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Supervision in an alternative paradigm

Abstract:

In this paper we express our framing of supervision as preparation and training for professional practice as a researcher, rather than the culmination of tertiary education. Instead of discussing the supervisory activity, performance and best practice, we focus on the uniqueness of practice as a researcher in the creative arts as being constituted by an emerging and novel research paradigm. We develop the theoretical framework of Guba and Lincoln, contrasting their use of the term ‘paradigm’ with that of Kuhn. We identify research in the creative arts as being a so-called ‘alternative paradigm’ but having its own unique characteristics. However, we claim that these characteristics are not discretionary but related to generic characteristics of research. By developing Guba and Lincoln’s model, we argue that the characteristics of research in the creative arts cannot simply be translated or inferred from the characteristics of research in cognate disciplines, but must be derived from the worldview and values of the arts community. This involves identifying both generic and discipline-specific characteristics. We claim that the discipline-specific characteristics reflect the values that are found in professional practice, and the generic characteristics reflect the values that are found in academic research across disciplines.

As a result of establishing criteria for the evaluation of activities as research in a novel paradigm such as the creative arts, we present a critical framework for thesis production that facilitates the inclusion of the researcher’s own creative work in the doctoral study. A number of issues arising from the experience of the authors as supervisors and examiners are discussed. Finally, a template for a seven-chapter thesis in the creative arts is proposed, which addresses common problems such as weaknesses in the single-case study approach and researcher bias in participant-observation studies.

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Keywords:

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Worldviews and research

Observations on the requirements and conduct of doctoral supervision need to be considered in the context of the purpose of doctoral study. Unfortunately, the purpose of doctoral study in the creative and performing arts is not at all clear. By ‘creative and performing arts’ we mean a broad swathe of subjects newly admitted to universities including the visual arts such as painting, performing arts such as music, and creative arts such as writing. Our examples tend to come from the visual arts because we identify in them some of the most radical departures from traditional models of research, for example, the claims for non-linguistic, and even non-conceptual content. However, we intend our research to be relevant in all these non-traditional areas. By ‘unclear’ we mean to draw attention to some distinctive features of research in these areas, and to problematize the commonly found attempts to simply extend concepts from traditional research in order to facilitate the inclusion of outputs in novel formats. For example, unlike the sciences, it is not a requirement of doctoral study in this area to offer any kind of training in advanced techniques. Neither does it offer a clear framework for deciding which techniques to use when confronted with a particular problem or professional situation. Indeed, we could say that doctoral study in the creative and performing arts is hardly a training at all since it is not only disregarded as a prerequisite for professional practice but is often regarded as a hindrance to creativity. Therefore, providing an extended notion of ‘training’ does not contribute very much to a rationale for doctorates in the creative and performing arts. So how might one frame the context for doctoral study in such a way as to clarify how it should be undertaken and to differentiate the good from the bad?

The NtKC research project at the University of Hertfordshire [1] seeks to clarify the nature of research in the arts and other non-traditional academic research areas by explicit comparison with the needs and requirements of research in traditional areas. Part of this comparative analysis is to enquire into the fundamentals of research, that is, its beliefs and values, that underpin the particular implementation that we see institutionalised in university regulations and the demands of research councils. These beliefs and values can be described as worldviews (Guba & Lincoln 1994). Analysing the worldview in which research is conducted results in an explanation of why it is that certain actions are regarded as constructive, and how the outcomes of such activity constitute a contribution to that community. Professionals operating within a field accept and reinforce these research paradigms, and demonstrate their membership of a community by acting in similar ways (Bourdieu 1992: 56). Since we claim that the requirements of research and doctoral study in the creative and performing arts are unclear, in this paper we discuss an approach that can be applied to established cases in order to determine the necessary features of the field.

The NtKC project makes reference to the work of Guba (1990), and Lincoln (Guba & Lincoln 1994), Heron and Reason (1997), and earlier work by Goodman (1978) and Kuhn (1996 [1962]). We focus on these theories because we feel that the creative and

performing arts, as relative newcomers to this academic context, are entering a context in which there are already some established worldviews and research paradigms derived from other, more traditional academic subjects. It would be a significant development if we could identify that these subjects bring with them a new worldview and research paradigm. Such a new paradigm would require changes in supervision, which is itself a professional practice within the research field. Conversely, it would also be significant for providing and evaluating supervision, and its associated practices, to identify whether arts research could be happily fitted into existing worldviews and research paradigms.

The terms ‘worldview’ and ‘research paradigm’ need some explanation. A worldview is basically a set of beliefs that one holds about the nature of the world and one’s place in it, that determines the activities one would undertake as a researcher. So if we think of the model from classical physics, the classical physicist believes in an external world, and that facts can be found out about the external world. As a consequence of being external, it is independent of the emotional responses and interests of the researcher. It is an objective world and one can say objective things about it. One can find evidence for it, and anyone else can find this combination of evidence and objective statements. As a result, they will conclude broadly the same things about the nature of the world. In this worldview, the more repeatable the outcomes, the more the statements and claims are held to correspond to what is actually out there. Such a worldview creates a research paradigm in which certain activities are relevant, that is, reaching for evidence and setting up repeatable experiments become meaningful. But, of course, this is not the only worldview. If we compare this to the world of literary theory, for instance, the literary theorist does not approach the world in this way. They do not believe there are objective answers to questions such as, for example, the final interpretation of a text. Their worldview is much more engaged with the reading of the individual person and therefore with the subjective experience of the reader in constructing the text. The individual’s interpretation is at least as meaningful as anything that one might claim the author put into the text. There is no such thing as objective content, in the sense of reader-independent, to be searched for.

The option that the world may be regarded as a construction of the individual, contributes to Goodman’s concept of ‘world-making’. Goodman regards worldviews as a representational problem whereas Guba and Lincoln (1994) refer to the relationship of the researcher to the world. They originally identified four main worldviews, but responded to the criticisms of Heron and Reason, and later described a fifth (Guba & Lincoln 2005). Worldviews are differentiated because their communities have different responses to the implied ontological, epistemological, methodological questions. In our view there are as many research paradigms as there are community-specific responses to these questions, although they can be clustered into ‘-isms’ such as ‘Constructivism’. These responses form networks within which one can evaluate whether research actions are appropriate. This use of the term ‘paradigm’ by Guba, Lincoln and us differs from Kuhn’s earlier use. For Kuhn, a paradigm is a large-scale set of dependent concepts that

determines a view of the world across a wide range of subjects. It forms a way of thinking that pervades enquiry in all fields until it is replaced by a new paradigm. For Kuhn, paradigm shifts occur when the existing way of thinking becomes stretched to breaking point. For Guba and Lincoln, paradigms do not shift. For them, a paradigm is a way of addressing the world according to a worldview. At any one time there are many different paradigms in operation, presenting the possibility of what Gage (1989) calls ‘paradigm wars’.

Research paradigms and research practices

Although the doctoral degree can be awarded across all academic areas, there are particularities for different academic communities that result in different understandings of what the content of the PhD should be and therefore what should be produced for the award. We claim that these different understandings are a result of different worldviews that certain communities have. The set of appropriate activities that is performed in pursuit of academic research in different communities constitutes its research paradigm. Following Guba and Lincoln (1994), research paradigms can be either received or alternative, referring to how dominant the presence, and how widespread the use, of certain traditional models of academic research. An example of a received paradigm is Positivism, in which Realism (the belief in an independent external world) leads to methods that value objectivity, the fundamentality of evidence, and verification. An example of a so-called alternative paradigm is Constructivism, in which Anti-Realism (the contrary belief in the centrality of human perception and understanding) leads to methods that value subjectivity, the fundamentality of interpretation, and of contextualization. If the creative and performing arts constitute a novel, alternative research paradigm in their own right, then its community needs to develop a model that corresponds to their particular worldview, and this will influence what practices are appropriate in supervising the doctoral student.

We claim that the indication of a valid worldview is that there is a functional relationship between its research paradigm and the actions that are taken within that paradigm. As a result there is coherence on the vertical axis of the diagram (Figure 1). In contrast, it is very difficult to make connections horizontally across paradigms. When one identifies differences in response to the epistemological question for example, it is difficult to map one paradigm onto another. Not only is there a terminological shift, there is also – perhaps more instrumentally – a conceptual shift. As described above regarding ‘evidence’, it is not just that evidence becomes less important; it falls off the map: it just isn’t a concept that one would introduce. This problem has been described by Hirsch (1967, 1984) – who comes from the tradition of textual scholarship – as being the difference between ‘meaning’ and ‘significance’. The former is something straightforward incorporating the common-sense distinction between meaningful and meaningless utterances. The latter incorporates the impact or relevance of the content for the interpreter. Thus an anti-Realist argument relies on persuasiveness and utility rather

than proof (Guba & Lincoln 1994: 108). The concept of evidence in another paradigm simply becomes something one doesn't really want. One wants something else: not just another word for evidence, but a whole different concept and a whole different network of relations between this and other concepts in that paradigm.

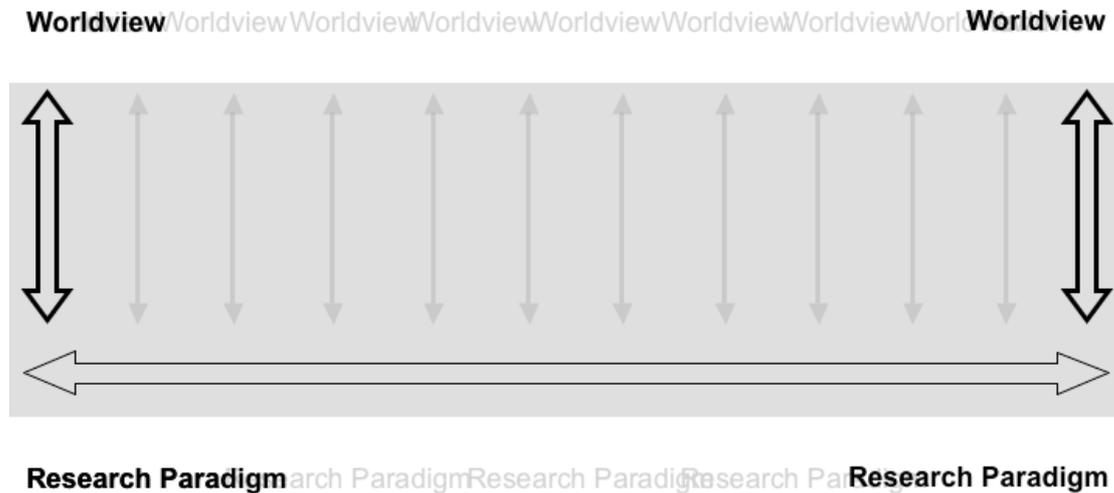


Figure 1. The vertical worldview/research paradigm, and horizontal cross-paradigmatic relationship.

This connection between the worldview and the research paradigm, between the belief set and the actions that are taken that correspond to that belief set, can be described as functional or dysfunctional. In well-established research paradigms such as the scientific method, hundreds of years of refinement have led to a very functional connection. But in newly academicized areas such as the creative and performing arts, our research suggested that there was often a dysfunctional relationship between the actions that were being taken (the methodological question) and the beliefs that were being claimed (the ontological and epistemological questions). The NtKC project found some indicators of this dysfunctionality, and we have chosen to mention three here, although we could have illustrated this dysfunctionality using other examples.

The first was a problem of Circularity. Newly academicized research areas such as painting base their claims for what constituted basic research practices by appeal to earlier examples of painting-as-research that had gained PhDs or gained research funding. But of course in the early pioneering days such examples were not robustly founded as examples of research. They could, perhaps, be held up as interesting examples but one cannot necessarily lean on them for definitions; one cannot necessarily analyse them in

order to find out reliably what makes them research. Perhaps it was just a shot in the dark that institutions awarded a PhD or a research grant to these early examples, in a pioneering spirit of letting people have a go and see what happens. We therefore concluded that there was a problem of circularity in some of the discussions about what should constitute second-generation research owing to the understandable weakness of the identification of first-generation research. This could be regarded as either a Virtuous or a Vicious Cycle, but we tended towards the latter. The second problem was a foundational one, which affects attempts at Foundationalism in all areas and accounts for its present unpopularity as an approach. The problem arises from the difficulty of finding grounds that people agree are foundational and upon which one can build a superstructure. Foundational approaches can often seem to suffer from this lack of consensus. However, we concluded that the problem of agreeing on the nature of criteria did not constitute a valid rejection of the notion of criteria *per se*, and we found support for this from such paradigmatically divergent users as the Realist Searle (1993) and the Anti-Realist Lincoln (1995). The third problem was a Coherentist one, in which we identified failures in argument that connected belief structures to actions. For example, if one believes the nature of creative writing is X then we claim it would be incoherent for the researcher to take action Y: these things do not fit together as a coherent chain of reasoning and actions. For example, it would be inconsistent to set up a school for creative writing if one believed that creative writing were a talent that could not be taught. Conversely, one can infer from the existence of schools for creative writing that the community does not believe creative writing is a talent that cannot be taught. So, on the basis of these three flaws, we diagnosed that there was a dysfunctional relationship between the creative and performing arts worldview and the research models that were frequently adopted for the development of academic research in these areas. Furthermore, we reasoned that we needed a different, non-paradigm specific way of cutting into these problems. We called our new approach a criterion-based approach:

The criterion-based approach generates not just individual characteristics of research, but an interlocking network of concepts that are mutually dependent and together form an adequate model for research in all disciplines: a unified theory. The resulting account can be evaluated in terms of coherence. [...] It is our claim that the judgment and classification of a work as research is a judgment that is made by the audience and is an issue of its reception, rather than being determined by the intention of the 'author'. This is because a work must meet a few basic conditions in order to function as research, and these are centred on issues of communication and audience. (Biggs & Büchler 2008a: 89)

The criterion-based approach, rather than embedding itself in a particular research paradigm, tries to stand outside the paradigm and identify features of something being research before it is identified as belonging to a particular paradigm. In this respect the criterion-based approach adopts a meta-position comparable to the common structure of research paradigms identified by Guba and Lincoln. In the latter there are the three persistent questions of ontology, epistemology and methodology, for which different

worldviews provide different responses. Likewise the criterion-based approach poses persistent issues to which different paradigms provide different responses. The four issues that we identified as being persistently indicative of something being a research activity were: the possession of a question and an answer, the presence of something corresponding to the term ‘knowledge’, a method that connected the answers in a meaningful way to the questions that were asked, and an audience for whom all this would have significance. A functional relationship between these four issues would represent a functional connection of the worldview to the corresponding research paradigm.

The audience has quite a strong role in our analysis because it determines the meaningfulness and significance of the question, and whether the actions that are taken actually generate something that is relevant for that community in response to the question. The audience is composed of two parts: the greater academic community as a whole, within which there resides a smaller, more specialized academic community. It is this academic sub-set that is appropriately situated and can therefore judge the meaningfulness and significance of the research (Biggs & Büchler 2008b: 11f.). We felt that these four issues were reasonably persistent, and were transferable to most subject areas. As such our conclusions contribute to earlier attempts at classification and criterion-building, including the ‘CUDOS’ system of Merton (1973 [1942]: 270ff.), Searle’s analysis of the fundamentals of critical rationalism (1993), and the Arts and Humanities Research Council’s process-model of research (AHRC 2009: 59). [2]

However, the four generic issues of question, answer, method and audience from our criterion-based approach seemed to lack something when applied to the creative and performing arts community. The issues did not seem to respond to some of the key concerns that we heard from our colleagues who were operating inside this paradigm and making claims for it. They had some additional concerns that they felt were not adequately represented – that there were characteristic features of the arts worldview that were not accommodated by these four initial issues. We could have responded to these concerns by dismissing them as the interests of the individual over the institution, but we did not because we felt that institutions were themselves insecure about the universality of their regulations. We could also have dismissed these concerns as resistance or laziness, but we did not because we felt that effectively addressing these characteristic features would certainly not represent an ‘easy option’. Indeed, the persistence of these claims even within the emerging scholarly literature made us take seriously the possibility that the hegemony of the traditional worldview was preventing the academy from realizing the potential of these subjects. So with the help of these colleagues we came up with four additional issues that seemed to be specific to research in the creative and performing arts, and cognate disciplines.

For example, creative practitioners seemed to want a particular role for the image, or the piece of music: broadly for the creative component often manifested through an artefact that was distinct for being non-textual. [3] This was unlike the kind of relationship that

text and image had in other subject areas where the image was merely an illustration of something that was otherwise described in text. Creative practitioner researchers claimed something more instrumental: where the image or the artwork was either generating the question, or was an instrumental component in the response to the question, or formed an integral part of the communication of the outcome without which it was incomprehensible. Removing such an artefact would have a catastrophic effect on the research.

Similarly we came to the conclusion that the novel form of the outcome – the fact that one ended up with a performance or a piece of architecture instead of a journal article – was perhaps misleading. It was not the form, but the type of content that came along with this form, which was significant. The mere presence of art was not an indicator of a novel paradigm called artistic research. There were rhetorical questions: our participants were joining an academic structure with an established vocabulary and with structures that direct action, that were not necessarily compatible with the kind of vocabulary that our participants were using. In addition to what is meant by what is said, there is also an aspect of rhetoric that refers to the conceptual repertoire (an aspect of the worldview) and that defines what one thinks can be said. And finally, the role of personal experience in both the production and the consumption of the artworks was much more central in many arts movements than it would be in the Realist model. Right up at the left-hand end of Figure 1 in classical physics, personal experience and philosophical subjectivity are undesirable and to be designed out of a research programme. Whereas at the anti-Realist, arts end of the diagram we found that personal experience, the subjective aesthetic response, was the beginning of the interpretation of the object – something that defined, rather than got in the way of, the object.

A model for including one's own work in a doctoral study

This analysis of the fundamental characteristics of research has had an impact on our approach to the supervision of doctoral candidates in creative, practice-based areas. Owing to our denial above that the mere novelty of form is not indicative of a new research paradigm, we do not differentiate between practice-based research and non-practice-based research. Rather, we seek research that produces relevant outcomes that are significant for the researcher's community. This may or may not arise from insights in professional practice, be undertaken using professionally recognisable practices, or be communicated through outputs that may also have significance in the professional world, such as creative writing or art objects.

Often, the student researcher wishes to use his or her own creative practice as a case for study. We have therefore developed a schema for the inclusion of creative practice while reflecting the values and needs of the wider research community. Commonly, the student will have a repertoire of advanced professional skills and a portfolio of work and themes that they seek to use as a basis for a doctoral project. To those from outside the team who

only see the visible practices and the aim of obtaining a research degree, this may seem to be ‘practice-based research’.

In order for the prior work and experience to be reconfigured for its new application as part of a research project, a number of matters must be addressed by the supervisory team and the candidate. One matter is whether the outline project contains an argument, or whether the project makes too many assumptions and basically only makes assertions, unsubstantiated claims, or *non-sequiturs*. Indicators for the presence of an argument include the use of argument-words such as ‘if, then, therefore, because’. Words such as ‘ought’, which is a moral rather than a logical imperative, should be treated with suspicion. ‘Might’ can just as easily be replaced by ‘might not’. In our experience, many creative and performing arts researchers feel uncomfortable in making firm claims, and seek to ameliorate this feeling by the use of conditionals, thereby weakening the force of the argument. Nearly all arguments must be placed in some kind of framework that provides conditions within which the claims are held to be valid. It is much better for the prosecution of the argument if these conditions are established in the initial contextualisation of the research so that, given these conditionals, the researcher can be as forceful as possible for the meaning, the significance and, therefore, the contribution of the research. The inability by the candidate or the examiner to identify and claim an original contribution to the field is fatal since it is a principal criterion of the award.

It is essential, in order to design a research project that is grounded in the candidate’s own work, that a case is made for the instrumentality of that work in the research, that is, that its inclusion is not gratuitous or merely illustrative of what is said in the text. It is therefore important to undertake a proper analysis of previous projects. It is not always clear what is the thematic issue being addressed by the work and it is quite likely that the whole project needs to be reconceptualised in order to shift from the requirements of professional practice to the requirements of research. Therefore, all aspects are up for renegotiation in the early stages of supervision. It may be that changing the focus of the project will bring more of the data and argument into use. On the other hand, given the research issue, it may be that different material should be reviewed or generated. This is a very fluid situation and requires a very creative and positive approach on both sides. The candidate will need reassurance that the newly configured project is significantly better than originally conceived – that is, without the intervention of the values and criteria of the academic supervisor. In our experience, once the process begins, the candidate can see very clearly what is inapplicable in the old project because the supervisory discussion makes clear the worldview that validates the need for change. The candidate should not therefore be regarded as a passive victim of this reconceptualisation but as someone who possesses useful experience of the unprofitable avenues that have already been explored. It may be useful to consider how many of the following key components of the work can be retained: research questions; contextualisation or literature review; method; data or evidence; argument; conclusion or contribution; and target audience/context of consumption.

Every PhD must have these components although in some so-called practice-based research it may be difficult to identify them. This is a difficulty that should be addressed and not ignored in practice-based research. Since every PhD must have these components it may be useful to approach this list, which is written in the order of consumption by the reader, from the point of view of production by the researcher. In that case it broadly operates in the opposite direction (cf. Biggs 2004), that is, it starts by identifying the audience for the research.

Once the strongest elements have been identified, a new focus must be created and the aims and objectives of the emerging research project restated. Because they are going to be unfamiliar, explicitly restating them ensures they are available for scrutiny and are not going to be subject to ‘mission-drift’. Focus is determined by asking ‘what can be argued on the basis of the data and information that survived the analysis?’ In particular, one is interested in potential conclusions that would be meaningful and consequential for an identifiable audience. Mission-drift sometimes occurs when the researcher becomes more interested in questions that interest themselves rather than questions that interest the audience. Identifying an audience means being able to identify its members, whether explicitly by naming them, or implicitly identifying them by reference to groups such as ‘environmental artists’ or ‘the concept of Mode 2 knowledge’, and the like.

In order to address the requirement that research should contribute to a community’s knowledge, we have developed a template for a research thesis that includes the researcher’s own practice as a core element, that is, so-called practice-based research. The authors have experience as both supervisors and examiners of various types of research degrees in the UK, Sweden and Brazil, including the common format of PhD by supervised research, practice-based PhDs, and the rarer PhD by published work including exhibitions. On the basis of this experience, and of managing research degrees in institutional contexts such as university committees, the authors have developed a working model or template for doctoral studies in the creative and performing arts. This template includes a thesis chapter dedicated to a case study of the researcher’s own creative practice. In order to be effective as a critical analysis of the case, precautions must be taken to avoid the weaknesses of the single case study approach (Gomm, Hammersley et al. 2000: 45). We address this requirement by making the template a multiple case study. In order to contribute to a community’s knowledge, the research must be therefore applicable to cases other than the one studied. We address this requirement by identifying both the putative audience (Biggs & Büchler 2008b: 11) and the significant outcomes (Hirsch 1967: 215; Bourdieu 1992: 54), as opposed to seeking what the scientific model calls ‘generalizability’ (Gomm, Hammersley et al. 2000: 27). In order to link the outcomes of the research to existing knowledges and practices, the research is contextualised through a ‘literature’ review that includes subject-specific media such as exhibitions (Kuhn 1996 [1962]). The originality of the research is demonstrated by an argued gap analysis (Searle 1993: 67). The work will be significant to others if it addresses a topical issue, that is, one that is also raised or addressed by others,

or if it can be situated as something novel but related to the work of others. This requirement follows from both the generic research and discipline-specific criteria above.

The chapters of the template are:

- Ch1. Introduction: setting the context in which the general issues arise and are topical for an explicitly identified community.
- Ch2. Literature/exhibitions, etc: establishing prior work on these topics.
- Ch3. Analysis: identifying theoretical concepts to be used in Ch4 and Ch5, resulting in a gap analysis and research question(s).
- Ch4. Main case study (self): description of own works in terms of critical concepts in Ch3.
- Ch5. Secondary case studies (other comparable practitioners): description of the cases in terms of critical concepts in Ch3.
- Ch6. Analysis: similarities, differences, insights into case studies as a result of Ch4 and Ch5. Identification of the contribution of the cases to the knowledge gap, i.e. the content of the contribution as distinct from the intention to contribute.
- Ch7. Conclusion: restating briefly the transferable outcomes, the audience for whom these outcomes should be significant, critical reflection on the study (i.e. what one would have done differently) and opportunities for future study.

Conclusion

In conclusion, we claim that supervision of the PhD in areas of creative practice is perceived as complex only when it attempts to produce research that imitates received paradigms rather than being in accordance with its own worldview. As a result, our position promotes the idea that research in all areas must have a functional relationship to its worldview and values. We also claim that the presence of professionally relevant outputs, such as an exhibitable painting or a publishable poem, is not a symptom of so-called practice-based research. Indeed, we find the term ‘practice-based research’ (and similar terms) redundant because we claim the criterion for the presence or absence of research is not based on any practices but in meeting certain basic criteria. We call this a criterion-based approach. This approach involves the identification of fundamental characteristics of research, such that its outcomes are recognisable and transferable across disciplines and incorporated into doctoral training. In addition, we recognise that there are additional discipline-specific criteria that reflect the values of the community for whom the research will be significant, and these will be embodied in the outputs of doctoral research. Candidates who seek to include their own creative practice in a doctoral study need to make explicit the ways in which their practices embody the values of the community. This requires that the researcher be explicit about the instrumentality of their actions and practices in terms of the issues under investigation and the outputs

generated. This is best done by a comparative case study approach that contextualises his/her practice in relation to others in the community, rather than immersion in a single case study of their own work. This paper proposes a template for such a study. Finally, by adopting this template, the outcome of such studies will have a clear conclusion regarding the significance of the creative practices that have been analysed, and for whom they are significant, thereby meeting the transdisciplinary criteria. Conclusions typically identify novel features in both the researcher's own creative work and in the work of others, and as a result propose a revision to former critical classifications and groupings. An example of a thesis by Daro Montag that follows an early version of this template is available from the University of Hertfordshire, currently available online at <http://sitem.herts.ac.uk/artdes_research/resdesgs/theses.htm>.

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Endnotes

- [1] Non-traditional Knowledge and Communication. <http://r2p.herts.ac.uk/ntkc> [accessed 1 February 2009].
- [2] Merton proposed a five-fold classification of scientific rationalism: 'communism, universalism, disinterestedness, and organised scepticism'. Communism refers to the shared ownership of academic knowledge; universalism refers to the impersonality of knowledge; disinterestedness refers to the location of the benefit of the knowledge; and organised scepticism refers to the preference to disbelieve rather than to believe new claims to knowledge. Searle proposed a six-fold classification of Western critical rationalism. This unpacks the relationship between fundamental beliefs such as logic, and the superstructure that is then built on those beliefs such as Searle's conclusion of the unavoidability of Realism. The UK research council's three-fold classification of research consists of 'question, context, and method'. This, too, forms a process model which evaluates knowledge claims in terms of the conformity to a structure that is regarded as both necessary and sufficient.
- [3] We use non-textual examples here in order to radicalize the difference between the non-traditional and traditional research output. We believe that the outcomes of our research also apply to creative writing.

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