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Drawing on the Archive: Re-evaluating copying for the design curriculum

Introduction, and teaching and learning context

In their role as external examiners and members of specialist discipline networks, the authors have become increasingly aware of concerns over the ease with which textile students can rapidly source images from digital archives or online uncontextualized image banks, which are then employed with little or no further modification in the students' own designs. Sharing this apprehension, the authors, who are both members of the Drawing Research Group in the School of Textiles and Design, Heriot-Watt University, decided to investigate methods of encouraging students to rediscover the merits of slower but more intensive copying methods through paper-based drawing. Planned in three parts, the first and second parts of the resultant investigation have been completed and the third is in the planning stage, with each part focussed on the delivery of drawn imagery through what we have termed the *Constructive Copying Workshop*. The structure and conduct of the workshop (explained more fully below) was based on preliminary findings from an earlier exploratory stage of the investigation. Two workshops have been conducted, in each case followed by interviews with student participants and an analysis of drawn outputs. Initial findings indicated an effective response from most of the students involved, a response which was manifested in enhanced thoughtfulness about the use of drawing and more willingness to reappraise the nature of copying.

Working from textile archives has long provided a source of inspiration and information for textile designers in industry, and many student assignments begin with the collection and analysis of imagery from archival or other historical resources. However, digital searches can lead to the sourcing of uncontextualized images from websites dedicated merely to the accumulation of images from elsewhere on the web. The use of digital manipulation can then facilitate the use of the images in design work with little or no adaptation. The importance to textile and fashion designers of seeking inspiration from archival and other visual sources is well established (Petre, Sharp and Johnson 2006, 183), and positive advice on how to copy effectively and, indeed, justification of copying to learn can be found (Wilson 2001; Marr 2013, 113). However, the detrimental effects of copying on the design industry are equally well known (Louziou 2016; Armstrong and Muirhead 2015, 71) and, as a result, many academics have been reluctant to officially encourage copying as such. Indeed, the

term ‘copying’ is often met with suspicion. Nevertheless, the importance of copying, that is to say drawing from found imagery in developing visual literacy, is also recognized (Davies and Talbot 1987, 19; Purcell and Gero 1998, 430; Schenk 2016, 23), and so the authors set out to explore ways to put constructive copying back on the contemporary textile design curriculum.

From the earliest days of design education there have been mixed views on the advocacy of drawing-based copying, whereas the practice has remained more acceptable to fine artists with recommendations being made from time to time for copying to be re-evaluated as a method of learning (Camp 1981; Ashwin 1982, 79; Drew and Harrison 1987). In the development of design education in the first half of the nineteenth century the importance of copying as a basis for the training of design school pupils was stressed (Bell 1963; Strand, 2 1984) but recently many design academics have been reluctant to encourage it, sharing concerns that students’ creative development might suffer (see, for example, the discussion in Schenk 2016, 84-5, 117). However, given the relatively easy forms of copying that digital technology now facilitates, and the implications this has for students’ creative development, the authors believe that a re-analysis of drawing-based copying methodologies is due. It is their contention that by encouraging students to explore different methods of copying through drawing, and by the enhanced quality of observation thus engendered, a more active and intelligent engagement with visual sources may be achieved or, put another way, “by shifting regard between what is perceived and what is imagined, between the percept and the image”, creativity will be facilitated (Imperatore 2016, 37). Karpova, Marcketti and Kamm (2013, 164), for example, have advocated the use of formal training workshops to help students learn problem-solving and develop creativity, and so the authors have investigated how an improvement in knowledge and understanding of classic textile design, and the practical skills and techniques to create new design, might be achieved by a systematic learning experience intended to connect cognition with practice in the form of a workshop.

For any re-evaluation of copying and, in particular, for promoting a more positive application of copying, it was clear that a considered employment of appropriate terminology to differentiate the different forms of copying was expedient. Cain, for whom copying is a well-established method of learning (see Cain 2010, 102), identifies three forms of copying, namely copying to replicate, copying to transcribe and copying to learn. Again, Marks (2015, 91) describes what she terms “borrowing” from visual sources in three ways, namely imitation, adaptation and transformation. In this context, the establishment of a *copying*

vocabulary matrix proved to be a key step in the development of the constructive copying workshop.

Research methods

The aims of the research were to seek means to enhance student awareness of the stylistic characteristics of archival reference, to improve expertise in effective copying techniques and to encourage students to become more reflective about their own practice of drawing for design (Schon and Wiggins 1992, 156). In order to achieve these aims, various techniques including a practice-based investigation, a systematic analysis of drawing practice and outputs, a review of written accounts, and various forms of interview techniques were initially tried, with different degrees of success, and this determined the overall approach to be used in the three-part study.

As members of the Drawing Research Group (DRG), the authors initially explored copying methodologies both through a review of the literature and by means of their own drawn experimentation with copying techniques. Each of the authors started with the same image from a textile archive and then, working without restriction, experimented with different media and techniques as they recorded their ideas and reactions while drawing, through a kind of a phenomenologically-based sequential methodology (Graham 2016, 65). They also collected ideas in a reflective journal to record their growing insight into copying techniques and, once a varied body of work had been produced, met to discuss and analyse their comments and drawn outcomes.

It was interesting (but not surprising) to find that not only was each set of drawn copies very different but also that the written commentaries were equally dissimilar. It was evident from this that there was no mutual employment of terminology, so agreement was reached to seek reference and to reflect further on the terms associated with copying. Through this process it was possible to evaluate an appropriate vocabulary for describing the different forms of drawing-based copying identified and, in this way, a key element of the workshop, a copying vocabulary matrix (see Table 1), was created comprising terms identified through the practice of drawing. Moreover, the matrix not only became a crucial aspect of the workshop, it also helped to inform the content and conduct of the interview programme, thereby ensuring consistency and systematic analysis. Consistency was also achieved by the use of a Drawing Analysis Checklist formulated by the DRG and updated through discussion in the early stages

of each project, and through subsequent drawing analysis (further description of which is given below).

Sclater (2016, 299) describes the “multiple incoherencies” affecting researchers from different backgrounds while working together but, in the case of this investigation, the different approaches of the authors, one from a textile and the other a graphic design background, formed an advantageously broad basis for evaluation of both potential opportunities and difficulties in copying procedures. The authors made the decision to plan an intensive one-day workshop and to integrate this into existing student courses centred on working from visual sources. Since the tasks to be set were difficult, it was agreed that, specified time in class should be allocated and the outcomes then included in assessment. It was also essential to provide clear guidelines and constraints in order for a class conducted on a single day to be effective and, again, further description of these is given below. Although both workshops were conducted in the same calendar year, 2017, they were, in fact, given in two academic years, the first being given in January in the second semester for one second year group, the second in the following October for the following second year group.

The Constructive Copying Workshops

The first workshop was set as a component of a floral print design course for printed textile design students during which they were encouraged to explore the role of innovative design collections in contemporary markets. It consisted of a one-day class introduced and conducted by the authors. A verbal briefing to the group was accompanied by individual handouts detailing the aims and content of the drawing-based copying tasks, along with an example of the textile archive material provided as the specified visual source for the students to copy from. The students were asked to limit the medium used to black pencil and to confine themselves to A4 tracing and cartridge paper in order to focus their attention on copying activities and to make the best use of the time available. Any queries raised were dealt with at the time and six drawings were produced by each student, either during the class itself or completed later.

The students were asked to consider particular copying strategies or approaches prompted by the terms set out in the Copying Vocabulary Matrix 1 (Table 1), and then to choose any six of these terms and elucidate their meaning both in their drawings and through notes made while drawing. They were also asked to bring these notes together in a reflective journal to be submitted for assessment along with the drawings. As indicated above, a range of terms

describing different types of copying procedures had been identified by the authors defining a range of copying techniques, from which were selected nine deemed to be readily understood by the students and also having the potential to stimulate response. These nine terms fell into three separate categories, and comprised the terms ‘trace’, ‘reproduce’, ‘duplicate’, i.e. to produce some form of facsimile or direct reference to the original; ‘translate’, ‘investigate’ and ‘deconstruct’, i.e. to interrogate the original for innovative potential; and ‘emulate’, ‘memorize’ and ‘interpret’, i.e. to seek inspiration from the original. These nine terms are set out in Table 1 grouped in the three categories.

Table 1 Copying Vocabulary Matrix 1

Trace	Reproduce	Duplicate
Translate	Investigate	Deconstruct
Emulate	Memorize	Interpret

Also included in the student handouts were appropriate references, including the link to an online dictionary and thesaurus (Thesaurus.com) to encourage students to explore definitions for the given terminology, and thus to relate terminological considerations to their drawing practice.

Learning from where problems arose in the first workshop, for the second the authors reduced the matrix to six terms, and in this revised Copying Vocabulary Matrix 2 (Table 2), each term was numbered. The handouts also included further guidelines on the naming and attribution of the drawings. These changes were essentially operational, with the reduction in choice of terms made merely to enable cross referencing, and the addition of numerals and clearer guidelines provided to avoid any misunderstanding during later analysis.

Table 2 Copying Vocabulary Matrix 2

1) Trace	2) Reproduce
3) Investigate	4) Deconstruct
5) Memorize	6) Interpret

As indicated above, the second workshop was conducted in a very similar way to the first but was carried out earlier in the academic year, during a different course, but on the same textile design programme. Just as in the case of the first, the course into which the second workshop

was integrated featured a significant concentration on visual referencing and, in this particular case, included an introduction to print through student designs inspired by *Toile de Jouy* fabrics.

Although selected using the same criteria, that is they were both classic textile designs relevant to the course within which the workshop was integrated, the archival material supplied for the two workshops differed significantly in visual content. The first, a printout of a section of the floral Liberty print named ‘Thorpe’, comprised simplified floral representations in a range of colours and tones. (https://www.libertylondon.com/uk/thorpe-tana-lawn-cotton-R013218006.html?dwvar_80675_color=C&referrer=departments#sz=60&start=241). The second, ‘Aimee’ was more figurative and pictorially complex in composition and repeat, yet had a limited tonal range created from a single colour. (<http://www.textilesfrancais.co.uk/toile-de-jouy/119-toile-de-jouy-fabric-aimee-blue.html>). Thus, the textiles serving as the source image were from different historical periods and were very dissimilar in style.

In both workshops, all the students were asked to start their copying exercise with a response to the word *Trace*, so that they all started in a similar way beginning with detailed observation but making few demands on established drawing competence. As one student described her experience, “tracing keeps the same scale, position, shape and, depending on the level of detail, the same marks”. Another discovered that her ‘very detailed drawing made her notice things she would have missed otherwise’.

While each workshop was in progress, small informal but focussed group discussions and individual interviews were carried out with the students to identify queries and to gain insight into their early reactions. Subsequently, more structured interviews with 12 of the students were conducted later in the academic year when they had had opportunity for reflection. Directly asking designers about what they do is perhaps the simplest and most direct form of inquiry into design activity (Cross 2011, 8), and interesting discussion during both sets of interviews revealed a thoughtful response to the issues raised by the workshops from almost all the students.

After assessment, when all the drawn and written outputs of each workshop could be assembled, the authors conducted a joint review of the students’ written and verbal reactions to the workshop gleaned from their journals and comments at interview, together with a critique of their drawings during which they (the authors) selected five student portfolios

from each workshop along with their journals for more in-depth analysis. This selection was based on the typicality, visual variety and range of copying techniques represented in the sets of drawings. Working with a relatively small but purposive sample of 12 students for the interview programme, and five portfolios of six drawings for further analysis, a sample was built up that was satisfactory to the specific needs of the research. As indicated by Cohen, Manion and Morrison (2018, 218), “in purposive sampling ... the researchers handpick the cases to be included in the sample on the basis of a judgement of their typicality”.

One of the main differences between the workshops was that the second was conducted earlier in the student’s academic year than the first. This change was prompted because a number of the first set of interviewees had suggested that an earlier input relating to copying might have helped them to work from visual sources more effectively (both first and second semester courses required them referencing archival material). However, this meant that the students were less familiar with the printed textiles discipline, having only specialized in this field for a few weeks. Another difference was that there were more students in the class for the second workshop, but the system of purposive sampling described above meant that the same number of students’ drawings and comments from each workshop were analysed in depth to facilitate comparative analysis. Some changes were also made to the guidelines and content of the workshop as indicated above. However, during the authors’ later analysis, it was evident that it was the difference in the archival material provided that formed the major variable.

Initial findings

The majority of students in both workshops engaged enthusiastically with the topic of drawing-based copying and endeavoured to produce drawings that demonstrated a thoughtful response to the terms given in the matrix. They noted their ideas, their difficulties and what they regarded as their successes, and, in most cases, they articulated their drawing strategies well, even including, in some cases, personal reflections on their own established drawing practice.

During interview most agreed that the workshop had helped them “make sense”, as one put it, of the potential of drawing-based copying. There were also insightful comments about the styles of the original textiles; the flowing lines and abstract characteristics of the Liberty print, on the one hand, and the pictorial complexity and historical style of the *Toile du Jouy*, on the other. One student from the first workshop described her efforts to “take the levels in

the image apart” and to “analyse the kind of shapes that make up the style”, another wished to remember not only the appearance of the original but also its stylistic qualities as a Liberty print. A student from the second described “ruffles on sleeves, leaves on trees, shadings on buildings” as her way of characterizing the *Toile du Jouy*, while another saw ‘a story that could change’ as the main characteristic.

Other students described strategies to learn from the original, to “take what you are looking at and make it your own”, or how to draw in such a way as to retain the “same overall mood but in your own style”. From their written comments it was evident that students had found appropriate definitions for the terms in the matrix and that this had helped them develop strategies for the copying exercises. Therefore, it would appear that linking terminological cognition with drawing practice not only stimulated understanding of the potential of drawing in design, but also helped the students improve their visual vocabulary for textile design. In general, the aims of the workshop were met on each occasion it was conducted. Awareness of the stylistic characteristics of textile archival imagery and, more generally, textile-based visual literacy was enhanced, effective copying techniques were achieved, and students became more reflective about their own drawing practice. However, as the authors started their analysis and comparison of the sets of drawings from each group, it became clear that not only was there a wide range of drawing styles and strategies apparent in the work but that there were also different approaches evident between the two groups. While this was to be expected because both workshops had been set within the confines of existing semester-long printed textile courses, each with its own specific aims and objectives, the type of inspiration that the students were able to derive from the archival sources evidently differed considerably.

The Drawing Analysis Checklist referred to above is used by the DRG to aid consistent and systematic analysis and critique of drawings, but it is modified for each analytical exercise to correspond with the variables identified early in that particular exercise. Broadly based on a classification model defined elsewhere (Schenk 2016, 175-189), it invariably comprised three sections. The first section, *‘the drawing’*, includes descriptors of the medium, drawing style, etc. The second, *‘the task’* lists the specific and general purposes of the drawing and thirdly, *‘the competence’*, registers the intellectual, practical and technical ability demonstrated in the drawing. Both groups had used the medium of pencil sensitively and effectively and had varied the composition of their drawings, at times retaining the square format of the original archival image provided, at others using the full A4 sheet. They both developed considered

responses to the stylistic features of the archival sources and indicated thoughtful investigative abilities. Most of the students in the second group also displayed story-telling aptitude. Therefore, reference to these propensities were included in the checklist, and the analysis it facilitated is described below. Some of the characteristics of the drawings produced during the workshops were determined beforehand in that the medium was limited to pencil and the substrate to A4 tracing and cartridge paper. However, the different qualities of line and tone achieved were of specific note, along with the relative rapidity or precision of the drawings. Similarly, the task was predetermined in that it comprised copying from a given archival source prompted by the use of a term from the matrix. Implicit in this task was the development of drawing strategies for the exploration of the decorative style of a classic printed textile design and the creation of new decorative potential.

A selection of the drawings produced for the first workshop is shown grouped to feature predominantly the use of line in Figure 1 and tone in Figure 2 below and, similarly, for the second workshop in Figures 3 and 4. The drawings are reproduced uncropped and to the same scale with minimal enhancement to strengthen faint images. In the figures 'a' is in the top left-hand corner and 'b' in the top right, 'c' is in the bottom left-hand corner and 'd' in the bottom right. The order of the drawings in each figure correspond to four of the terms in the Copying Vocabulary Matrix 2 and are positioned in the order in which they appear in the matrix.

Figure 1: Line pencil drawings from Constructive Copying Workshop One, a) Trace, Clara Leitão; b) Deconstruct, Kes Andrews; c) Memorize, Miriam Totterdell; d) Interpret, Hayley Lees, January 2017.

In Figure 1a (Trace) the act of tracing defines precise outlines of all the elements of the archival source but, as indicated by the student, it 'does not form an exact copy', that is to say the kind of copy the same student attempts to reproduce in Figure 2a (Reproduce), where an increase in scale facilitates control of the representation of a detail, and where even the colours of the original are represented in grey scale. In Figure 1b (Deconstruct), the original design is, in fact, deconstructed and put back together in a configuration of delicate lines very different from the original in composition but which retains its floral provenance. In Figure 1c (Memorize), while drawn rather quickly and from memory, the shallow depth and visual variety of the archival source are represented. In Figure 1d (Interpret), the simple strategy of

copying the forms but with a jagged line means that the student both retains the decorative qualities of the original print but ‘with more edge’ as she puts it.

Figure 2: Tonal pencil drawings from Constructive Copying Workshop One, a) Reproduce, Clara Leitão; b) Reproduce Miriam Totterdell; c) Investigate, Hayley Lees; d) Memorize, Kes Andrews, January 2017.

In the four tonal drawings shown in Figure 2, the medium of pencil has again been used to reflect the decorative qualities of the source while exploring new potential. While the ‘colours’ of the original are represented in Figure 2a (Reproduce), in Figure 2b (Reproduce) the pictorial floral elements are redefined by the ‘reproduction’ of the flat background tone. In the carefully controlled drawing in Figure 2c (Investigate) a single tone is used to ‘investigate’ secondary details in the source and thus create a new pattern that fills the A4 sheet so mimicking the cropped pattern of the original, and Figure 2d (Memorize) shows the student’s considered strategy of memorizing individual flowers to build up an almost posy-like depiction.

Figure 3: Line pencil drawings from Constructive Copying Workshop Two, a) Reproduce and b) Deconstruct, Giacomo Varbaro; c) Deconstruct and d) Interpret, Pauline Martin, October 2017.

As described above further additions to the checklist for the analysis of the drawings in the second workshop, aided the consideration of the technical and intellectual competences required to depict not only figurative elements but also narrative, even surrealistic, impressions. It was also important to give due consideration to the technical handling of the structural and spatial features associated with the original. It was evident that, within the confines and time limitations of a one-day workshop, not all the second group of students were able to achieve the convincing figure and architectural drawings that their storytelling ambitions required. However, many lively and convincing drawings were produced and, for example, interesting and effective drawing strategies were demonstrated in the line and tone drawings shown in Figures 3 and 4. In the confident vigorous drawing in Figure 3a (Reproduce), only the main compositional features of the source are selected to be copied making it an unusual response to the term ‘reproduce’, one which, in contrast, provoked a

more careful and precise rendering from most students. In Figure 3b (Deconstruct) the scene has been deconstructed by the use of a single, continuous line used to draw a very different pattern with appealing decorative qualities. Conversely, the process of ‘deconstruction’ indicated in Figure 3c (Deconstruct) has seen components of the original reassembled to form a new, three-dimensional object, convincing in itself but with little of the characteristics of textile design and, in Figure 3d (Interpret), a similarly surreal outcome is envisaged through a reinterpretation of the narrative of the original, again without reference to textile design.

Figure 4: Tonal pencil drawings from Constructive Copying Workshop Two, a) Reproduce, Clare Burns; b) Reproduce and d) Interpret, Jessica Barbagallo Usher Smith; c) Investigate, Helen Laurenson, October 2017.

In Figure 4d (Interpret) a reinterpretation of the narrative in the Seventeenth Century original in contemporary terms retains the visual aesthetic of a *toile*, as does the lively yet detailed reproduction in Figure 4b (Reproduce). In Figure 4a (Reproduce) a different kind of ‘reproduction’ is seen to that in Figure 4b in the careful depiction of a detail from the archival source producing a very dynamic drawing but one with little reference to printed textile design. Again, this disassociation with the purpose of the original is apparent in the investigation shown in Figure 4c (Investigate), where the student’s intention to ‘zoom in’ and observe a detail echoes those of students in the first workshop, albeit with an item of clothing becoming the focus and not the original textile as such.

Reflections for future work

Important differences between the majority of the drawings produced by each group can be noted. Drawings from the first workshop were more varied and inventive in a decorative sense than those of the second workshop. The second workshop led to the detailed analysis of form and interesting narrative alternatives. Clearly the students were predisposed to bring the aims and experience of the courses in which the workshops were embedded to their drawing activities. The re-interpretation of archive material as a basis for a new design collection was the main topic of the course within which the first workshop was conducted, while the sketchbook-based observation and analysis of locations and narrative reconstruction was that of the second. However, it may also be that the realism and figurative nature of the *toile* made it more difficult to translate convincingly through drawing than the already more

abstract floral design. Again, it may be that greater technical competence is required to reinterpret the figurative, architectural and spatial content of a *toile*. Further analysis will be conducted, and the authors will reflect on the relative merits of the type of source material to be provided and also, consequently, on the kind of course within which the workshop may be best integrated.

The original aims of the research comprised enhancing student awareness of the stylistic characteristics of archival reference, improving their expertise in effective copying techniques and helping them become more reflective about their designerly drawing practice. While the commentaries and drawn outputs of students from the second workshop indicate that the first two of these aims were also met for them to some extent, the authors are of the opinion that those in the first group achieved greater awareness of the characteristics of archival reference and expertise in copying techniques. Nevertheless, it is also apparent that the concentrated efforts of a one-day workshop focussed on relating copying-based terminology to drawing activity succeeded in encouraging a more reflective practice on their use of drawing for design in all the students participating.

Planning for the third part of the investigation is underway and, based on the results of their analysis so far, the authors feel confident in recommending the use of the Constructive Copying Workshop to colleagues from their own and other textile programmes. They intend to review the initial findings and elaborate on their original aims, thus developing a set of recommendations for tutors who wish to conduct similar workshops. They also intend to conduct additional workshops themselves with students from different disciplines and different year groups. In this way, it is hoped to arrange a series of one-day constructive copying workshops that adhere as far as possible to the model defined by the investigation described above such that the research aspects of the enquiry maybe progressed. The benefits of integrating the workshop with an existing course will be emphasized, and criteria for the selection of visual source material will be more carefully considered. The existing handouts will be subject to minor changes, chiefly to clarify the guidelines. Moreover, for any colleagues who may also wish to join the research aspects of the investigation, interview scripts and the Drawing Analysis Checklist will be updated and shared. The first two parts of the research project, including the planning, discussion, workshops, feedback, examination of drawn outputs and journals, and the analysis of results, were conducted over approximately two academic years, and it seems likely that at least two further years will be required to

refine the final part, that is to say to create a valuable teaching aid for the re-discovery of drawing-based copying in developing visual literacy and design creativity.

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