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Recording the Creative Process: An Empirical Basis for Practice-Integrated Research in the Arts

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Abstract

A case is made for a form of narrative reporting (the Creative Process Journal) as a methodology for practice-integrated research in the arts. It is argued that this stage of research creativity, which applies in all domains of academic study but is often not reported, is fundamental to the kind of arts research which allocates practice a central role. The practical and technological character of making a CPJ, and its consequent benefits to the maker–researcher are outlined.

Undergraduate students in the visual arts commonly maintain some record of the process leading to the final assessed outcome of their practice. Among qualified practitioners this stage is rarely recorded systematically and these kind of data are typically buried or discarded en route, constituting the 'undocumented tradition' referred to by Agnew [1] below. Agnew was writing in the context of engineering design history. Our interest is in the role that a focused recording and analysis of process could have in explicating design outcomes, and the development of designers' ability to evaluate their practice so as to carry it forward. That this function extends to the visual arts in general is apparent in a self-report account by the artist Antoinette Herival [2] which is discussed below.

It should be made clear that our focus is quite different from the vogue for 'learning journals' [3], which are primarily concerned with 'reflection' and self-analysis. Our emphasis is on the importance of detailed *description* to provide the raw data for critical interpretation and interrogation. Here 'description' is as much visual as textual and we are particularly interested in the potential of new media for integrating and representing these varied components in a coherent and accessible fashion.

The term 'practice-integrated' is used in the sense that the recording, analysis and commentary on the process of making should be recognised as fundamental to constructing practitioner research. We seek to distinguish it from the overinclusive category of practice-based research and suggest that that term should be reserved for investigations where the research element is essentially something added to practice; and from practice-related research, a term of wide application including 'basic' research with potential for informing practice.

Discussion

While recognising that a distinction can be made between research (as creating new forms of understanding) and practice (as the skilled deployment of established techniques and concepts), the role of recording and analysing innovative making as a form of knowledge is still insuffi-

ciently appreciated as a research methodology in its own right. Our argument is that there are two conventions (or levels of discourse) for reporting and executing research, both with their uses, but that one is more appropriate to the study of creative research processes. And, incidentally, that both ways of displaying 'logic' and veracity are applicable across all research domains.

It is more than forty years since Sir Peter Medawar's essay (following on from a talk on the BBC Third Programme) entitled 'Is the Scientific Paper a Fraud?' was first published. He makes the essential point, paralleled in the essay by Watkins in the same volume, that: 'the scientific paper is a fraud in the sense that it does give a totally misleading narrative of the processes of thought that go into the making of scientific discoveries', and castigates the scientific community for being 'ashamed to admit that hypotheses appear in their minds along uncharted by-ways of thought; that they are imaginative and inspirational in character; that they are indeed adventures of the mind' [4].

Watkins quotes Descartes' distinction between the method of Synthesis and his own method of Analysis which 'shows the true way by which a thing is methodically discovered...so that if the reader cares to follow it and gives sufficient attention to everything, he understands the matter no less perfectly and makes it as much his own as if he had discovered it himself' [5].

In other words, there are two complementary ways of knowing or presenting what is known: the logic of a formal paper, and what might be called the 'chronologic' of a narrative report. This fits within the context of developments in narrative theory (narratology): see Barry [6].

Although much-cited, Medawar's exhortation appears to have had little effect on practice. However, an empirical study by Gilbert and Mulkay, using the techniques of discourse analysis, compared the formal published papers of a group of specialist biochemists with their informal accounts of how their scientific discoveries were actually made. They point out:

A style is adopted in formal research which tends to make the author's personal involvement less visible... As a consequence, the findings begin to

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take on an appearance of objectivity which is significantly different from their more contingent character in informal accounting. This formal appearance is strengthened by the suppression of references to the dependence of experimental observation on theoretical speculation, the degree to which experimenters are committed to specific theoretical positions, and the influence of social relationships on scientists' beliefs, all of which are mentioned frequently in informal accounting [7].

This brief incursion into the history of ideas is brought into focus as an issue for design research in Agnew's paper The Spitfire: Legend or History? (subtitled: An Argument for a New Research Culture in Design) where he argues that what he calls the 'undocumented tradition' in design 'leaves us in an academic Stone Age' [8].

He makes a case for the study of design process arguing that:

At the heart of the research culture there needs to be a new kind of comprehensiveness in the most creative stages of design... The insight, the new view of the problem or its environment, is often much more general in its implications than the design solution that follows it... All too often the insight may later be entirely lost. In my view the brief but formal recording of this new understanding at the point of breakthrough, and then of the related design resolution, should be a routine step in all professional work [9].

Many papers published since have dealt with the issues of reporting process in terms of a rapidly increasing interest in practice-based PhDs in art and design over the past decade [10]. Much of the debate focuses on the relative roles of textual and non-textual material in PhD submissions. These are questions of academic legitimacy within higher education but are not our primary concern here.

However, what we have taken from this now quite extensive literature is a sharpened awareness of *how* artists and designers 'know' and how they could or should present their methodology in a practice-integrated PhD. For example, in a paper by Hanrahan *et al.*:

The traditional scientific model seems, to us, to give an over-simplified picture of how learning happens and what knowledge is, since it presents learning as a more or less linear, impersonal and individualistic process resulting in knowledge which may be detached from the personal, cultural, and historical context of the researcher. We believe that it is more consistent with recent developments in educational theory for factors such as subjectivity and discussion of changes in epistemological beliefs to be accepted and reported as a legitimate part of the learning process in a doctorate [10].

In essence, there are two ways of reporting a 'research' investigation:

- i. in the conventional logical format of an academic paper;
- ii. in a chronological format as a narrative detailing the research journey.

The same research activity can be reported in both ways: one is not necessarily better than the other because they serve different purposes. However, in the 'creative' disciplines the narrative format (equivalent to the unreported creative precursor stage in conventional academic research) is more appropriate because the research process in the arts is more individual in character, and it is here that the main research is carried out and the discoveries made. In other words, it is more critical to an understanding and reporting of the research outcome—whether this be a product design, an artwork or a performance.

Apart from the fact that this way of researching does not have an intrinsically 'tidy' format there is the added technical challenge of representing, in an accessible narrative form, those visual elements central to an appreciation of the research process in the arts. Digital software makes possible flexible combinations of text, still and moving images, as well as speech and music, each medium having its own unique characteristics. Even within visual media similar components are not entirely interchangeable even if interrelated and complementary. With regard to the relationship between text and visual media we should





bear in mind Wittgenstein's proposition that 'what *can* be shown *cannot* be said' [11]. Digital technology can make possible the integrated presentation of multiple media in what we call a *creative process journal*.

Recording the creative process

A creative process journal (CPJ) can be in book form or digital format using appropriate software to manipulate the balance of textual and visual/auditory components. In whichever case it is an attempt to represent for someone else the key contributory elements of the process of creation. The main benefit to the researcher who has to undertake this task is that in making it clear for an external reader/viewer they make it clearer for themselves. This process is apparent in the paper by Herival, cited above, the strength of the account being her emphasis on detailed description:

Writing is not generally practiced in the domain of visual art making. Artists tend to shy away from tasks that threaten precious studio time. Although I am in the habit of making occasional notes on sketches or using carefully chosen text in my artwork, I had no experience of how I would feel

to constantly interrupt my work to describe what I was doing or thinking. My first few pages were experimental. I wanted to elaborate upon and analyse what I was doing, rather than describe the actual activity...

Writing the diary over several months allowed me to observe patterns of a self-created discipline... I record all the snippets of ideas through rough notes and sketches. These adorn my studio walls and may not be used immediately, sometimes not at all. Because I work by myself, an important part of my process is to be self-critical.

Artists who have written journals are not always forthcoming about practical details. They like to philosophise but not always to describe... Most of what I had read about the creative process in the thought patterns of artists was through speculation by others (La Pierre, 1992). Recording what I did, allowed me to follow the stages of my working process [12].

Herival's paper is quoted at some length because it is a rare published account of the process of recording which also examines its effects and

CAPE FOR BOLERO SHORT JACKET

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J.KENNEDY'S CAPE

PAPER PATTERN DEVELOPMENTS

FABRIC PATTERN MODIFICATION AND DEVELOPMENT

SLIDE 18: THE EVOLUTION OF CAPE FROM PAPER MODELING ON MANNEQUIN

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uses; note that she did so for her own purposes, without regard for any constraining notions of 'research'.

It might be countered that this kind of record of personal discovery is of the essence of how artists work but that designers follow a less personal, more familiar and even standardised procedure in which there is nothing of significance to discover in the process to outcome. Precisely this argument has been made in the PhD Design discussion list hosted by JISCmail [13] and it is commonly encountered informally. In the case of routine design practice that probably stands: but that is not research, even if research procedures can be applied to it. Creative problem-solving practice is another matter: there are discoveries to be made here both for the designer and those who might read an appropriately recorded and interrogated account. The creative process journal (CPJ), rather like an interview transcript, thus provides the empirical data for subsequent critical interpretation (exegesis) or for a more formal analysis led by research questions (a thesis). It also answers the challenge posed by Agnew in his influential paper that 'At the heart of the research culture there needs to

be a new kind of comprehensiveness in the most creative stages of design' [14].

So, a practical challenge; and it is the practical elaboration and testing out of the CPJ which has been influential in the authors' teaching and course development at the Glasgow School of Art, UK and LaSalle-SIA College of the Arts, Singapore. This has been mainly at the level of postgraduate taught Master's degrees in design but also in the development of multi-component doctoral submissions. What has become clear is that such teaching should include the provision of guidelines, with discussion seminars where students report on the stage-related progress in constructing their journal, together with training in the techniques and applications of appropriate software. The emphasis is on constructing a chronological narrative of the creative journey, treating themselves as a case study with multiple forms of evidence [15].

The main lesson that we, and the students, have learnt from this experience is that achieving 'simple' description is not self-evident. A common failing is being too elliptical or using second-order descriptions – for example 'I experimented with printing on different fabrics' – which

Opposite page:

Figure 1 Anirban Mallik, page from Creative Process Journal, 2006, Glasgow School of Art

This page:

Figure 2 Anirban Mallik, page from Creative Process Journal, 2006, Glasgow School of Art

Printing - Technical Problems

Oth September

I spent some time today heat sealing toil crite the leather that I perited with gum leat week. It is meant to be an uneven print but, even so, when the leather came out of the heatpress I couldn't even see the print in some places. I was not happy with this but knew I shouldn't put the leather back in the heatpress and risk it dying out.

I decided that I would try to do the folling by hand with an iron. We don't normally do this because it gives an uneven effect but seeing as this is the effect that I was going for I decided to do it. It took a long lime to get every bit folled but it was worth it as the end rout was exactly how I had imagined and I was very pleased.

I think I am going to do all my heat pressing by hand from now on because it gets exactly the results that I am after and I have more control.



Learning from Technical Problems
All of these technical hitches were frustrating at the time but I now understand that I seamed a lot from the problems I encountered and some of the results have worked out for the better.

I am an optimist and I will keep trying something because I always believe I will get a good result somehow. I also realised that when a print is for a garment, as opposed to just a flabric sample. I can afford to make a few mistakes because they are easier to disguise with careful fabric outing.

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does not actually describe what was done. The necessary achievement is what the cultural anthropologist Clifford Geertz [16] calls 'thick description': an account so clear and detailed that the reader can follow the writer's experience. The students are required to maintain a detailed log/diary alongside sketches, photographs of prototypes, drafts and so on, as sources for compiling a CPJ, selecting from all the elements that *might* be included to construct a reasonably succinct narrative: all that an 'outsider' can be expected to assimilate.

The maker/researcher as a case study

A case study is not a simple vignette but a way of assembling a range of evidence relating to a case (which might be an individual, a group, an institution) [17]; for the CPJ this is the underlying methodology (way of knowing). When the case is a single individual the researcher who chooses to study themselves has unique access to a wide range of empirical material, only part of which would be accessible at second hand:

 i. records of thinking, plans, intentions, insights, reformulations;

- ii. descriptions of what has been done/made, skills acquired;
- iii. sketches, models, drafts, plans, prototypes, photographed, annotated and integrated with text as appropriate;
- iv. display, practice or construction sequences, and other continuous elements which are best video-recorded with a voice-over exposition on CD.

The first three of these elements can also be presented in CD format, but this medium works best where the amount of text is minimal. Reading a substantial amount of text from a screen is tiring and awkward, printing it off is an alternative but additional task. The fourth category is where a digital format comes into its own. The function of all of them is to present the data which have to be interrogated. As previously indicated there are two levels of approach. A critical and evaluative interpretation (exegesis) of process and outcome is sufficient at a taught Master's level. Nancy de Freitas [18] makes a good case for this.

At a more advanced level (the thesis) the corpus of data (like a set of measurements in an experimental study, or a group of interview tran-



scripts in a qualitative investigation) can be analysed in the light of research questions. What these questions are can only loosely be predicted at the outset. The notion that research 'questions' or lines of enquiry antedate the 'investigation' is here confounded. In arts research, as in the creative precursor of *all* original research, questions, directions and resolutions emerge: the progressive development of these elements being recorded and reviewed in the thesis. This is the essence of using a CPJ as a formal research tool.

The main pedagogical case is that the meticulous recording and scrutiny involved make for practitioners who observe themselves more carefully and so come to understand their practice better. This is evident in the following excerpts from the CPJ of one of our students on the Master's degree in Textiles as Fashion at GSA. The text-only quotation does not however demonstrate the juxtaposition to, and interaction with, the accompanying images.

Asymmetric Yoke Blouse/Dress

The lower part of this garment will need to be constructed with a very lightweight fabric, such as chiffon, otherwise there will be too much volume over the bust, which will not be flattering. In this case calico is more different from the final fabric so a calico toile would give a very unrealistic garment shape. I start toiling the yoke of the blouse/dress in calico and decide to work out the bottom part of the garment in muslin, which is more similar to chiffon and will give a more realistic finished shape.

The relationship between my drawings and their realisation becomes apparent. This design idea developed from wrapping an old blouse around the mannequin and draping fabric on top. My drawing was made from photographs of the three-dimensional experiment. Fabric can be pinned and knotted together on the stand but not necessarily sewn together into a workable wearable garment that can be guaranteed to look the same each time it is worn (though this may not always be important to a designer).

In this process of trying to render my flat drawing into a three-dimensional form I realise the importance of ad-libbing in my design process. Instead of sticking steadfastly to the garment described by the drawing, working on the stand allowed me to react to the reality of the fabric. In this respect, I suppose I view my drawings as an idea to be worked towards, rather than a defined end point for my design process. There is a sense of constant re-evaluation and refinement in this way of working. It is a dynamic and reactive process.

I found it very helpful to pin final fabric samples onto the toile, as this allowed me to see the effect of pattern scale and placement on the body and made me re-evaluate the ideas I had already committed to paper [19].

This kind of self-report account is sometimes dismissed as too 'personal', the implication being that research should be impersonal. But this impersonality is an artefact of a style of writing even in qualitative research. The ethnographer Alan Bryman points out that quite often:

...just as in much quantitative research writing, the author disappears from view... The author Opposite page:

Figure 3 Anya Barry, page from Creative Process Journal, 2006, Glasgow School of Art

This page:

Figure 4 Natalie McLeod, print samples appendix from Creative Process Journal, 2006, Glasgow School of Art

provides a narrative in which he or she is no longer to be seen...the personal subjectivity of the author/ethnographer is eventually played down by this strategy [20].

In other words, an 'impersonal' account is still constructed by a person, with all that that implies. The safeguards for truth are not in the chosen style, but in the scrupulous recording of the evidence which forms the account, the representative validity of selections from it, and careful evaluation of any conclusions drawn.

Although such a single-case account may not allow empirical generalisation of the findings, it can offer the possibility of *theoretical* and procedural generalization, thus fulfilling two of the main purposes of research.

As an element in a taught Master's course aimed at developing reflective practitioners, the CPJ also has the potential for contributing to a distinctive emphasis on, and motivation for, practice as research at PhD level — one that is not dominated by traditional notions of what research is or how it should be conducted. In particular, that research questions are not a priori but emerge as the issues become apparent in the process of recording, and where that process of emergence is key to the methodology. Further than that it throws back onto conventional research reporting the challenge mounted by Medawar more than a generation ago.

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