently a Substitute Professor in Fashion Design at Universidade Federal de Minas Gerais (UFMG) and Master student in Design at Universidade do Estado de Minas Gerais (UEMG). She holds a specialization course in Creative Processes (PUC-Minas) and a Bachelor's degree in Fashion Design (FUMEC).

Introduction

In the context of fashion design education, one of the most widely used methods to introduce pattern cutting[3] to fashion design students is through flat patterns, using scales or the direct measure system (BYE et al., 2006; ALMOND, 2010). This broadly propagated method creates flat shapes on paper that are altered and adapted to fit the human body when transferred from paper to cloth and sewn together. For outsiders of the fashion field, this method can at first seem hard to understand and to visualize the garment in its tridimensionality. From our own experience as pattern cutting practitioners for over ten years, getting familiar with the method takes time and a lot of 'learning by doing' (DEWEY, 1934) from events of failure and success. Other methods bring different approaches to pattern cutting, such as moulage, draping and tailoring. The methods of moulage and draping use the body as support to design, whilst in tailoring the pattern's lines are drawn with chalk directly into cloth (ALMOND, 2010). Methods can be combined, increasing the process' complexity and bringing fruitful results. Almond (2010) points out to the fact that combining different methods 'does not minimise the value of either patternmaking method, but it does enhance the patternmaker's ability to create design patterns' (ALMOND 2010, p. 15).

The work of a pattern maker, thus, includes managing different 'languages' and approaches through an often bumpy road towards the final garments. Regardless of the method chosen, multiple attempts and errors are necessary to the aspiring designer in order to understand the best way to

[3] Note on terminology: In this article we use 'pattern cutting' to refer to the field in a general sense, which includes traditional and alternative modes of making patterns for clothes. By creative pattern cutting, as in Hollingworth 1996 and Almond 2010, we understand the different methods in pattern cutting that can, for instance, combine two traditional methods in a new approach. On the other hand, when we speak of experimental pattern cutting we refer to methods that explore giving form to tridimensional wearable pieces essentially via a research-based approach and that do not necessarily lead to a finalised outcome.

design and achieve desired results. In the workshop scrutinized here, participants were invited to explore personal experiences as the informant to a process in experimental pattern cutting where no previous pattern making skills were required. This was an opportunity for each of them to develop their own creative method and explore a mode of designing where intuition takes over pre-conceived rules, transforming the usual pattern cutting practice into a creative one. Fayga Ostrower (2005), despite speaking from the field of visual arts, discusses how intuition is central to adding the 'creative' part to a process or method. By relating subjective aspects from the everyday life to the creative process, the students had to use intuition to translate the chosen concepts and generate shapes for pieces of clothing, forcing the boundaries of mainstream pattern cutting with innovative approaches.

In addition to the difficulty in understanding the traditional pattern cutting methods, another aspect makes it hard for new approaches to appear in the field within our context. Concerned with increasing the intake of students, many universities in Brazil approach education from a standardized perspective with less room for catering for individual needs. This leads to programmes that treat pattern cutting as a rigid field of knowledge based on theory and methods, avoiding experimentation. Exposition to theory and methods are important in the construction of knowledge, but it should not be understood as the only path. A pragmatist perspective (DEWEY, 1934) suggests that the most effective way of learning is from the construction of own theory through experience. This accounts for the fact that each person has the ability to articulate, synthesize, and act based on his or her own logic. Adding to that, Galvão (1996) points out to creative suppression in traditional education and suggests active experimentation and self-awareness to overcome this matter. The workshop discussed here addresses the emergence of these issues by proposing experimentalism as a tool to regain comfort in creative learning.

Ideas can be materialized and expressed by a broad range of possibilities, but as suggested by Galvão (1996), some transformation is necessary for a creative potential to be developed, regarding the behaviour of students and teachers. Judgmental behaviour that causes insecurity based on internalized concepts, without individual questioning, should be avoided because they harbour marginalization and shame of exposing one's own ideas. Also, the overvaluation of memory, which encourages the archiving of "right answers" to the detriment of discovery, can be diminished. More methods, thus, are needed to encourage action for new experiences. The creative pattern cutting is one of those new paths to unlock creativity, as will be presented later in the article.

We understand that the academic environment should bring forth experimentation and supports students to engage in research and testing of previously unexplored grounds. In order to advance knowledge in professional practices, it is also necessary that students feel at ease and encouraged to face the new in regards to technology and design processes. Facing the above-mentioned problematics related to education and interested in broadening the understanding in our field of concern, this investigation studies and exposes a workshop in experimental pattern cutting proposed by the first author of this text. It discusses the pros and contras of the method as an educational tool that aims at a smoother and more enjoyable learning process.

This paper starts off with a brief overview of literature in creative pattern cutting followed by a presentation of the workshop and its outcomes. In sequence, we introduce the study methodology and its findings. The conclusion discusses points of improvement and indicates future directions for the practice.

From Industrial Practice to Academic Discussion

As a prominent field of research within the broad spectrum of fashion design practice, pattern cutting has received a consistent amount of professional and, more recently, also academic contributions. Professional publications, which include from educational method books (e.g. Método Centesimal) to do-it-yourself magazines (e.g. Burda, Moda-Moldes), have been available for about a century and are familiar to most households and independent craftistas. In the last 35 years, academic discussions and contributions have both consolidated pattern cutting as a field of knowledge and raised discussions on the ways we make, understand and develop pattern cutting. Foundational works, especially in combining technology to pattern cutting (EFRAT, 1982) laid grounds for the emergence of more recent movements that investigate the discipline, such as that of creative pattern cutting, which interests this study.

Differing in process and outcomes from mainstream pattern cutting methods, the creative cut, as Almond (2016) addresses it, envision reaching new approaches by experimentalism, often leaving aside an essentially commercial interest. Many designer-researchers in fashion practice have actively contributed to the development of pattern cutting as acknowledged research (LINDQVIST, 2015; RISSANEN, 2013; SIMÕES, 2012).

Timo Rissanen and Holly McQuillan propose the ‘zero waste’ model for pattern cutting (RISSANEN, 2013; MCQUILLAN and RISSANEN, 2011). The model, previously practiced by creative individuals in the industry without a specific nomenclature (e.g. TENG, 2003), gained through his work recognition and adopters throughout the world (TOWNSEND and MILLS, 2013). The zero waste pattern cutting puts into discussion the often ignored amount of fabric waste produced during the manufacturing of garments in the fashion industry.

Focusing on the fact that dressed humans move, Inês Simões (2012, 2013) suggests the creation of block patterns that better embodies this moving essence, targeting the representation of the body as a 'mobile entity' (SIMÕES, 2013). The study, which analysed individuals in movement and self-portraiture, resulted in slight modifications to the block patterns and confirming through wear tests an approximation to the expansion and shrinkage of the fabric closer to that of the muscles. Expanding this investigation, Lindqvist (2015) proposes an alternative to the well-established method of measuring the human body via the tailoring matrix naming it the 'kinetic garment construction'. His investigation drew from the work of fashion designer Genevieve Sévin-Doering inspiration to a draping proposal centred on the moving body.

The works mentioned above, are only a sample of the growing field of academic research in pattern cutting. Along with developing and theorizing their pattern cutting methods, many of the researchers above shared their investigations and methods with students through courses and workshops. The workshop shared through this study adds to these previous efforts of applying a more experimental take on pattern cutting both in practice and education.

The Workshop

Part of a series of extension courses offered at Universidade do Estado de Minas Gerais (UEMG) the course targeted the broad audience. The workshop consisted of twelve contact teaching hours, divided in three consecutive Saturdays between August and September 2017, and around ten individual working hours. A total of nine participants took part in the workshop and agreed to participate in this study via a consent form. The majority of them had between little to extensive previous experience in pattern cutting or

clothing/fashion in a more general sense. Most of the participants were bachelor students and the average age was 28 years.

The workshop starts by questioning *what is pattern cutting* and asks the participants to visually exemplify how they understand or would make the pattern for cutting a shirt, including all the internal and external factors that could affect it. This aimed at acknowledging the different process in making clothes already existent as well as the potentials of new emerging processes to come. It was supported by examples from known fashion designers such as Yohji Yamamoto (YAMAMOTO & SALAZAR, 2011) and Jil Sander (LOWTHORPE, 2013), who have previously stated in interviews a particular appraisal and investment in pattern cutting. The participants filled in a form with this information, which was kept to be re-assessed and discussed after the end of the workshop. They complemented the examples by demonstrating individual interpretations of what is pattern cutting and finished the section by discussing the question 'are all pattern cutting processes creative?'.

In sequence, a series of alternative processes in creating patterns was introduced, including the works of Holly McQuillan and Timo Rissanen (2013) and Rickard Lindqvist (2015). The workshop facilitator's personal projects (VALLE-NORONHA, 2015; VALLE-NORONHA, 2016) were also presented and discussed together with the participants as a closure to the first introductory day. The second encounter was dedicated to presenting examples in conceptual art, from both national and international levels, in order to exemplify creative processes where the concepts precede or even substitute the work. The main point of interest was to show how many conceptual artists, such as Sol LeWitt (BAUME et al. 2011), centred efforts in creating 'guidelines' or 'instructions' that would fully inform the production of an artwork. Drawing from these examples and from the creative practice of the workshop facilitator (VALLE-NORONHA, 2016; VALLE-NORONHA, 2017), the participants were

invited to create 'instructions' that would focus on generating patterns for producing garments. After finalised with the instructions, the students sat in teams of two and exchanged 'instructions'. It was suggested that the partner would test the execution of the 'instructions' on paper and evaluate them in regards to clarity and feasibility. Each participant would then share his/her partner's 'instructions' and the workshop group as a whole discussed each example. This second meeting was finalised with the participants returning home with a task: polish their instructions and produce one piece based on their newly created design process.

The last encounter aimed at a showcase of all the processes and its outcomes together with a discussion about the possibilities these methods may bring to the designer. Participants shared their feelings and conclusions about working with pattern cutting via this alternative approach and compared with previous experiences, when existent, based on their first task of visually describing the patterns for cutting a shirt.

On the Designed Processes and the Disrupted Results

The methods created by the workshop participants represent a plural approach to pattern cutting, ranging from experiments relating closely to the usual pattern cutting (e.g. genderless garments using straight lines) to deep experimental tentative in creating new shapes (e.g. bus trepidation for drawing accidental forms). Some of the projects also focused more on a performative side of the practice (e.g. use of national flags to inform shapes to patterns and discuss the notion of nationality via performance). All in all, it was clear and unanimous that they all reflected the personal interests of each participant.

The final results in the image below (Image 1) represent the plurality of personal interests and outcomes executed by the participants. One participant was absent from this last meeting, resulting in a total of 8 processes exposed.

Image 1. Final results from the workshop present plurality in outcomes. In the image, examples from the works of eight students that took part in the workshop

Image credit: the authors

The results include swimwear, accessories, genderless garments and surface design experimentations, making it clear that the disruptive aspect of the proposal also invites to more open outcomes, in which not only finalised garments are welcome.

Data Interpretation and Findings

This study worked with a mixed set of data, collected longitudinally during the running period of the workshop. They have been interpreted independently through open coding and, in a second stage, comparatively through thematic coding (FLICK, 2009, p. 305-323). The themes applied to the second round of interpretation emerged from the data itself and were chosen in resonance with the central interest of this study: to evaluate experimental pattern cutting as a method for educational purposes approach with smaller resistance from students.

Table 1: Description of the data set collected and used in the study

Data	Description	Quantity
Conventional Pattern Cutting Task	A4 sheets of paper with participants' personal and background information added to instructions to the task of reporting visually and textually how she/he understood the activity of making the pattern for cutting a shirt.	9 sheets
Audio-Recordings (transcribed)	Recordings of all the sections. The transcription was done only of the discussions between participants/tutor. The original language in the recordings and the language in the transcripts is Portuguese. The original language was kept to preserve information closest to the original possible. All transcriptions were done with the support of f5 software.	162m21s
Photographs - general workshop images	Taken by the second author of this text, during the workshop. Participants granted the right to have pictures taken.	9
Instructions' - photos from participants notebooks	Taken by the second author of this text, under the permission of participants	8
Final outcomes - photos	Photos of the final objects/outcomes, taken by the first author of this text, under the permission of participants.	8
Field Notes	Notes taken by the authors during the workshop days.	6

From the two data interpretation stages, a few topics emerged and were tagged as 'valued personality' and 'lack of expectations'. They are described in the following paragraphs.

Valued Personality

A first point to note was that the experimental approach to pattern cutting instigated very personal interests, not often made so clear in other approaches such as metric pattern cutting. Each of the students brought very personal topics to serve as information to their methods. Some of these were: visual memories of a grandmother, personal bus rides and narrative of objects used during the morning. One student mentioned this experience as rescuing feelings similar to when he developed his first piece, suggesting how much the lack of prior knowledge in a particular technique demands more creativity for something to be created. It is expected by common sense that the more knowledge around a subject we have, the better results will be obtained. However, depending on how this knowledge is acquired and through which method, the results obtained over time can be conditioned to have similarities even if produced by different people and places.

Lack of Expectations

The lack of expectations in the experimental method, suggested and promoted by the instructor throughout the workshop, led to pleasing encounters when a positive outcome or solution was achieved. It suggests ways of addressing expectation in pattern cutting courses that would lead to less frustration, enhancing students' quality of engagement. The frequent lack of a clear visual target or the absence of sketches/croquis supports the creation of pieces outside the framings of fashion trends. In a similar way, while lacking pre-

defined visuals or shapes, these processes discouraged pre-conceived understanding on body(ies), allowing voices from a variety of bodies other than that of the magazines or the designer.

Concerning the instructions given and the format of the workshop, bringing examples to be shown in class was essential to drawing understanding and making the abstract process into a concrete visualisation of the outcome possibilities. The difficulty in approaching the traditional pattern cutting methods was also addressed by participants. Their difficulties reinforce the need for a more welcoming approach in which barriers are avoided, as opposed to the traditional methods and support the proposal of experimental approaches as a first introduction in the pattern cutting learning process.

Conclusion and Discussion

From the discussions and the report of how the workshop developed in each participant's learning process two concepts were highlighted: frustration and disruption. While frustration acted as a negative drive behind the creative process, disruption played sometimes the role of a negative input as well as a positive input to the creative flow and openness to new learnings.

What we noted, in comparison to previous experience in teaching traditional block patterns, is that the experimental approach allowed a more facile approach, where previous experience in the field would not necessarily result in a more satisfying outcome. It was observed that previous experiences could or not emerge or be applied to the new methods created, reinforcing the idea that a background in pattern cutting was not necessary and did not affect the productivity during the workshop.

The negative aspects found during the workshop were mostly in regards to understanding of the proposal. One of the students could not fully grasp the instructions and drew sketches from the outset. Ensuring that all outcomes are

positive and clarifying the lack of judgement, especially those involving visual preferences, could enhance this issue. Another point of development perceived was that one added meeting between the 'instructions' creation and the production of the pieces could help enhancing quality outcomes as well as helping participants understand the learnings taken from the buggy process. Added to that, the applicability of the method holds the potential of expanding the field of fashion and reaching out to other fields, such as product, graphic and surface design.

With this disruptive introduction, the method aims at challenging the broadly propagated paradigm in fashion that pattern cutting demands troublesome learning practice. Instead, it proposed pattern cutting as fun and surprising, in which the practitioners' mindset has plenty of room for creative and intuition expression. It is expected that the openness made possible by these aspects can inspire and expand the field of pattern cutting and pluralize theoretical forthcomings. Some of the forms found in the experimental pieces can serve as the basis for the creation of other pieces, allowing participants to build their personal repertoires of processes and patterns.

The students developed their own creative processes based on personal experiences, which encompassed from the ideation phase to sewing. These processes invited critical analysis and reflection beyond the construction of a designed piece. From an educational viewpoint, it is necessary for teachers to practice other forms of building knowledge that embraces critical reflection together with students. In other words, it is valuable that students find their own means to navigate the process through constant questioning and problem-solving decisions instead of following instructions without room for experimentation.

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