A DISCUSSION PAPER

Types *of* Research
in the
Creative Arts *and* Design

B BROWN, P GOUGH, J RODDIS : MARCH 2004

INTRODUCTION

1. This paper sets out some preliminary thoughts for discussion with colleagues in the sector on potential typologies of research in the creative arts and design. These thoughts were initially prompted by two (amongst other) considerations: (i) an informal consultation conducted in 2004 by policy officers at HEFCE on definitions of *applied research* across disciplines that included the creative arts and design, and (ii) the AHRB's response to the Funding Councils' 'Review of Research Assessment' focussing on the perceived problematic of 'practice-led' research alongside its focus on *scholarly research*.

2. Initial requests for advice on these issues (of *Scholarly Research* and *Applied Research* as specific within the creative arts and design) made clear that research in these fields varies in practices, methods and types of knowledge. Moreover, this rich complexity suggested greater urgency (not less) to evolve some form of typological approximation that might help locate diverse research practices within and across the community and to better map these for those seeking to engage with these complex debates from outwith the sector.

BACKGROUND and CONTEXT

3. In 1992, — and just 150 years after their inception as institutions for the promotion of art and design for manufacturing and industry — British art and design schools were invited to compete for research funds against traditional universities with already well embedded scholarly and intellectual infrastructures that supported largely textually-based research. Few people in 1992 anticipated that research success within the academy was a serious proposition for art and design as a subject. Instead, its recent academic history pointed towards professional and vocational training that was rarely understood as linked to 'applied research'. Few art and design institutions had, at that time, evolved the scholarly research infrastructures enjoyed by traditional university departments — so they faced the challenge of articulating intellectual frameworks for research activities that were largely focussed on object-based outputs and visual language. Furthermore, since their incorporation into the polytechnics during the late 1960s and 1970s, the CNAA validation process had emphasized undergraduate course innovation and evaluation at the expense of graduate development and research growth. This combination of circumstances did little to prepare the academic community in the creative arts and design for RAE 1992.

4. In the event, art and design contributed an unexpectedly high volume of quality research outputs to RAE 1992 that were well beyond the pre-assessment prediction. As 'new kids on the research-block' the projection of their likely outputs had been derived from volume measures used in the 'traditional' universities where only a limited amount of art and design practice is conducted — the majority being located in the poly/mono-technics prior to their incorporation. The effect of this unexpectedly high volume of additional research contributed by art and design was to deflate the unit of funding across the system. By way of response a cap was put on the funding threshold for art and design so to protect other less well performing areas. The impact of this on art and design was severe, taking the next eight years (1992-2000) to work its way through the system. The effect was compounded by the location of high scoring art and design departments in 'new' universities where art and design income from the RAE was in some instances used to protect research in other less well performing areas. So, during this critical period in the

growth of art and design's research capacity it made a considerable fiscal contribution to the research funding 'safety net' across the sector and within institutions (where its research activity relied heavily on QR funding). The table below shows the effect of the funding cap (in white) on QR allocations in a typical 'new' university through 1994-2001.
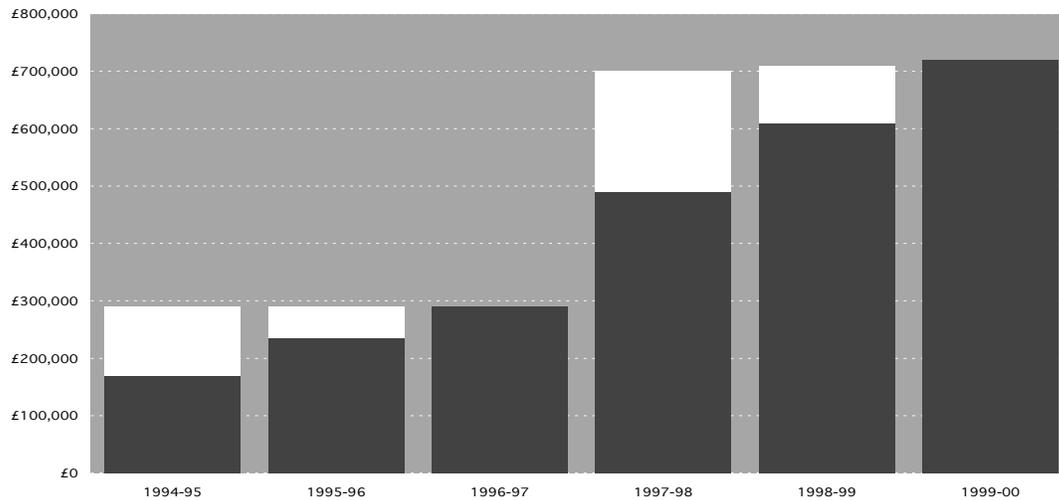
5. In the 1992 RAE a significant proportion of the success of art and design research, and the concurrent large volume of outputs, was to some extent the result of *applied research* that had been undertaken within professional and industrial contexts. However, such research had not, until that time, been understood or articulated within an appropriate typology that located it within the academy alongside other forms of knowledge (it being described mostly as 'professional practice') — that is, it had been imprecisely expressed as research practiced within the academy. So, between 1992–2000, the creative arts and design community began to place greater emphasis on the need to professionalise, systematize and better articulate its distinctive research activities, capabilities, typologies and processes across a very wide range of disciplines.
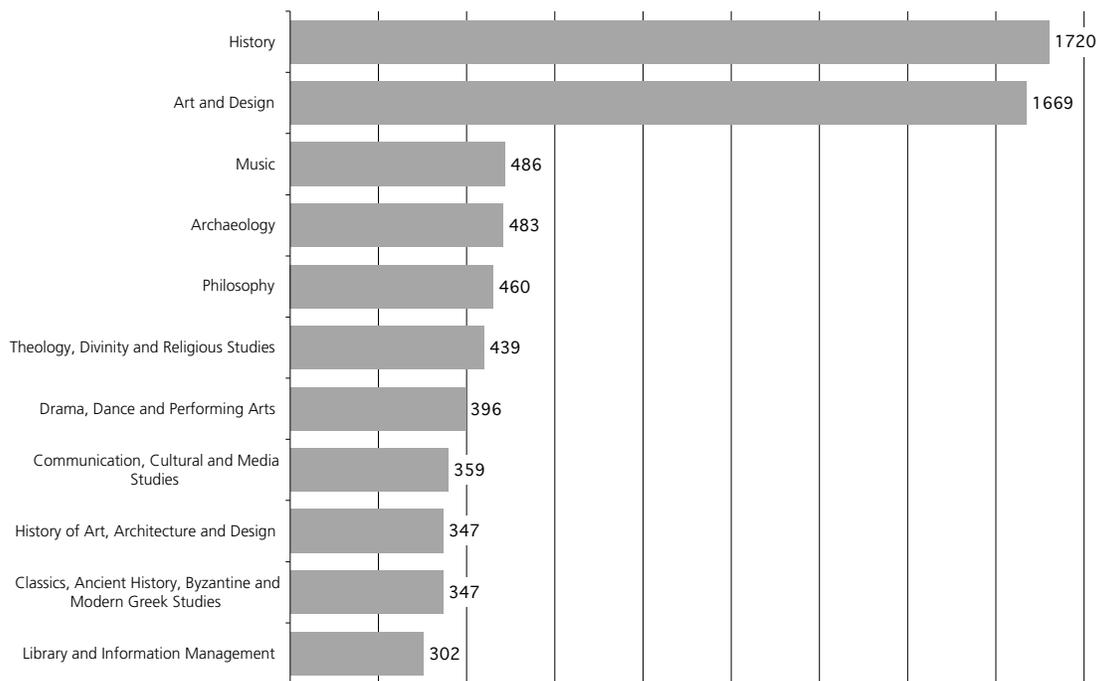
TYPES of RESEARCH

6. In the sector report for RAE 2001 the panel for UoA 64 described a need to evidence the scholarship of research in art and design by saying "To assist the assessment process, it [the panel] had requested in its published criteria that all individuals provide a succinct statement for all outputs submitted. This was intended to facilitate articulation of the individual creative process, thus clarifying the investigative content, methods, context within the field, means of dissemination and potential significance of the work." The report went on to note the still underdeveloped state of this scholarly infrastructure by observing "Many institutions apparently did not perceive this to be a potential development tool and these statements were not always provided. Where they were provided, such statements were helpful to the panel, particularly when these articulated the research cited by the individual and its particular context in the field." With the increasing emphasis on scholarship alongside assumed criteria for applied research in art and design (that made it

difficult at times to distinguish the outputs of 'practice' from 'research'), the panel was also concerned to note the seeming decline in applied research outputs by commenting that "in some of the design areas in particular, there was a relatively small percentage of practice-based outputs compared with the large volume of text-based outputs submitted, the latter being mainly in the form of journal articles and conference contributions".

7. In the 2001 RAE, art and design research (UoA 64) was made up of a very wide range of disciplines incorporating a high percentage of applied research whose core methodologies have been described as 'practice-led' e.g: "Fine Art (including Painting, Printmaking, Photography); Performance/Installation (including Sculpture); Time-Based Arts (including Film, Animation, Video, Virtual Reality, Multimedia, Digital and Interactive Art and Design); Textiles (including printed, woven, embroidered, multimedia textile design and tapestry); Fashion; Applied Arts/Craft Design (including Silversmithing/Jewellery, Ceramics, Glass); Graphic and Communication Design (including Software Design for Digital Artefacts); Art and Design in the Landscape; Interior, Theatre, Exhibition and Events Design; Industrial Design (including Automotive Design, Product and Furniture Design); Pedagogy in Art and Design; Cultural Studies and Art and Design Theory, where this is related to current practice and culture." In the event, submissions to RAE 2001 in UoA 64 also included outputs from the performing arts/music (where it was integrated with the visual arts) and also from architecture (including buildings and materials innovation).

8. Within these disciplines the number of active researchers submitted in UoA 64 for Art and Design, if mapped against those submitted in all of the AHRB's other programme areas, shows that Art and Design, along with History, supports the largest constituency of active researchers in the arts and humanities and, hence, contributes a significant volume of applied research to this sector as a whole (diagram below: AHRB programme areas correlated against the numbers of active researchers submitted in RAE 2001).

Programme area	Active researchers
History	1720
Art and Design	1669
Music	486
Archaeology	483
Philosophy	460
Theology, Divinity and Religious Studies	439
Drama, Dance and Performing Arts	396
Communication, Cultural and Media Studies	359
History of Art, Architecture and Design	347
Classics, Ancient History, Byzantine and Modern Greek Studies	347
Library and Information Management	302

9.   The above efforts were greatly assisted and guided by the inception of the AHRB in 1998. Their substantial expertise — particularly in the scholarship of research (process) — has been invaluable to art and design research where, traditionally, an emphasis on outputs in the context of an underdeveloped scholarly infrastructure without the apparatus needed to articulate its distinctive research methods and processes. Consequently the AHRB's response to the Funding Councils' 'Review of Research Assessment' focussed on the perceived problematic of 'practice-led' research in the creative arts and design by emphasising the importance of process (questions, context, methods, dissemination) at the expense of types (of knowledge) working in the field. From this it seems that 'practice-led research' may have been unintentionally conflated with 'applied research' without due distinction. Just as the 'practice-led' debate may have tended to generate more heat than light so may it have diverted focus away from discussion on the types of art and design knowledge and their complexity — also, the ways in which these may be created, tested and contested. In this case the question may be asked 'What is applied research, how is it different from practice-led research, and what other types of knowledge surround it?'

10. This seeming conflation of *practice-led* research (a methodological approach) with *applied research* (a type of knowledge) may be one reason why the art and design community does not yet seem convinced by the AHRB's recommendation to the Funding Councils — reasonable though this may seem — that 'we do not believe a creative, performance, or practice-led output should be allowed to stand on its own as a record of research activity…we have come to the conclusion that this documentation — at least for the purposes of RAE — should be required to be presented in verbal written form'. Although the art and design community may concur with the AHRB that there is still perhaps a need for continuous enhancement of its approaches to scholarly research (and also for a more effective apparatus for its systematic evaluation) nevertheless, the scholarship of applied research in art and design is just as relevant as it is to the scholarship of other types of research in the humanities although evidenced differentially. Better definition and articulation of the types of art and design research (including applied and scholarly research) is therefore needed if it is properly to evolve and gather credibility as a professional research domain within the academy and research councils.

11. For the purposes of stimulating debate both *applied research* and *scholarly research* in the creative arts and design could be seen to be located at either end of a more complex typology (though the terminologies used at this stage are approximate) of research practices that could be described as:

(i) Scholarly Research
(ii) Pure Research
(iii) Developmental Research
(iv) Applied Research

12. A first attempt to map the very broad characteristics of these four types of research, and their interconnectedness, is set out on the following page.

Scholarly Research	Pure Research	Developmental Research	Applied Research
Creates intellectual infrastructure	**Asks key questions**	**Tests relevant issues**	**Solves specific problems**
Records — questions asked; issues explored; solutions proposed — in the field.	Sets and explores hypotheses experimentally through logic and/or intuition.	Contests and tests existing hypotheses/theories originally.	Examines specific cases systematically.
Documents the knowledge gained from Pure, Developmental and Applied research along with the results	Searches for pure knowledge.	Tests and applies the outcomes of pure research by (a) identifying the limitations of existing knowledge to generate further insights (b) harnessing existing knowledge to determine new methods or ways of achieving some specific and pre-determined objective.	Applies developed knowledge and methods to the examination of a specific context in order to solve a problem in that context.
Compiles the resources, methods, tools and models used in Pure, Developmental and Applied research in that field.	Uncovers issues, theories, laws or metaphors that help to explain why things operate as they do, why they are as they are, or, why they appear to look the way they do.	Focuses, in general, on how things are done by (a) generating useful metaphors for organising insight (b) developing specific theories that can be used to predict the future in specific situations.	Creates new or improved artifacts, products, processes, materials, devices, services, or, systems of thought and ways of seeing.
Maps the field in which issues, problems, or questions are located (what is known or understood in the general area of the proposed research already, and how addressing or answering the issues, problems or questions specified will enhance the generally-available knowledge, and, understanding of the area in question).	Discovers/generates significant new facts, general theories or reflective models where immediate practical application or long-term economic, social or cultural benefits are not a direct objective.	Tests and reworks knowledge through (a) the generation of alternative visual models, experiences and thought systems so to expand the limitations of specific existing knowledge (b) the evolving of special methods, tools and resources in preparation for the solving of specific problems, in a specific context, where immediate practical application is a direct objective.	Applies outcomes from Pure and Developmental research to a specific context or project where long-term economic, social and/or cultural benefits are a direct objective.
Disseminates the results of research to the research community and to others who migh be interested in them.	Results may be unexpected and yield original theories, discoveries or models that are unrelated to the disciplines in which the research has been conducted or the questions first asked (they wait for application in some other context).	Results may be useable across many contexts in Pure and/or Applied research, establishing connections between individual cases and disciplines.	Results cannot usually be directly applied to other contexts because of the specificity of the context from which information is gathered. The methods and tools evolved to deliver these results are often transferrable to other contexts.

SUMMARY

13. SCHOLARLY RESEARCH — creates and sustains the intellectual infrastructure within which *Pure, Developmental and Applied* research can be conducted. It aims to map the fields in which issues, problems, or questions are located (what is known or understood in the general area of the proposed research already, and how addressing or answering the issues, problems or questions specified will enhance the generally-available knowledge, and, understanding of the area in question). It documents/compiles the knowledge, resources, methods, tools and models evolved through *Pure*, *Developmental* and *Applied* research along with the subsequent results.

PURE RESEARCH — asks fundamental questions in the field and explores hypotheses experimentally. It searches for pure knowledge that may uncover issues, theories, laws or metaphors that may help explain why things operate as they do, why they are as they are, or, why they appear to look the ways they do. It generates significant new facts, general theories or reflective models where immediate practical application or long-term economic, social or cultural benefits are not a direct objective. The results may be unexpected and yield original theories, discoveries or models that are unrelated to the disciplines in which the research has been conducted — they may be applied in another research context.

DEVELOPMENTAL RESEARCH — serves two purposes (a) it identifies the limitations of existing knowledge as evolved through *Pure* research by creating alternative models, experiences and/or thought-systems so to generate useful metaphors for organising insight and expanding/reframing the base of existing knowledge (b) it harnesses, tests and reworks existing knowledge so to evolve special methods, tools and resources in preparation for the solving of specific problems, in specific contexts, through *Applied* research.

APPLIED RESEARCH — involves a process of systematic investigation within a specific context in order to solve an identified problem in that context. It aims to create new or improved systems (of thought or production), artefacts, products, processes, materials, devices, or services for long-term economic, social and/or cultural benefit. It is informed by the intellectual infrastructure of *Scholarly Research* in the field; it applies and/or transfers enhanced knowledge, methods, tools and resources from *Pure* and *Developmental* research; it also contributes to scholarship in the field through systematic dissemination of the results. The outcomes cannot usually be directly applied to other contexts because of the specificity of the situation in which the research has been applied although the methods/tools evolved are often transferable.

CONCLUSION and PROPOSAL

14. Further work is needed. So, the Arts and Humanities Research Council should be invited to undertake a systematic exploration of research typologies in the creative arts and design; drawing upon expertise from related research fields and resulting in a publication with worked examples and case histories that serve to illuminate and exemplify the debate.

15. Thanks to Paul Gough, Jim Roddis and Ian Biggs for their contributions to this paper. Further responses are welcomed and will be credited : send to b.brown@brighton.ac.uk.

Bruce Brown
Faculty of Arts & Architecture
University of Brighton
Grand Parade
Brighton
East Sussex
BN2 2JY

T 01273 643005
F 01273 643128
E b.brown@brighton.ac.uk
W brighton.ac.uk/arts/research