T rusting Technê: An exploration into the creative value of learning through doing

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Abstract
This paper takes the form of a testimonial experience reflecting on the piloting of two undergraduate projects. Students on the BA (Hons) Fashion course at Leeds Arts University, United Kingdom (UK), were required to start the design process by participating in a series of kinesthetic workshops, solely based on exploratory pattern cutting principles. Sourcing any visual inspiration or references was prohibited, thus distorting students’ preconceived notions of what constitutes a linear design system.

Encouraging design ideas to emerge from creative cutting principles rather than sourced imagery aims to embed ‘technê’ (practically applied knowledge); emphasise the importance of tacit epistemologies in a pedagogical context; enhance creative impact; and instigate autonomous learning. The paper will also serve to illustrate the creative potential of eliminating visual research from the early stages of the design process.

Key words: technê; epistemology; craft; pedagogy; cutting.

Introduction
Historically, fashion innovators such as Madame Vionnet and Charles James focussed on pioneering new cutting methods and silhouettes. Emphasis was placed on exploring the relationship between cloth and the body, not on visual research or appropriation (Long 2015). The modern fashion designer, however ‘…has been brought up with a sense of loss and nostalgia for the earlier and exciting decades’ (Edelkoort 2015: no pagination), and ‘…rummages in the historical wardrobe, scavenging images for re-use just as the nineteenth century raggpicker scavenged materials for recycling.’ (Evans 2003: 13). Through the hybridisation of inspirational referencing, abstract ideas are translated into commodities, and sold on the basis of desire. Terms such as ‘mood’, ‘theme’, ‘concept’, ‘feeling’ and ‘narrative’ are now commonly used in design studios and educational environments to critically contextualise a collection and describe the presentation of a cohesive ‘distillation of research’ (Sorger and Udale 2017: 24).

Fashion educators often find that students become overly concerned with collecting a vast number of visuals in order to create a ‘strong concept’ with which to initiate their design process. Taylor and Whitson-Smith (2015: 124), when discussing their teaching experiences, state that ‘…amongst the many challenges that face those who teach creative disciplines, the appropriation of ideas and imagery is increasingly
difficult to manage.' In an era of information overload and online distractions, students frequently collect imagery, predominantly from secondary sources such as Pinterest or Instagram, thus taking the emphasis away from the craft and physicality of fashion design. Important factors such as cloth and silhouette can become overshadowed by visual themes, or selected in order to suit a concept, often resulting in a contrived final outcome. There is also often, disconnect between the creative ambition to translate an abstract idea into a viable garment and the technical skills required to execute this to a professional standard.

It is important to note that successful design cannot happen without some form of research taking place, i.e. the creative investigation of visual or literary references, and that well considered research should not be a collection of random images and references (Sorger and Udale 2017). Also, while the linear order of ‘Research – Sketch - Flat pattern/drape – Fabrication – Make’ is a standard approach, and works for many designers, this ordering does not have to be the only one (Dieffenbacher 2013: 10). Students on the BA (Hons) Fashion course at Leeds Arts University, United Kingdom (UK), have generally worked within a linear framework, and whilst this has been effective, it has been recognised that students would benefit from being introduced to a wider range of experimental working processes and frameworks. Dieffenbacher (2013: 11) makes the point that, ‘…if we are only training students to design clothes via a process that is rote and mundane, then we’ve missed the point entirely.’

Fashion educators currently working in the higher education sector (HE) are presented with the challenge of introducing experimental approaches to the design process in a way that caters to a range of learning styles and capabilities. Previously, students entering creative education at undergraduate level had already experienced a range of experimental working processes and developed their understanding of specialist skills on further education (FE) courses. However, over the last ten years, the educational landscape in the UK has dramatically changed. While the move towards an expansion of the HE system, to include approximately 50% of school and college leavers, has resulted in greater student diversity (Thomas and May 2010), the proportion of pupils taking at least one arts subject at GCSE in 2016 significantly dropped to 53.5% (Johnes 2017). Government cuts to funding have ensured a threefold decline in the number of entrants for A-levels in arts subjects (Association of Colleges 2017) as well as the closure of established art foundation courses at colleges such as Falmouth and Norwich. Matias Shortcook (Associate Dean at University of Plymouth) makes the point that closing art and design foundation diplomas can result in ‘simplistic’ routes into creativity, meaning that students miss out on a year of ‘…vital experimentation and confidence…’ (Dawood 2017: no pagination). In her ‘Anti-Fashion’ manifesto, Li Edelkoort (2015: no pagination) argues that in fashion education, ‘…the design process is now compressed…students no longer have time to consider an approach, which might transform the silhouette.’ She states that it is ‘…in the atelier of couture that we will
find the laboratory of this labour of love and that we will see a comeback of craft as a major benefit to the future of fashion.’ (Edelkoort (2015: no pagination)

**Technê Approach**

The Oxford Dictionary (2019: no pagination) describes ‘technê’ as ‘...an art, skill, or craft; a technique, principle, or method by which something is achieved or created.’ It could be argued that James and Vionnet are designers who pioneered a design process based on the act of technê in their ateliers, in which craft was skilfully engineered to innovate new silhouettes. In order to explore how the act of technê can be used as a feasible creative research method in a pedagogical setting, two projects were piloted; Project One, with a group of first year students and Project 2, with second year students, on the BA (Hons) Fashion course at Leeds Arts University. Both projects were delivered over thirteen weeks, with taught sessions taking place over one and a half days per week.

Disrupting the linear design process by eliminating the collation of visual referencing from the outset of each project, and replacing with pattern cutting principles, aimed to establish an alternative framework for fashion students to design new garments. A new order, ‘Pattern Cutting – Research – Design – Fabrication - Make’ encouraged design ideas to solely emerge from physically doing. Julian Roberts (2013: 13) states that ‘...pattern cutting and design are physical activities that extend from the hand and eye, from rotations of the elbow and shoulder, but also flow from the mind and its perception of spatial awareness.’

In the accompanying publication to the fashion exhibition Patronen:Patterns (Mode Museum, Antwerp) the respected writer Lauwaert claims that,

> **Thinking about the pattern is thinking about a technê - an operating process, a ‘means of making’, a profession. There is, however, considerable incompatibility between the technique of thinking and the technique of making. Instruments of thought are intended to separate, to distinguish...The instruments of making, in contrast, are aimed at a process of bringing together, of binding. The discerning process of thought is a counterpoint to the creation of relationships through making.**

(Lauwaert, 2003: 42)

It is therefore important to recognise that encouraging a haptic approach to the design process allows for tacit knowledge to be gained and applied via practical measures when an epistemological framework of design thinking is established. Pattern cutting can be perceived as a technical science, a theory based system of rules. If presented as an intuitive situation-oriented mode of discovery, belief systems about what constitutes as a source of knowledge are likely to be challenged, therefore guiding and developing a student’s critical thinking practice.
Each project needed to encourage active investigation, grounded in theoretical enquiry.

**Project 1: ‘Pattern Cutting Skills’**

‘For the things we have to learn before we can do them, we learn by doing them.’
(Aristotle 1999: 21)

At the onset of a degree, students have limited prior knowledge of pattern cutting and construction skills, and can have preconceived notions of what the fashion design process may entail. Fischer (2008: 25) states, ‘…like all craft skills, pattern cutting can at first seem difficult and intimidating but with a basic understanding of the rules to be followed (and broken) the aspiring designer will soon learn interesting, challenging and creative approaches to pattern cutting’. Therefore, the project comprised of a comprehensive series of workshops focussing on creating conventional patterns i.e. adapting a set of ‘blocks’ representing fundamental sections of a garment (sleeves, bodice, skirt, etc.) to immediately engage students in the physical act of cutting. Visual research was limited to independent investigations into how each process has been interpreted through contemporary and historical fashion design.

Students were informed that towards the end of the project they would design and produce one dress based on skills and knowledge acquired in the workshops. Throughout the module, students recorded and further developed each pattern cutting method in order to explore the many creative combinations and possibilities available. For example, one workshop explored a range of dart manipulation techniques, which could be adapted in a range of styles, while another explored creating volume or asymmetric pattern drafting. Students worked in half and full scale, and generated designs by combining and juxtaposing different garment components in order to create hybridised outcomes in paper or calico (figure 1). A list was provided, outlining the components that needed consideration when designing, which included ‘sleeve silhouette’, ‘added fullness’, ‘asymmetry’, and ‘dart manipulation/style lines’.

**Figure 1:** Example of ½ scale pattern cutting experimentation.

For the final outcome (a dress), a number of clashing patterned fabrics were supplied to the students so that they could focus on the pattern cutting process and to eliminate the need to gather unnecessary visual references in the early stages of the module (figure 2). Creating a series of constraints such as a limited choice of fabrics and cutting methods enabled the design process to stay focussed and within the realm of achievability.

**Figure 2:** Design sketches in response to cutting techniques.
Project 1 Findings
A range of methods were used to analyse and record findings, which included observational reflection and student feedback via a focus group. It was observed that students portrayed a greater sense of design awareness when compared with the previous cohort who had sourced inspirational research to exclusively drive the direction of their designs (figure 3). There was also a notable difference in engagement and independence, and at the end of each session students were positive about what they had achieved.

Figure 3: Example of design development

Design ideas were well-considered, demonstrating a deeper understanding of how to combine apparel elements in a three-dimensional (3D) form. Through the toiling process and the production of the dress there was a notably higher level of understanding and skill demonstrated by the cohort (figure 4). Initially there was some resistance to using pattern cutting principles to inspire designs, and some would either get distracted by sketching ideas that did not respond to the workshop content, or they would ask for a theme to inspire designs. However, as the module progressed, they expressed that they actually found it easier to visualise a design. One student stated:

*I had previously not enjoyed pattern cutting prior to this project, and initially wanted to break the rules that we were confined by. However, I began to realise that it made the design process easier because I could understand what I was designing.* (Student participant, first year)

Figure 4: Final dress outcomes.

Project 2: ‘Exploratory Cutting Methods’
This cohort entered the second year with some knowledge of how to create a conventional pattern. The project follows a menswear tailoring module where students work in a linear format by researching historical and contemporary references to inspire a tailored jacket. The outcome requirements consisted of a cohesive micro-collection of outfits, using exploratory cutting methods as inspiration.

Students were briefed from the outset that their previous understanding of the design process would be challenged, and that visual referencing and appropriation would be prohibited in the first four weeks of the project to encourage design ideas resulting solely from exploratory cutting. In previous projects, earlier weeks had typically been allocated to ‘research’ and the consolidation of findings into concept/mood/story boards in order to inform designs. Instead, the first four weeks of the schedule consisted of a series of kinaesthetic workshops focussing on exploratory and experimental cutting principles, encouraging participants to use alternative methods to adapting ‘blocks’. Design ideas were generated rather than produced as reaction
to collected ideas. Therefore the cutting process became a fashion innovation tool (Sissons 2018: 214).

Every week, a different exploratory cutting principle was demonstrated, and students were required to apply this to a different context, or develop it further by experimenting with a range of options, creating half and full-scale forms. For example, one workshop involved drafting a sleeve using the armhole as the central axis rather than using a traditional block, to generate a range of abstract sleeve prototypes in calico (figure 5 and figure 6). Another workshop involved replacing ‘blocks’ with geometric shapes, adding simple seam formations to create a basis for a draping exercise. Students worked from one handout containing a range of possible combinations to create a chance based outcome out of a woven fabric such as jersey (figure 7). Each workshop required no particular conclusion, however there was the pre-requisite that the workshop prototypes should directly inform the designs (figure 8). A playful and inquisitive mind-set was encouraged, and the results were recorded through drawing, photography, collage, and pattern making. Upon completion (after five weeks) of the workshop series, students could then source visual references to enhance initial ideas, and develop them into refined designs (figure 9).

Figure 5: Abstract sleeve trialling and experimentation.

Figure 6: Final outcome in response to exploratory sleeves workshop.

Figure 7: Example of design development in response to the geometric workshop.

Figure 8: Design line-up in response to the geometric workshop.

Figure 9: Final design outcome in response to the geometric shape workshop. (2018) Photograph by Nicola Knight.

**Project 2 Findings**

During each workshop, the majority of students were engaged, active and ‘doing’, producing a number of physical forms and prototypes by the end of the day. In comparison to the previous cohort who had completed the same project but were taught in a linear manner, the amount of work produced in the first five weeks was significantly more substantial and well considered. Design sheets contained a wider range of research methodologies - photographs of cutting experiments (successes and failures), developmental pattern shapes and making, observational and problem-solving sketches, and initial design ideas in response.

As the project progressed, a large proportion of the cohort seemed to ‘loosen up’, embracing each workshop with an active work ethic. Students who had previously struggled with compiling visual references produced a range of ideas in the
workshops and spoke of a great sense of achievement. It is interesting to note that during the design development stage, some reverted back to designing a conventional silhouette, and had to be steered back to the exciting initial ideas produced earlier on. In particular, it was observed that those who identified as menswear designers struggled to subvert traditional forms. Generally, however, the cohort produced garments that were more individual than the previous year group.

A minority of the students seemed to struggle with the changes, commenting that they needed to be given a ‘theme’ or a ‘concept’ to start the design process. These students lacked enthusiasm during the practical workshops and produced a limited number of outcomes. Honey and Mumford (1992) argue that two people of similar intelligence and background who undergo a learning opportunity may be affected in very different ways, for example, one person is enthusiastic while the other is disaffected, and that this is due to particular styles of learning. ‘Activists’ involve themselves with activity and experience and do so in an open-minded manner and ‘Theorists’ prefer to gather information to develop a coherent narrative or theory (Beard and Wilson 2002: 42).

**Conclusion**

The aim of the two projects was to explore the creative potential of replacing visual referencing and appropriation with cutting principles at the start of the design process in order to embed ‘technē’ (practically applied knowledge). Factors such as tacit knowledge, creative impact, and autonomous learning were considered and discussed amongst the teaching staff as a way to examine the impact of an alternative approach.

A significant increase in attendance and engagement was observed in both cohorts, and students worked productively during sessions and private study, demonstrating enhanced self-sufficient learning and problem solving. A practical approach from the beginning enabled students to embrace breaking rules and openly allow mistakes to inform a design idea, devoting more thought and consideration to the importance of the process itself. Within the unpredictability of the process, mistakes transform into new ideas, yielding fresh concepts that can drive silhouette and the fashion form forward (Dieffenbacher 2013). Through this approach, students have been encouraged to ‘Trust Technē’ and allow creative ideas to emerge from the cutting process by equipping them with tacit knowledge and autonomous learning strategies. As Dieffenbacher (2013: 12) highlights, ‘…emerging designers must learn to develop both their own personal philosophy of design and a particular way of working, which involves taking ownership of the process itself.’ While there was a proportion of students in each group who found the format challenging, it was observed that the process catered for a wider range of capabilities than with previous cohorts and the student’s learning experience was generally more in-depth.
To conclude, while it is inadvisable to dismiss visual research from the design process, introducing the act of technē from the outset, interwoven with theoretical and visual investigation, does propel innovation, instil a critical understanding of fashion thinking, and create self-sufficiency in a learning environment.

References


