The practical implications of applying a theory of practice based research: a case study

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Introduction

At the launch of the AHRB's framework for doctoral training provision on March 12th 2004, Michael Jubb, in response to a question from the floor, observed that practice based research is "contested territory". Notwithstanding the fact that scholars and practitioners agree on many points, such as the centrality of artefacts, e.g., paintings, videos, installations, etc., the existence of contested territory means that the doing of practice based research is accompanied by a significant component of methodological development: frameworks and methods are created and tested through the doing of practice based research.

This puts the practice based visual arts and design doctoral student and supervisor in an unusual, if not historically unique position of having to consider both methodology and methodological rigour. This situation, which is a source of inspiration and anxiety for both supervisor and student, requires a level of critical engagement with the debate on the theory and practice of research not demanded of researchers in those disciplines where shared and agreed research principles and methods have become embedded.

Much of the contemporary debate on practice based research is theoretical and abstract, focussing on such issues as originality and knowledge. In contrast, for the doctoral supervisor and student, the prosecution of a doctoral programme is practical and situated, requiring a position to be taken on theoretical and practical issues, whether agreed or contested, e.g., the role, form and quantity of documentation accompanying research outcomes, e.g., paintings. Across the country, each visual arts and design department is establishing a doctoral framework consistent with ITS current take on the theory and practice of practice-based research, even though key aspects of these frameworks are still being contested within the wider community. This is unavoidable for two reasons: first, it is necessary just in order to prosecute practice based research; second, some aspects of the debate are only likely to be resolved through doing practice based research.

This paper is predicated on the belief that doctoral programmes across visual arts and design departments in the United Kingdom differ to a greater extent than is the case in other more established research disciplines, such as psychology, where research programmes tend to draw on the same research knowledge base. This being the case, each institution's approach to practice based research is in essence an experiment and both the advocates (e.g., supervisors) and participants (e.g., students) in the experiment need to engage critically and reflectively with all of its aspects.

This paper outlines an approach to practice based research advocated by Scrivener (2002a) that is being promoted and developed at the Coventry School of Art and Design. We then explore the practical application of this method by examining the student experience (in particular that of the co-author, Chapman) and consider how this experience has altered understanding and raised issues for further consideration. We hope to show that the issues raised are not peculiar to the approach advocated at Coventry, but ones of general interest to those concerned with practice based research.

The foundations of the approach

In many respects, a practice based doctoral scheme can be seen as an academic exercise designed to instantiate a given theory and practice of arts (and design) research. The scheme outlined here should be regarded as just one such instantiation. Prior to considering how this programme works out in practice, we will briefly review its foundations in terms of how the goal of the research is framed, what features the research is expected to exhibit, the structure of the research process and its perceived value.

The goal of visual arts research

Scrivener (2002b) has argued that the proper goal of visual arts research is visual art, and that visual arts research should be conceived as being concerned not with original investigation undertaken in order to gain knowledge and understanding, but with original creation undertaken in order to generate novel apprehension. Hence, Scrivener (ibid.) revises both the activity and goal of research as commonly understood.

Scrivener (2004a) justifies his position by arguing that the current debate is too focussed on generalising the features of research, thus loosing sight of the purpose of research, which he argues is directed to advancing the purposes of the disciplines involved. Banathy (1994) identifies "three cultures": Science, the Humanities and Design (the position of Art in Banathy's framework is unclear). Science has as its purpose the advancement of our knowledge of the natural world; Humanities the purpose of advancing our understanding of the human experience; and Design the purpose of advancing our capacity for envisioning possible future realities. It can be argued that Art has as its is purpose the advancement of insights into emotions, human nature and relationships, and our place in the World, inter alia.

Scrivener (op. cit.) argues that "researchers" are the professional practitioners in each "culture" whose task it is to advance its purpose. In Science the professional entrusted with this task of "breaking new ground" is the researcher and in the Humanities the scholar. However, in art it is practising artists who break new ground: the art culture has not identified a particular practice of advancement.

But the purposes are not the same and therefore we should not necessarily expect the "research" undertaken to be the same. Given the above, visual arts research can be seen

as being concerned with endowing novel insights through the apprehension of and discourse surrounding artefacts. Scrivener (op. cit.) calls this mode of research "creative-production".

Visual art research norms

Scrivener (2002a) has argued that this type of Ph.D project is characterised by a focus on issues, concerns and interests that are explored and manifested through the production of creative artefacts. According to Scrivener (ibid.) such research projects share a number of common features (see Table 1).

Table 1. Norms of creative-production research projects

1	Artefact(s) are produced.
2	Artefact(s) are of high quality and original in a cultural, social, political or/and aesthetic, etc., context.
3	Artefact(s) are a response to issues, concerns and interests.
4	Artefact(s) manifests these issues, concerns and interests.
5	These issues, concerns and interests reflect cultural, social, political or/and aesthetic, etc., preoccupations.
6	Artefact(s) generate apprehension.
7	Artefact(s) are central to the process of apprehension.
8	The creative-production process is self-conscious, reasoned and reflective.

First, artefacts are produced. Second, the work can be described as being original, i.e., not derivative or imitative of others' work, in one or more of the context identified above. Third, the work can be described as a response to a set of on-going issues, concerns and interests explored and expressed through one or more artefacts. Fourth, these issues, concerns and interests should be manifested through the creative-productions, i.e., the artefacts produced. Fifth, although issues, concerns and interests may originate in a highly personalised way, they are inevitably rooted in a human context. Sixth, whether useful or not, the important attribute of the artefact is that it generate apprehension. In other words, the creator constructs a material situation that the observer must make sense of, and the result of this sense making process is apprehension. Seventh, this being the case, the creative product, as an object of experience, is as important as any knowledge embodied in it.

However, it is important to note that a student could not be awarded a PhD for merely producing artefacts, even if the work satisfied the above norms. The PhD candidate would have to show that they arrived at, explored and expressed the identified issues, concerns and interests in a self-conscious, reasoned, and reflective way. In other words, if the reasoning involved in identifying issues, concerns and interests, in relating them to wider contexts, and in producing the related artefacts were not evident, then the work would not

be satisfactory. It is therefore important that the creative production process is self-conscious, rational and reflective.

The shape of the visual arts research process

Scrivener (2002a) further argues that Schön's (1983) theory of reflective practice provides a way of thinking about the nature of the creative-production process: the way past experience (both personal and collective) is brought to bear on it, the evaluation of action, rigour in creative-production, and the stance of the practitioner. Taking Schön's (1983) theory of reflective practice as a starting point, Scrivener (op. cit.) sought to characterise the shape of a visual arts research programme.

He postulated (Scrivener, op. cit.) that a creative-production project will be grounded in a practitioner's current practice and realised in future projects. Consequently, it is proposed that it should begin with reflection on past practice and appreciative system, Table 2.1. This will generate issues for further investigation; goals for future practice and a reappraisal of appreciate system (e.g., a designer might choose to put a higher value on sustainability or user involvement in the design process, while a painter might choose to explore narrative in static imagery). This reappraisal is likely to stimulate a search for information and knowledge relevant to the identified issues, etc., Table 2.2, which may need to be revised in the light of the initial preparation stage, Table 2.3. Subsequently, an interactive cycle will commence in which work is produced and reflected on in terms of action and practice. Here the artist or designer should reflect back on the issues, goals and appreciation surfaced in the preparation stage (and subsequent stages in later iterations). This may lead to revision of issues, etc., and a search for additional knowledge and information, Table 2.4. This cycle will recur until it is decided that the goals of the project have been satisfied. At the end of the project there should be a final reflective stage. Here, the researcher should reflect both on the project as a whole in relation to the issues explored, the work produced, development in appreciative system, Table 2.5, and the reflection on action and practice itself, Table 2.6. Pre-, within- and post- project reflections will provide the primary material for communicating and sharing experience with peers, together with descriptive records of the work and decisions made.

Table 2 Suggested Basic Structure for the Form of a Creative-production Project (adapted from Scrivener, 2002a)
1
Pre-project reflection on practice, including identification of issues, concerns and interests to be worked with in the project
2
Review of theory, knowledge and information relevant to identified issues, concerns and interests
3
Reframing of issues, concerns and interests in response to material found in the review
4
Cycles of production of work reflection on productive phase in terms of action and practice possible revision of issues, concerns and interests possible search for theory, knowledge and information relevant to modified issues, concerns and interests
5
Post project reflection on action and practice (i.e., on the project as a whole)
6
Reflection on reflection on action and practice (i.e., critical reflection on one's reflecting)

The value of visual arts research

According to Scrivener (2004c), the "academic exercise" above is worth pursuing on the basis of a number of assumed values, that:

There is a positive relation between productive excellence, .i.e., innovative artefact production and reflective practice;
Reflective practice is a productive mode of personal creative development;
Reflective practice yields practitioners who can give accounts of their work, which, e.g., explicate overarching theory, appreciative system and the norms used to evaluate the unintended and unexpected consequences;
These accounts are a valuable resource for other practitioners and interested parties: providing, amongst other things, 'examples, images, understandings' (Schön, 1983:138) and strategies for action that other practitioners may employ to extend their own repertoires;
Reflective practice equips practitioners to induct novices into that practice.

Experiences in implementing the CSAD framework

Coventry School of Art now has more than fifteen students registered on programmes of study leading toward the award of practice based PhDs. On joining Coventry they are required to undertake research methods training, including that which presents and contextualises the framework outlined above.

If the proposed creative-production programme does not work or cannot be made to work, and if the assumed values described above cannot be demonstrated, then there would be good reasons for thinking that the whole enterprise was misguided. It is therefore important to constantly assess the applicability of theoretical practice based research degree frameworks and the validity of the assumptions that underpin them.

In the following, we report on the experience of working to the above framework, both from the supervisor and the student point of view. Although considered in relation to a single case (i.e., of Peter Chapman, the paper's co-author), the outcomes reported here reflect the overall experience gained through running the programme. In the following, the dialectic between supervisor and student is distinguished by the identification of the relevant author and the indenting of text.

Creative Production PhD - a student's overview

Chapman - When I started my PhD, I was initially concerned, like most students about the enormity of the task I was undertaking. Now entering my year of presentation, I wish that it had been merely as a difficult as I had anticipated.

The first major problem was that of the understanding, or lack of it, of the practice based doctorate by the broader academic community. This misunderstanding (opposition) manifested itself in some subtle ways. But the opposition was not always subtle. Overcoming such entrenched views has not been easy, but necessary. However that is not the topic under discussion in this paper, but should help to inform what follows.

When I first sat down with my Director of Studies, Professor Stephen Scrivener, we discussed Schön's (1983) ideas as they might relate to my PhD as an artist. My initial reaction was that they seemed more applicable to the designer who responds to a brief,

perhaps prescriptively, rather than the artist. In the absence of what seemed an alternative viable methodology, we decided that I would try to approach my work by researching an area of interest and then making work on it.

In my MA I had looked at the work of the American painter Edward Hopper and its relation to film rather than painting. I had suggested that Hopper used what I call 'perceptual fracture', a device that encapsulates the elements of a narrative stream into a single image - the whole, is more than the sum of the parts. Carrying on from this starting point I looked at elements of my own work, a series 'Scenes from FAIRGROUND', which consists of mainly photographically constructed images that suggest a documentary format. Whilst this process of interrogating previous work was useful in understanding what I had done and why, it seemed strange, not something I'd done as consciously before. I read my chosen texts, and whilst useful and illuminating, I had stopped making meaningful work. This quickly induced a sense of crisis, as it seemed that the alienating method of working was stifling my creativity. It was almost as if I was making work in my head without making any real work at all.

At our next supervisory meeting I reported this crisis and it was, naturally of concern to us both. We discussed what action might be taken and I decided that I should continue with the process until I was certain that this wasn't just a fallow period in the cycle of creativity.

Throughout this period I had continued to draw, doodle and make notes - conversations with myself - in my sketchbooks and workbooks. I was still not able - so it seemed - to make any serious, resolved work. This period had now lasted several months and was inducing an anxious state - had my creativity vanished? The anxiety had taken over and soon I stopped drawing and making notes in my books. In a year I had gone from prolific to non-productive. I was convinced that my change in output was wholly because of this new way of working. I decided that I either had to give up the PhD and return to my previous way of working, which now seemed wholly intuitive, or struggle on until I broke through this barrier, or whatever it was.

I returned to try making work the way I had in the past, but this was problematic as I was trying to consciously force a method of working which had seemed subconscious and intuitive - it just happened. After a period of several months during which I reported my increasing concern at a supervisory meeting, I started to look at a series of images I'd made whilst on holiday of an outdoor swimming pool. I made notes in my workbooks again and became enthused and confident about my working practice. But why and how had this happened? What had led to this process being rediscovered, if that was what had happened?

In response to these questions I decided to write a paper on the problem and titled it, "Where Do Ideas Come From?" (Chapman, 2003). In it I examined the lineage of what was now called The Pool Project. In the paper I analyse reflectively the various elements, background, similar work, influences, which led to the making of the work. In this reflection I needed to find a way of describing certain 'mechanisms' for what occurs - albeit seemingly intuitively - when making the piece. From this developed a further need to understand better how these 'mechanisms' work in terms of my creative process. So the paper further reflects on how this applies in my image making approach generally, not just in regard to The Pool Project. This led to the need for another paper in order to cover one aspect of the creative process that emerged from the writing of the first paper and other issues, which occurred when teaching. It seemed increasingly intriguing that I found the

idea of influence - who and how much - to be crucial in deconstructing how the project had come to be made and why it looked the way it did?

"The Nature of Influence" (Chapman, 2003) was written shortly after and looks at the apparent influential sources and the more obscure influences. In it I discuss what influence is and how it works, whilst quoting extensively on what those who have influenced me have to say on the matter.

The Pool Project was put together and exhibited in the Lanchester Gallery at Coventry University in Spring, 2004. For me it marked a change in how I worked, or rather it demonstrated that the process of the Creative Production PhD has led to an enhancement and better understanding of how I made work. The quality of the work is, of course, for peers to evaluate, but the key to this model of the PhD has been the need for a substantial engagement with not just the critical and theoretical aspects of work-making, but that the work itself demonstrates this understanding and reflection, i.e., 'better' work should ensue as a consequence of the process.

Theory and practice, thinking and making

Scrivener - Chapman's experience is characteristic of the visual arts students under my supervision and has led me to question the initial creative production process illustrated in Table 2 in two key respects: the relationship between theory and practice and between thinking and making.

Theory and practice

The term theory can be understood in a number of ways, e.g: as a supposition or system of ideas explaining something, especially one based on general principles independent of the particular things to be explained; a speculative view; the sphere of abstract knowledge or speculative thought; the exposition of the principles of a science, etc.; and a collection of propositions to illustrate the principles of a subject (Allen, 1990). A common feature of these definitions is that they concern the realm of thought. Thus, the term theory and practice might be seen as distinguishing thinking from doing, or making. The painter, Gerhard Richter has written, "Painting has nothing to do with thinking, because in painting thinking is painting. Thinking is language - record-keeping – and has to take place before and after. Einstein did not think when he was calculating; he calculated – producing the next equation in reaction to the one that went before – just as in painting one form is a response to another, and so on." (Richter, 2004:p17).

In most research domains, the research begins with a period of deep thinking about the theory and knowledge relevant to the subject of interest. Generally, this thinking is directed toward identifying a problem or hypothesis the solving or confirmation of which will make an original contribution to the theory and/or knowledge under the research spotlight. Hence, there is a direct relationship between this stage of thinking and the doing involved in question answering or problem solving. It is also necessary at this stage to show that the material under consideration is coherent, complete and independent of other bodies of theory and knowledge. So the relevant theory and knowledge forms a coherent whole that shapes and frames the doing of the research. However, this funnelling or reductive conception of a theory has proved problematical in practice, as we shall see below.

Elsewhere, I have argued that the "literature review" in creative production is different to that of traditional research (Scrivener, 2002a). Nevertheless, implicit in this thinking was the notion that somehow the theory and knowledge under consideration would comprise a coherent whole framing the creation and development of the work, as reflected in the proposed creative production process, Table 2.

However, rather than accelerating the creative work, Chapman's theorising appeared to be applying a brake to it. This was exacerbated by the fact that Chapman works in what might be called an intuitive way, where the motivation to produce work proceeds from things seen or experienced, rather than preconceived ideas. Richter (2003:p19) captures something of the logic of this approach when he writes, "We can't rely on the picture of reality that we see, because we see it mediated through the lens apparatus of the eye, and corrected in accordance with past experience. And because that is not enough for us – because we want to know whether it can all be different – we paint." It also became clear that Chapman's making is supported by a range of activities that are formative of work in progress or planned, such as reading on artists, film and philosophy, and viewing films and exhibitions, etc. In short, these enrich the intellectual and creative resources of the artist, but they do not directly determine the work. Indeed, most of these resources appear to be redundant with respect to any particular work, or body of work.

Consequently, the notion of theory and practice, the idea of a coherent body of knowledge that prescribes practice, may be problematic in the context of the visual arts. It certainly appears to be such in Chapman's case and that of my other visual arts students. It may be more useful to consider practice as an activity that garners and exploits mental and physical resources through thinking, reading, imagining, looking, reflecting, drawing and painting, etc., to achieve goals relevant to a given domain, such as Fine Art. Viewed in this way, theory is the sum total of material in the World concerning the domain of thought, e.g., ideas, interpretations, bodies of knowledge, etc., relevant to a given practice domain, say painting. Each practitioner absorbs some of this material. However, it is not necessarily garnered for the purposes of a particular piece of work; it may be garnered simply to build and refine one's mental resources. And of course, there are other mental resources that must be garnered, such as images and experience.

Consequently, the creative production process has been modified as shown in Table 3. Here, there is no longer a requirement for a review stage prior to the onset of making. Instead, resource acquisition, Table 3.3, is seen as running in parallel with creative work, Table 3.4, informing but not determining it, and, at any moment in time, potentially much wider in scope than that demanded by the creative work underway. New doctoral students are encouraged to map out the domains of knowledge relevant to the development of their practice and then to specify the strategies that they will employ to acquire and organise this knowledge.

Table 3 Revised Basic Structure for the Form of a Creative-production Project
1
Pre-project reflection on practice, including identification of current issues, concerns and interests
2
Identification of resource domains relevant to one's practice and formulation of acquisition strategies
3
Application and refinement of acquisition strategies throughout the programme of work

Cycles of production of work reflection on productive phase in terms of action and practice possible revision of issues, concerns and interests possible search for resources relevant to modified issues, concerns and interests
4
Post project reflection on action and practice (i.e., on the project as a whole)
5
Reflection on reflection on action and practice (i.e., critical reflection on one's reflecting)

Nevertheless, this does not diminish the role of "theory" (thought) which, as Chapman sees it, is locked in an ineluctably embrace with practice (making).

Chapman - It seems that the value to the practitioner of working in a way that engages with "theory" through reflection on action and practice is twofold. The work is more critically informed and the understanding of individual process leads to a different sort of self-interrogation, thus the work, the artefact, reflects this. It leads to practitioners who are better able, if so desired, to articulate the ancestry of their work and something of the seemingly intuitive process via which it emerges. This greater understanding - by reflection and self-examination - of both the process and the artefact should present a body of knowledge. The artefact should not be, cannot be, separate from this process, as it is the making of the artefact, even if intuitive, or seemingly intuitive, which determines the interrogation of that process. Without the artefact, there is just the assumptive theory, separate from the actual process. It follows then that the two elements of the Creative Production PhD are closely allied to the point of inter-dependence. Without this alliance the Creative Production model, to paraphrase Monty Python, ceases to be.

Thinking and making

Scrivener - The discussion above points to the second issue concerning the nature of the relation between thinking and making. As noted above, in conventional research, making (e.g., an experiment) is generally seen as following from thinking, at least in theory. In this sense, praxis is largely about bringing means to bear in order to achieve a known end, i.e., to solve a problem or answer a question. As noted by Chapman above, thinking inhibited his making. This experience is shared by many of our practice based research students and suggests that making is the central driver and the creator of material for thought in certain modes of practice, such a Fine Art.
should be recognised that it is quite possible to make, say, a painting without being clear about what you are doing and why you are doing it: it is possible to do in order to see what happens. Furthermore, continuing the example, the result might be a satisfactory painting. This is not meant to imply that painting is a mindless activity, or that just "seeing what happens" is the painter's typical way of proceeding. Nevertheless, it is a legitimate way and illustrative of the fact that making is not necessarily contingent on knowing, ideas, intentions, etc. By making, one can discover whether something is possible: a picture, a photograph, a sculpture, or a work of art.

Gerhard Richter's comment quoted above suggests that, for him at least, painting operates in the domain of possible worlds: in this case, whether paintings can be made that reveal the World more accurately. If it were the case, generally, that the creative arts operate in the domain of possible worlds (i.e., artefacts), then this would explain why making is so central to the artistic way of proceeding because you can only know whether a world is possible by making it. Having made such a world, one can then examine why it was made, how it was made and what it does or might mean. Seen in this way, making (i.e., the creative process) functions not a means to a preconceived end, but as a means of

realising a thing, which has to be perceived, recognised (as the possible thing) and conceived or understood. A similar position in reflected in Chapman's comment below.

Chapman - Understanding of the process has led me to developing a different way of working which, because it accepts the intuitive, has had the effect of 'freeing-up' how I make work and subsequently come to understand it. By knowing what is happening, I am less anxious about the making and more committed to the idea that I let it happen. I may not yet fully understand the process of creation, in all its aspects, but I trust the consequences as a viable methodology of production.

is another reason for allowing creative work and knowledge acquisition to run in parallel, Table 3. The intellectual strategy for "discovery" in the creative arts appears to be one in which material is brought forward for analysis, discussion and reflection, through making, rather than through observation or reason. Indeed, this is perhaps what gives it its unique cultural significance. Rather than being understood as somehow not intellectual, the creative process should be recognised as complementary to mathematical, scientific and philosophical thinking. Artefacts are not merely central in terms of outcome, they are central to the very realisation of outcomes, and hence must take centre stage from the very outset of a PhD programme.

On the Value of the Creative Production PhD

Above, it was stated that the creative production PhD programme, as described in this paper, is founded on assumptions about its value both to the student and the wider community. In regard to the latter it is too early to say. However, in the following, Chapman reflects the value of the programme to him personally.

Chapman - It is fair to say that despite serious misgivings, I have found a way of working which goes much of the way in meeting and maintaining the academic standards required of the PhD. It has maintained that serendipitous action, stuff, happens and has led to a greater understanding of the work itself and the process of its making. The making of work and the emergence of the idea still feel intuitive, but the response from thereon in is more critically engaged and reflective. As a consequence of this better understanding of process, its application has led to more informed work and this greater critical awareness should be a major determinant in the "quality" of the artefact.

process has been a big influence on my teaching and I would like to do post-doctoral research in this area. The problems I encountered in engaging with the initial methodology of the PhD are, to some extent, reflected in the teaching and modular structure of first degrees. It seems that the way we structure degrees directly conflicts with the way in which the creative process develops. In many ways it puts the cart before the horse. The research would look at the nature of the creative process and the increasing hybridisation across disciplines in art and design practice. That the PhD study has proved enlightening in terms of teaching is undeniable. It has made me more informed, and better able to engage critically with student's work, but the key has been the encouragement of critical reflection, often by suggesting the device of the self-interview. It seems to be a simple process, which they can engage with directly, while to talk of theoretical structure and informed critical engagement is too daunting. It is that process of course, but with a different name, and a seemingly more benign intent. It is the vernacular, "Have a word with yourself", and they all seem to understand that.

Knowledge and creative production

Knowledge that a thing is possible

Scrivener (2002b) has argued that the artwork does not embody a form of knowledge. However, there is an argument for suggesting that the fact of the artwork is itself knowledge: an existence proof that something is possible. Whilst every artwork, or existence proof, may be unique this is not a sufficient condition for it to be seen as original or novel, or of a kind not seen before. An artefact will be seen as original or novel, if and only if it is proof of existence of something not known to be possible. Such an artefact, in its actuality, may generate surprise, even apprehension, but it may not immediately yield knowledge of what has been shown to be possible. Thus we would argue that, in general, the knowledge reified in original and novel artefact has to be recovered, through analysis and reflection on the relationship between what is known and what is to be known. Paradoxically, the creator, as implied earlier, is likely to be in exactly the same position as the viewer of the artefact. This is because the creative process is one of establishing the conditions for the realisation of what has not been seen before, not one of thinking the thing out in advance.

Individual learning and self-knowledge and its wider value
framed above, for the "researcher" the creative production Ph.D. is a learning and self-learning process. Initially, this knowledge of when, how and why is subjective. However, the possibility exists that it can be given greater objectivity through the rigorous and ethical application of reflective practice. The more such investigation follows - as a consequence of creative, artistic endeavour - by way of individual self-examination and reflection, then the more complete, broad-ranging and replicated the knowledge pool becomes. Of course, for this to be the case, learning and knowledge need to be made accessible to the broader creative community – which is another challenge.

Understanding the creative process

The creative production programme outlined in this paper is, in a sense, a prescriptive model of the creative process (and so is every other such programme). As such, every practice based Ph.D. programme is a test of the model. If the model demonstrates understanding of the creative process, creative students should be able to achieve creative outcomes by means of its application. The dialogue between the student and the tutor is a crucial part of evaluating the method. Through this dialogue, around the effects of the model, understanding can be affirmed, questioned and refined, and retested through adjustments to the model. As such, a creative production PhD model can be viewed as a method for understanding the creative process, and thus a means to knowledge in itself. Triangulation between models should increase the reliability of this knowledge.

Conclusions

In this paper we have outlined a particular approach to the practice based Ph.D. and given an account of some of the insights that have emerged from its application. In particular, we have focussed on what our experience suggests about the nature of the "theory"-practice and thinking-making relationships in the creative process. We have also reflected on the kinds and forms of knowledge that might be acquired through the formalisation of the creative process in the doctoral degree. The results so far offer grounds for optimism, but there is still much to consider and do, and the stakes are high for all concerned. It's crucial that this work proceeds in the context of a community of trust, openness and mutual support. In this way, it is hoped that a mode of research can be is evolved in which the

unique contribution that art makes to the understanding of the human experience is acknowledged.

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