

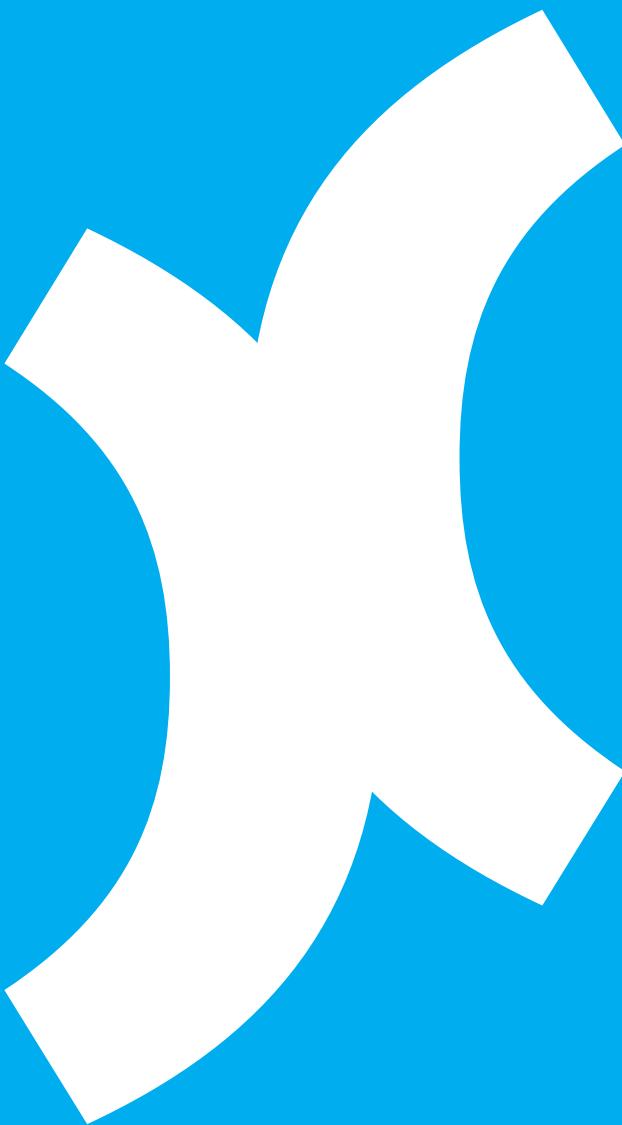
Reflections and Connections

On the relationship between creative production
and academic research

EDITED BY

NITHIKUL NIMKULRAT

AND TIM O'RILEY



Reflections and Connections

Publication series of the University of Art and Design Helsinki A 93
www.taik.fi/bookshop

© University of Art and Design Helsinki and authors
Graphic design: Jarkko Hyppönen

ISBN 978-951-558-285-0 (pdf)
ISSN 0782-1832

Helsinki 2009

Contents

- 7 Introduction
Nithikul Nimkulrat and Tim O'Riley
- 11 Throwing the Baby Out or Taking Practice Seriously
Iippo Koskinen
- 19 Passages of Articulation: Art and Research Touching
Mika Elo
- 29 The Place and The Product(s) of Making in Practice-Led Research
Maarit Mäkelä
- 39 Three Steps for Integrating Artworks into a New Residential Area:
Arabianranta in Helsinki
Tuula Isohanni
- 47 Future Reflections: Rhetorical Response
*Future Reflections Research Group (Catherine Maffioletti,
Katrine Hjelde and Marsha Bradfield)*
- 59 Relating the Production of Artefacts and the Production
of Knowledge in Research
Kristina Niedderer
- 69 The Roles of Art and Design Process and Object In Research
Stephen A.R. Scrivener

The Roles of Art and Design Process and Object In Research

STEPHEN A.R. SCRIVENER

INTRODUCTION

“Practice-based research” and “practice-led research” are terms used to characterize research that involves the work of art and design, *i.e.*, the productive processes, or works of art and design, *i.e.*, the products, in some way or another in the work and works of research. For the purposes of this chapter, we shall use the term “creative production” to mean the work and works of art and design and the term “research” to mean the work and works of research. When referring only to process or product, the term will be appropriately qualified.¹

In this chapter, we explore some of the different ways in which creative production can be understood as contributing to the fulfilment of the conditions of research, which are here defined as intention, subject, method, justification, communication and goal. Although primarily a mapping of theoretical possibilities, the analysis that follows is informed by understanding of the theory and practice of practice-based research and the recognition that many of the theoretical possibilities can be found in current practice.

¹ The use of separate terms is not meant to imply non-equivalence.

The analysis reveals the manifold ways in which creative production can figure in relation to the conditions of research. However, not all of these cases embody a substantive role for creative production in research, and even fewer appear to justify the research being qualification as practice-based or practice-led. Consequently, it is argued that these terms should only be applied to research where it is claimed that creative production is a mode of knowledge acquisition.

DEFINING OF RESEARCH

The Oxford English Dictionary (OED) defines research as both a noun and a verb. Research as a noun is described as the systematic investigation into the study of materials, sources, *etc.*, in order to establish facts and to reach new conclusions, and as an endeavour to discover new or collate old facts *etc.*, by the scientific study of a subject or by a course of critical investigation. As a verb, it is described as meaning to do research into or for, and to make researches.

According to this definition then, an activity is research if and only if it is 1) a systematic investigation, 2) conducted intentionally, 3) to acquire new knowledge, understanding, insights, *etc.*, 4) about a subject.

This might be called the common definition of research and it is a useful starting point for thinking about what academic or professional research means. Clause 1) above might be described as the method condition; clause 2) as the intention condition; clause 3) as the goal condition; and, finally, clause 4) as the subject² condition.

However, the definition does not make clear the nature of newness, as something can be new to the individual or new to the world, *i.e.*, beyond the bounds of what is currently known to humankind. Interrupted by a colleague whilst using the Internet, we might inform her that we have been researching flights to Venice. This use of the term research is appropriate but that which is acquired, including the conclusion reached, is not new to the body of human knowledge as it already in the knowledge base. This kind of research is often described as "little r" and Frayling (1993, 1) observes that the term research in the little r sense, as "the act of searching, closely or carefully, for or after a specified thing or person" was first used in regard to royal genealogy in 1577. In contrast, "big R" research is often used to characterize a special kind of research, typically conducted in academic or professional realms, which must meet the condition that the acquired knowledge is *new to the world*.

The common definition accommodates this understanding of research, but is too inclusive, because it allows for research processes and outcomes that would not be accepted by the academic

and professional research domains. As we have already seen it permits the acquisition of knowledge that is new to the individual but not new to the world. It also permits the acquisition of knowledge that is new to the world but is not understood as such or passed on to the world by its finder. None of these cases would be accepted as research in the academic and professional research domains, because in these domains research is intrinsically social, even when conducted by the individual researcher. The body of knowledge, all that is known by humankind, belongs to the humankind, not the individual, and it is preserved, modified, *etc.*, by humankind, not the individual. Hence, it is not the individual who decides whether or not something is new knowledge, it is humankind, or rather the knowledge discipline responsible for the relevant domain of knowledge. It follows then that an activity is only research if its outcome is communicated.

However, it is not sufficient to merely communicate the fact of knowledge. Let us assume that we have discovered something we believe to be new knowledge, and in the spirit of the shared endeavour of research, we share this with you, our peer. Will the fact that we believe in this new knowledge be sufficient in itself for you to accept it as such, even when on face value it seems probable that it is new knowledge? This is highly unlikely. You would ask us to justify our belief, partly because we know from experience not to trust every spoken and written claim to new knowledge and understanding, and partly because we need to be able to explain to ourselves and to the others who share with us the body of knowledge to which it contributes why we know something. Similarly, an activity would not be understood as research unless the researcher can justify a belief in the new knowledge acquired to the satisfaction of his or her research peers. Hence, in the academic and professional research domains, claims to new knowledge must be justified. Since the social, collective, collaborative activi-

² Most research domains are concerned with phenomena, with things, whether natural or artificial. Hence, we often talk about the object of inquiry, meaning the thing that is studied. However, in this context the term object is not used as it can be confused with the goal of the inquiry, *e.g.*, with the object of research being knowledge and understanding. However, it can be argued that subject is actually the more appropriate descriptor for the focus of an inquiry as research is inevitably not simply the study of a given phenomenon but also all that is already known about that phenomenon.

ity of research requires communal acceptance, self-justification is always evaluated with communal justification in mind.

Hence, to characterize research as understood by the academic and professional research domains, we need to include justification and communication conditions:

An activity is research if and only if it is 1) a systematic investigation, 2) conducted intentionally, 3) to acquire new knowledge, understanding, insights, *etc.*, that is 4) justified and 5) communicated 6) about a subject.

This definition accords closely with Cross' (2000, 98) observation that examples of best practice in design research are those where the research is purposive, inquisitive (seeking to acquire new knowledge), informed, methodical and communicable. The definition excludes some activities that might commonly be understood or referred to as research, such as that defined above as little r, but is inclusive enough as a background against which to consider how creative production might figure in research.

DESCRIPTIONS OF PRACTICE-BASED RESEARCH

The notion of practice-based research in art and design is relatively new. Gray (1998) locates its emergence in the UK to the late 1970s and early 1980s, preferring the term practice-led (1998, 83):

I mean firstly, research which is initiated in practice, where questions, problems, challenges are identified and formed by the needs of practice and practitioners; and secondly, that the research strategy is carried out through practice, predominantly methodologies and specific methods familiar to us as practitioners in the visual arts.

However, Frayling (1993) was perhaps the first to examine the role of art and design in relation to re-

search practices. He (*Ibid.* 5) identifies three modes of research: research into art and design, research through art and design, and research for art and design. By "into" he implies that art and design is something to be looked into, *i.e.*, it is the subject of inquiry, a phenomenon to be studied from the outside. By "through" he appears to posit creative production as research method.

Frayling (*Ibid.*) describes research for art³ as the difficult one for art and design, "research with a small "r" in the dictionary – what Picasso considered was the gathering of reference materials rather than research proper." Research for art and design is defined as, "Research where the end product is an artefact – where the thinking is, so to speak, *embodied in the artefact*, [his italics] where the goal is not primarily communicable knowledge in the sense of verbal communication, but in the sense of iconic or imagistic communication."

He distinguishes two artistic traditions: expressive and cognitive, the latter meaning artists researching subjects which existed outside of themselves and their own personalities. As examples, he cites Stubbs's studies in animal anatomy and Constable's researches into cloud formation, in both cases partly at least communicated through visual means, *i.e.* drawings and paintings. This is characterized as research for art and sometimes research through art.

Frayling is enthusiastic about the cognitive tradition as a basis out of which much future research could grow, "a tradition which stands outside of the artefact at the same time as standing within it." However, with respect to the expressive tradition he questions why people would want to claim research with a big "r" at all. He observes that at the

³ In his foreword to *Thinking Through Art: Reflections on Art as Research*, Frayling (2006) uses the terms art as research in the place of what he had previously called research for art. This is actually a significant change as his 1993 discussion of research for art seems to exclude the possibility of art as research.

Royal College of Art they do not offer a research degree entirely for work where the art is said to speak for itself, as the goal here is viewed as art not knowledge and understanding.

Having first considered definitions of research appearing in Australian government documents⁴, Strand (1998, 33–34) reports definitions published by The National Council of Heads of Tertiary Music Schools, the Committee of Heads of Australian University Theatre Studies Institutions, and the National Council of Heads of Art and Design Schools:

Research involves reflective and reflexive activity which probes both the process and product, and is directed towards the advancement of scholarship and creativity. Thus research requires:

- scholarly location within the discipline(s)
- critical reflection to identify the research niche
- cogent reflexive analysis of process and practice
- retrospective reflection to determine future research directions

Performance as research (as compared to other kinds of university theatre-based theatre performance) *e.g.*, in the form of professional practice, teaching etc. occurs: when a production becomes an intervention in an established scholarly debate, dialogue or discourse, *or* when it initiates or seeks to initiate a debate. Any performance-as-research must make explicit its relation with that debate, and communicate the ways in which the terms of the debate have been changed by the research project.

The research function of developing and extending knowledge is to be judged on the products of research. In the same way that a learned paper is evi-

⁴ Strand cites the OECD definition of Research and Experimental Development which includes reference to creative work and also the Australian Research Councils definition, which admits creative work as long as the investigation is not solely directed to this end.

dence and coherent argument for all the processes that proceeded it, laboratory or speculative, the finished work of art and design is the culmination of the theory and practice of the discipline. Based essentially on investigatory, exploratory, speculative or analytical processes, the outcome is a result of synthesising the problematics of the discipline. Like the best research in any field, it is expected that the creative work will comply with these defining characteristics. The aim of the program is to develop new knowledge, or to preserve or critically assess it. It is also the case that works of visual art and design are available for critical assessment by peers, and are available to the wider intellectual community, as expected of well-defined research.

Notable in the first statement is the idea of advancement of scholarship and creativity rather than new knowledge and understanding. In addition, research in this context is defined as an activity that yields both new scholarship and new creativity. Similarly, in the second statement the goal of new knowledge and understanding is substituted by the notion of intervening and changing a scholarly debate, which locates creative production as an agent within a scholarly debate. In both cases, it is not the acquisition of new knowledge and understanding that distinguish creative production as research from everyday creative production, but the intention to advance scholarship and creativity in the first case and to intervene and change the discourse in the other. Another distinguishing feature, explicit in one and implicit in the other, is the researcher's responsibility to justify and communicate advancement or intervention. The third statement defines art and design research by comparison to the methods and outcomes of other learned disciplines, and seems to take it as given that creative production yields new knowledge and understanding.

The UK Council for Graduate Education's report (1997) on practice-based doctorates in the

creative and performing art and design describes this mode of doctorate as advancing knowledge partly by means of practice. The report continues (*Ibid.* 18) by noting that, “An original/creative piece of work is included in the submission for examination. It is distinct in that significant aspects of the claim for doctoral characteristics of originality, mastery and contribution to the field are held to be demonstrated through the original creative work.”

Gray (1998, 82) defines “practice-led” research as, “research initiated in practice and carried out through practice.” This definition can be viewed as consistent with Frayling’s research through and for art and design, if we take the term practice to mean creative production.

Scrivener (1999) describes research for design, as an investigation directed to enhancing the efficiency and effectiveness of our capacity for envisioning possible future realities. He invokes a combination of Frayling’s research through practice and into practice, since design is the subject of inquiry and an element of the method, which is defined as comprising investigation, design and implementation, and evaluation phases. In contrast, research within design (Scrivener 2000) is described as being concerned with gaining knowledge and understanding that directly contributes to the design practice of the designer/researcher: with research that occurs as an integral component of the practice of design. Here design is seen as a way of creating new knowledge and understanding, although the goal is to produce original design. In essence, this is a claim that the generation of an original work of design necessarily involves the generation of new knowledge and understanding. However, this claim does not imply that design works embody and/or communicate this knowledge. Indeed, Scrivener (2002, 33) avoids making such a claim, when he defines creative production as an “original creation undertaken in order to generate novel apprehension.”

In *Artistic Research: Theories, methods and prac-*

tices, Hannula, Souranta and Vadén (2005) devote a section to practice-based research within a chapter concerned with the methodological faces of artistic research. They argue that it is possible to differentiate between practice-based research and design-based research. In practice-based research, they continue, practice is seen as interesting in itself: the research subjects are, “the theory-infused analyses, routines, methods and habits of the field, different ways of seeing, cultural forms and structures.” (*Ibid.* 104). To illustrate this mode of research they compare it to studies in the sociology of science, arguing that the artist can approach his or her practice in the same way. Here they seem to be describing research into art and design, where the subject is the practice of art and design, in this case, the researcher’s own art practice. Later they write that a design component can be integrated into the research, to show the new kind of practice that is possible because of the research, thus introducing the possibility of research through design as substantial component within a programme of research into design.

In contrast, in design-based research method, the artist-researcher uses design as a research tool to attain a primary relation with the researched phenomenon. They explain that design as method can be justified from a sociological viewpoint of knowledge, in which scientific research is seen as being constructed of conceptual and material elements, and the varied interactions between them. In design-based research, knowledge and knowing are formed from the dialogic relationships between conceptual and material elements. Here, Hannula et al. seem to be describing a mode of research through art and design.

Finally, Rust, Mottram and Till (2007, 11), define practice-led research as, “Research in which the professional and/or creative practices of art, design or architecture play an instrumental part in an inquiry. This is not to say that practice is a method of research or, as some assert, a methodology.

Practice is an activity which can be employed in research, the method or methodology must always include an explicit understanding of how the practice contributes to the inquiry and research is distinguished from other forms of practice by that explicit understanding."

The above statements point to different understandings of practice-based research. Indeed, most, if not all, of these roles are implied in Frayling's (1993) discussion of research into, through and for art and design. Each attempts to describe how creative production figures in research. If not explicitly stated, each also attempts a description of practice-based research that distinguishes it from advanced practice. Frayling (*Ibid.* 5) makes this latter issue explicit towards the end of his paper, as a kind of justification for elaborating his categories, when he observes, "And we [at the RCA] feel that we don't want to be in a position where the entire history of art is eligible for a post graduate degree. There must be some differentiation." However, there is a fundamental problem with Frayling's categories as means of differentiation. For example, Scrivener (1999) describes a number of projects where the focus is on enhancing the efficiency and effectiveness of design practices, partly achieved by research into and partly research through design. How should this mode of research be classified? This problem arises because Frayling's categories describe the different roles of art and design in relation to research, *i.e.*, art and design as the subject, method and goal of the research, rather than types of research, which typically might be of subject, *e.g.*, psychology or sociology, *etc.*, or of method, *e.g.*, qualitative or quantitative, *etc.* That is to say, where type differentiates within one or more of the conditions of research,

Indeed, the whole debate surrounding practice-based art and design research can be viewed as not being about a type of research, but about how creative production functions in research:

does it have functions, what are they, and what claims do these functions imply? This is reflected in the statements above, which articulate different roles for art and design in research, *i.e.*, as the subject of inquiry, as method of inquiry, as goal of inquiry, as the means of communicating the knowledge and understanding acquired through the inquiry, *etc.* In the following sections, we will consider the potential roles of creative production in relation to each of the conditions of research, eliciting in each case the claim that follows from the posited role and the grounds for characterising it as practice-based research. Whilst it is not claimed that this analysis is exhaustive, we will see that many of these cases do not merit qualification as practice-based research.

ART AND DESIGN MAKING AND THE CONDITIONS OF RESEARCH

The "working" definition of research given above comprises six conditions: intention, subject, method, justification, communication and goal. In essence, the notion of practice-based art and design research rests on the claim that art and design makes a distinctive contribution to research in these domains: the knowledge and understanding acquired could not be acquired without this contribution. Every discipline is distinctive in terms of the subject of research, *e.g.*, psychology, physics, sociology, *etc.*, but clearly practice-based research is not simply a question of different subject matter. If it were, the labels Art Research or Design Research would be sufficient for purpose. But of course, research is not only distinguished by subject matter. Typically, subject matter calls for different research methods and forms of justification and communication, *etc.*, and it is these differences that are at the heart of the debate and the claims made for practice-based research. In the following sections, we will seek to make these claims explicit by examining the ways in which creative produc-

tion might feature in relation to the conditions⁵ of research.

Art and design as the subject of research

There appears to be universal agreement in the literature that research where creative production is the subject of inquiry equates to Frayling's (1993) research into art and design category. There are many instances of practice-based research where creative production is the object of inquiry. This kind of research requires no special justification except where the creative production disciplines choose to qualify research with the terms art or design. For such qualifications to be meaningful, some criteria or symptoms (*cf.*, Biggs 2002a) need to be identified that distinguish artistic or design research from the other kinds of research where art and design are the objects of inquiry, *e.g.*, by virtue of the kind of knowledge acquired, the point of view taken on the objects of inquiry, *etc.* The literature does not talk about this kind of research as practice based.

Therefore, the notion of practice-based research would not seem to rest on art and design being the subject of inquiry. Indeed, creative production is a valid domain of inquiry for a host of disciplines, which do not feel compelled to use the practice-based label. Similarly, if many disciplines can find good reasons for studying creative production, we should expect the creative production disciplines to find good reasons for studying subjects other than creative production, such as the mind, society, *etc.*, but unless the principles and practices of creative production are involved in the research in some substantive way, there is little reason for characterizing this as practice-based research.

5 Excluding the intention condition, which requires no elaboration.

Art and design as method of inquiry

As we have already seen, Rust et al. (2007, 11) refute the claim that creative production is a "method of research or, as some assert, a methodology." However, if not explicitly stated, many of the other definitions can be interpreted as treating art and design as method and/or methodology. "Research method" is perhaps best understood as a tool or technique employed within a conceptual framework. Under qualitative methods, Banister, Burman, Parker, Taylor and Tindall (1994) consider observation, ethnography, interviewing, discourse analysis, *etc.* Methodology can be understood as a body of methods used in a particular branch of activity, encompassed by a coherent set of theories underpinning those research practices. Typically, methodology reflects a school of thought about the objects of inquiry and how they can be known. In psychology, for example, Banister et al. identify positivist, realist and social constructionism schools of thought, the first promoting quantitative approaches to knowledge acquisition, whilst qualitative approaches are favoured under the other schools of thought.

Each of the above is often loosely referred to as method, but what is meant by the term when claiming creative production as method makes a difference. At its weakest, it is a claim for art and design as procedure employed in research, for example, to generate objects for analysis and evaluation. This is very common in art and design research (some of the "pioneers" identified by Gray (1998) fall into this category⁶), but it does not amount to research method or methodology in the

6 Scrivener's PhD concerned the development of interactive computer graphics systems for artists and designers. His contribution was a language for manipulating bit-mapped images. At the time bit mapped systems were still only available in the laboratories, so he and his colleagues designed and developed a bit mapped system to enable the language to be tested.

sense described above. A stronger claim is for creative production as method, in the sense of tool or technique, within an established research methodology, *e.g.*, Action Research. At its strongest, it is a claim to creative production as research methodology, *i.e.*, as a body of methods. In all cases, this can be described as research through art and design. When art and design is both subject and method of inquiry, then the research is both research into and through art and design.

The justification required for art and design as method varies depending on how method is understood. The weakest claim for method (*i.e.*, that implied in Rust et al., 2007) as a process encompassed within a given research methodology requires little justification. Here art and design process merely generates evidence or data on process or product for examination (Scrivener 1999; Niederrerr 2004). The claim that creative production is a tool or technique operating within a given methodological framework, *e.g.*, Action Research, requires a justification of appropriateness. The strongest claim of methodology requires a justification of art and design as a means of knowledge acquisition. In all cases, art and design processes and products function in a substantive manner: the research could not be conducted without them. However, there is an argument for suggesting that it is only the strongest interpretation of art and design as research methodology that merits qualification as practice-based research. Under the other interpretations, creative production is subservient to the research practice within which it sits, *e.g.*, sociological, psychological, engineering research, *etc.*

However, it is important to note that none of these claims for method implies a claim for works of art and design as a component of research. It is consistent to believe in creative production as research method whilst not committing to the idea of works of art and design as the goal of the research, the embodiment of the knowledge and un-

derstanding acquired or its justification.⁷

Art and design as communication and justification of research outcomes

New knowledge and understanding has been identified as the goal of research. A further condition is that the new knowledge and understanding acquired is stated in a communicable form. Here, from the creative production perspective, we are concerned with how knowledge is made explicit, *i.e.*, definitive, clear, unambiguous and objective, or external to the mind of the researcher, using artistic and designerly forms.

The simplest claim is for the use of the visual, a defining characteristic of visual art and a general predisposition or preference amongst artists and designers. Claims to the visual as a means of explicit communication can be made that include or exclude the “non-visual”, typically verbal statements. In both cases, in the absence of a claim to art and design as research methodology, there would seem to be no good reason for calling the research practice-based, since the lesser claims to method subsume creative production under non art and design knowledge acquisition practices, many of which also employ visual communication.

Alternatively, it can be claimed that the art and design objects are communicative forms of knowledge and understanding, meaning that works of creative production communicate knowledge and understanding. This does not imply a concomitant belief in the creative production as a method or methodology. For example, one might hold that such works are representations. However, as for the cases described above, the use of the term the practice-based research only seems justified when

⁷ For example, we might hold that knowledge and understanding is acquired in the creation of novel works of art and design that is not normally articulated publicly by the artist or designer.

communication is claimed concomitant with methodology.

Similar claims as those for communication can be constructed for works of art and design as justification of knowledge and understanding, *i.e.*, visual and non-visual, visual only, works of art and design. As for communication, the label of practice-based research is not justified in absence of a concomitant claim to methodology.

Art and design as a/the goal of inquiry

Above, the goal of research was defined as being to acquire knowledge and understanding. In this section, we consider how the goal of creative production might be understood in relation to the goal of research.

As noted above, Frayling's initial definition of research for art and design, as exemplified by Picasso's working practice, qualifies as research with a little "r". As noted above, toward the end of his 1993 paper, Frayling redefines research for art and design as that where the resulting product is an artefact that embodies the thinking, communicating the new knowledge acquired iconically or imagistically. This construction of *research for* posits roles for creative production as method, justification, communication and goal. The gauntlet, as it were, is thrown down for the art and design community to pick up, since this is essentially a claim for creative production as a mode of research in its own right, *i.e.*, art and design *as* research (*cf.*, Frayling 2006; Macleod and Holdridge 2006). Similarly, Gray's (1998) and Scrivener's (1999) definition of practice-based research as that initiated in practice and carried out through practice and Scrivener's use of the term research within art or design can be interpreted as claims for "works of" creative production as the goal of the research.

However, it is possible to make the claim for "works of" creative production as a goal of one's research, without claiming that the "the work of"

and "works of" contribute substantively to the research. One way of viewing this "goal only" claim is that it is merely an aspiration, the hope that some works of creative production will be produced, thereby maintaining the practice of creative production. There are good practical reasons for constructing a programme of research in this way, but few or no obvious conceptual reasons for doing so. Those experienced in research shy away from such unnecessary complication. The best we might hope for is a programme that achieves a useful dialogue between the two processes. Although this discussion might seem a little abstract, even absurd, such instances can be identified.

The claim for creative production as goal can take several stronger forms, depending on whether the goals of research and creative production are seen as different or not. If seen as different, then the claim is not for creative production as a mode of knowledge and understanding acquisition, but a claim that knowledge and understanding can be acquired in the context of creative production. Newgren (1998, 96) can be interpreted as saying as much when he asserts that design research "...simply serves as a guide to unravelling the mysteries of the unknown within the design process." Under this view of creative production as context (and goal), no claim needs to be made for creative production as a mode of knowledge acquisition. Instead it merely serves as an enveloping activity within which research takes place.

Alternatively, it can be argued that novel creative production that is new to the world of creative production extends the knowledge and understanding of that world. Hence, although the creation of novel creative production is the primary motivation or goal of the overall activity, new knowledge and understanding emerges as a necessary consequence of creative production (see Scrivener 2002). Viewed in this way, creative production, in pursuit of its particular goals and purposes, is a way of acquiring new knowledge and

CONDITIONS OF RESEARCH	ART AND DESIGN ROLES
Subject of inquiry	Art and design (no claim required) Non art and design
Method of inquiry	No role It is a source of evidence and data It is a research method (tool or technique) It is a methodology
Communication	No role It communicates (coupled with non visual) It communicates Works of creative production communicate
Justification	No role It justifies (coupled with non visual) It justifies Works of creative production justify
Goal of inquiry (creative production is a goal of the research)	No role It aspires to works of creative production It is a context for knowledge acquisition It yields tacit knowledge It is research

Table 1. Condition of research and claims for creative production in knowledge acquisition.

understanding. Like the practices of scientific research, the practices of creative production yield new knowledge and understanding, *i.e.*, creative production as research.

The claim to creative production as a mode of knowledge acquisition can be made in two ways. First, it can be claimed that whilst this is the case, under normal circumstances the new knowledge acquired remains tacit. The job of research, we might argue, is to make this knowledge explicit. Under this view, a claim is made for creative production as methodology⁸, but, in order to qualify

as research, it is one which must be coupled with a methodology for making explicit what is otherwise tacit. Second, in addition to the claim to knowledge acquisition, we might also wish to claim that the works of creative production stand as both justification and communication of the knowledge acquired. Under this view, the goal of creative production and research are indistinguishable: creative production is research.

CONDITIONS, CLAIMS AND PRACTICE BASED RESEARCH

Table 1 shows the roles of creative production in relation to the five conditions of research consid-

⁸ Unless we wanted to make cognitive explicitness a crite-

rion of research methodology.

ered. Given that each condition has a number of possibilities associated with it rather than one form of research we have six hundred and forty combinations⁹ (*i.e.*, $2 \times 4 \times 4 \times 4 \times 5 = 640$ disjunctive combinations) in which creative production figures in one or more conditions. At one end of the range, art and design research is simply the choice of art and design as the subject of study, with active creative production playing no role at all in the research process. At the other end, creative production is involved in satisfying all research conditions.

At this extreme, the claim is that creative production practices are research practices. In between these extremes, there are some combinations which hardly involve art and design, such as that in which parallel creative production is a mere aspiration. Many other complexions of research between the extremes involve creative production substantially. Whilst a substantial role for art and design production needs justification in every case, many do not merit qualification as practice-based research because the “work of” and “works of” creative production are not in themselves seen as knowledge producing. Only those cases where creative production is claimed as research methodology merit the qualifier “practice-based”.

CONCLUSION

We have examined the conditions of research, the different ways in which creative production might function in relation to them and the claims that follow from them. This analysis reveals that there are many different combinations of conditions and roles of creative production. It is reasonable to suggest that instances of many of these combina-

tions already exist in the research annals. We might find some combinations more interesting than others, but there is no reason in principle for saying that one combination has greater value than another.

Although the inclusion of creative production in research needs justification in every case, it had been argued that not all of these combinations merit the qualification practice-based. Indeed, the number of combinations that do is relatively small. Whilst there is a growing literature around the theory and practice of practice-based research, it is not always clear what claims are actually being made about the role of creative production in research and much of what is discussed does not merit the term practice-based research.

The idea of practice-based research would appear to hinge on the claim for creative production as a means of knowledge acquisition whether transferred using familiar “works of” creative production, or augmented by that which might be viewed as a residual of the exchange between the non public “work of” and the public “works of” creative production.

ACKNOWLEDGMENT

The research reported in this article was supported by the Arts and Humanities Research Council, UK, under grant number 112155.

⁹ Not all of these are likely to be independent. For example, the claim to creative production as research is also a claim for it as methodology, thus reducing the number of combinations.

REFERENCES

- BANISTER PETER, ERICA BURMAN, IAN PARKER, MAYE TAYLOR, and CAROL TINDALL. 1994. *Qualitative methods in psychology: A research guide*. Buckingham: Open University Press.
- BAYAZIT, NIGAN. 2004. Investigating design: A review of forty years of design research. *Design Issues* 20 (1): 16–29.
- CROSS, NIGEL. 2000. "Design as a discipline" In *Proceedings of doctoral education in design:foundations for the future*, ed. David Durling and Ken Friedman, 93–100. Stoke on Trent: Staffordshire University Press.
- FRAYLING, CHRISTOPHER. 1993. Research in art and design. *Royal College of Art Research Papers* 1 (1): 1–5.
- FRAYLING, CHRISTOPHER. 2006. Foreword to *Thinking through art: Reflections on art as research*, edited by Katy Macleod and Lin Holdridge, xiii-xiv. London: Routledge.,
- GRAY, CAROL. 1998. "Inquiry through practice: Developing appropriate research strategies in art and design." In *No guru, no method*, ed. Pia Strandman, 82–89. Helsinki: University of Arts and Design Helsinki.
- HANNULA, MIKA, JUHA SUORANTA, and TERE VADÉN. 2005. *Artistic research – theories, methods and practices*. Helsinki and Gothenberg: Academy of Fine Arts, Finland and University of Gothenburg, Sweden.
- MACLEOD, KATY, and LIN HOLDRIDGE. 2006. Introduction to *thinking through art: Reflections on art as research*, ed. Katy Macleod and Lin Holdridge, 15–19. London: Routledge.
- NIEDERRER, KRISTINA. 2004. Why is there a need for explanation? Objects and their realities. *Working Papers in Art and Design* 3. <http://www.herts.ac.uk/artdes1/research/papers/wpades/vol3/knfull.html> (accessed June 16, 2008).
- NEWGREN, DON. (1998) "The components of de-
- sign research in the future: a case study." In *No guru, no method*, ed. Pia Strandman, 96–101. Helsinki: University of Arts and Design Helsinki.
- RUST, CHRIST, JUDITH MOTTRAM, and JEREMY TILL. 2007. *AHRC research review: Practice-led research in art, design and architecture*. http://www.ahrc.ac.uk/About/Policy/Documents/Practice-Led_Review_Nov07.pdf (accessed September 22, 2008).
- SCRIVENER, STEPHEN A.R. 1999. Design research as reflection on action and practice. *Useful and Critical Conference*. Helsinki: University of Art and Design Helsinki.
- SCRIVENER, STEPHEN A.R. 2000. Reflection in and on action and practice in creative-production doctoral projects in art and design. *Working Papers in Art and Design* 1. <http://www.herts.ac.uk/artdes/research/papers/wpades/vol1/scrivener2.html> (accessed June 16, 2008).
- SCRIVENER, STEPHEN A.R. 2002. Characterising creative-production doctoral projects in art and design. *International Journal of Design Sciences and Technology* 10 (2): 25–44.
- STRAND, DENNIS. 1998. *Research in the creative arts*. Canberra, Australia: Department of Employment, Education, Training and Youth Affairs.
- UNITED KINGDOM. UK Council for Graduate Education. 1997. *Practice based doctorates in the creative and performing arts and design*. Coventry: UK Council for Graduate Education.