Perspectives on the nature of academic design research: a qualitative case study of identity in research communities of practice

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ABSTRACT
Debate continues on the nature of design research, particularly in its institutionalized form as academic research in higher education. Within the competing discourses about design research as a new and emergent discipline is the debate about the distinctive academic character of research and knowledge in design in relation to consultancy and practice. Is academic design research distinct from industry practice or is it a hybrid form of research practice and knowledge more suited to the field? Existing statements in the literature pay insufficient attention to contextualized design research definitions by individual designer educators within design research communities of practice. From a larger study of fifty two design educators this paper examines the responses of eleven design educators to the nature of design research and postgraduate training. The study sees the responses of participants within the theory of participation in research communities of practice (Lave & Wenger 1991). The study suggests that proposals for a hybrid scholarly and practice of academic design are alive and well while competing with more conventional proposals.

I. DESIGN SPECIALISMS, DISCOURSE AND DISCIPLINE
Although the project for a discipline of design is still under discussion some design scholars argue that the field has its own intellectual culture and is so diffused in everyday life that it is ubiquitous. Cross (1999), for example, argues that there are forms of knowledge peculiar to the awareness and ability of a designer’ (p.5). And Cross and others have sought to peg disciplinary legitimacy to this essentialist claim. However, Julien (2000) observes that this ‘agitational standpoint’ taken by some ‘to deplete design of any separateness’ (30) in fact works against the professionalisation and legitimisation design seeks as discipline. In its search for disciplinary uniqueness, design may, in fact, be pursuing an outmoded vision of academic disciplines. The last fifteen years have seen numerous sociolinguistic studies counter the notion of disciplinary consensus and acknowledge the discursive complexity of disciplines and their specialisms. Thus, Becher (1989) notes that in fact it is the specialism, such as industrial design, not the discipline or department which forms the ‘true basic unit of intellectual organization’ (p.42) and it is here that social networks and affiliations and epistemological and methodological coherence can be found. The human and social concerns of design specialisms appear to fit Becher’s soft applied disciplines, the latter being knowledge, which ‘draws on soft pure knowledge as a means of understanding and coming to terms with the complexity of human situations, but does so with a view to enhancing the quality of personal discipline areas and social life’ (p.15). However, even this definition is not one that every design specialism or project would subscribe to.

Design specialisms are also subject to the potentially overwhelming pull of a dominant disciplinary partner. Julier (2000) also puts on notice a competitive division into major (dominant) and minor (emergent) disciplines which is relevant to understanding the responses of designers to academic design as a discipline. He claims that ‘the minor profession has historically referred to the major profession for its research paradigms and its norms and procedures … the minor profession has been engaged in a struggle to build its own discursive structures, to free itself of dominance and develop its own professional culture’ (35). Thus, Bonsiepe (1995) notes that where science, technology, and design interact the less established disciplines of design adopt the discourses of science leading to familiar emergent/dominant binaries such as industrial design/engineering, interior/architecture, and graphic design/fine arts. These historical binaries of design fields are also invested with gender and ideological histories (see Havenhand (2004). Seago & Dunne (1999) add that academic intimidation from dominant disciplines has lead to a limitation in the methodologies art and design research students are prepared to use. Some of these discursive disciplinary struggles inform interviews responses.

Disciplinary discourse refers to ‘the acceptable forms of social and verbal behaviour which demonstrate the possession of an important corpus of tacit knowledge’ (Becher, 1987, p.261). Contrary to the prescriptive approaches in the design literature regarding design research and design as a discipline, such tacit knowledge can not be prescribed but encompasses the form and content of scholarly communication, structures of argument, and values. Given this understanding of the discursive complexity and competition for design as discipline, Poggenpohl et al (2004) are mistaken in their claim that the current ‘lack of a specific design discourse’ (p.589) can be overcome by defining a common set of terms and meanings. Such an exercise, which they themselves note,
is fraught with problems and indicates the limited appreciation designers have of what discourse is. For example, language use in context, such as in interviews, is about taking up discourses and individuals getting recognized as a member of a community of practice. The responses individuals provide indicate the available positions and discourses about academic design that exist. In addition to language use, forms of nonverbal behaviour, use of objects, and knowledge, is employed by individuals to be recognized as taking up what Gee (1999) designates ‘big D’ Discourse and the identities it offers. A limited number of identities are currently available within design research and professional communities of practice (Lave & Wenger, 1991; Wenger, 1998). Below, interviewees attempt to position their work and their understanding of design research in relation to the professional practice and experience they are familiar with.

II. DEFINING DESIGN RESEARCH: COMPETING DEFINITIONS

Definitions of design research for academic institutions are not neutral and may compete in a single institution. Jones & Jacobs (1998), for example argue that no definition of design has been found ‘that does not risk excluding or inhibiting imaginative work for the sake of academic respectability and reputation’ (p.5). Bayazit (2004) notes how the dominance of scientific approaches to design research has given way to a search for more autonomous versions although design scholars have yet to reach consensus on a common definition for design research. The establishment of academic departments of design and higher degrees has created the need for definitions of design research that recognize a form of scholarship that can integrate practice and its outcomes. In institutions also, definitions of academic at the postgraduate levels compete with design research, which is a common designation in undergraduate programs for industry-based studio work.

A scholarship for academic design that integrates a practice perspective is still required and the ideological content of definitions needs taking into account. At the postgraduate level Newbury (1996) suggests that current definitions of academic research overly exclude practice work. And Wood (2000) claims that conventional academic rigour is incompatible with the particular combination of practice and theory that characterizes design. Durling (2002) has argued that the different discourses on research and the PhD in design particularly around the importance of professional practice respond to the historical origins of design in Art. He notes that the existence of national measures of research, such as the RAE in the UK, mean that this proliferation of discourses must be looked at sceptically.

Friedman (2003) offers a relatively widespread three-way categorization of design research and design as an integrative discipline into basic, applied, and clinical research. ‘In one dimension, design is a field of thinking and pure research. In another, it is a field of practice and applied research. When applications are used to solve specific problems in a specific setting, it is a field of clinical research.’ (p.508). The three-way categorization of design research that Downton (2003) proposes overlaps somewhat with that of Friedman while privileging the design outcome as an embodiment of design through research, a model clearly influenced by Downton’s affiliation with architecture. The category of research for (to enable) design covers what Friedman calls clinical research and industry based practice but also appears to refer to the kinds of research for professional practice embodied in professional doctorates and research programs that privilege advanced professional practice.

While informative, these varied definitions of design research pay lip service to actual understandings of designers and educational contexts of use. The use of qualitative research with design academics has few precedents in the literature (e.g. Cliff & Woodward 2004). The study from which the data presented here come is another recent contribution.

III. QUALITATIVE INTERVIEW SETTING, METHODS

Qualitative interviewing is a particularly appropriate methodological choice where situated interactive accounts of perceptions are sought. Mason (2002) offers several reasons which are relevant to this study. First, the interview is an environment for an interactive account of perceptions since interview responses are produced through social interaction. Following Holstein & Gubrium (1995), qualitative interviewers consider the interview encounter to be more active, reflexive and constructive than in more conventional structured interviews, such as market research. Knowledge and evidence are considered by qualitative researchers to be ‘contextual, interactional, and situational’ (p.64) and such knowledge requires each interviewee provides a particular ‘situated’ account. As a contextual encounter the semi-standardized interview is particularly appropriate to addressing such knowledge. Three kinds of question characterize the interview – open questions, theory and hypothesis driven questions, and confrontational questions (Flick 2006). All three kinds of questions were used in this study.

Analysis requires attention to the ways in which individuals attempt to position themselves within familiar communities of practice (research and professional). It is such a rationale which informed this study. From a larger cohort of fifty two interviewees, eleven interviews (seven males and four females) from a range of design specialisms (industrial design, multimedia design, and communication design) were chosen for this paper. All interviews were from a single institution and ethics approval and consent was obtained for the research; pseudonyms are used in reported quotes. Each interview averaged twenty minutes and three prompts were used– one asking interviewees to provide a biographical teaching and professional background, a second prompt asking for definitions of design research, and a third asking about the nature and importance of postgraduate research skills. Four interviewees were completing PhDs in design, one had a doctorate and the remainder had a range of qualifications. Five of the participants were involved in postgraduate supervision as associated supervisors. Following transcription and analysis of eleven interviews the data were
organized into themes through inductive analysis. Narrative summaries under subheadings attempt to capture the scope of the general themes while illustrative quotes form transcript are used to illustrate particular formulations of themes.

IV. RESULTS

A. Reflecting on background

The prompt regarding professional practice and teaching background aimed to get interviewees to position themselves biographically with respect to their profession and teaching. The prompt also aimed to elicit the range of institutions and experience they had. Individual interviewees had teaching and learning experience of a range of academic institutions in Australia and overseas. Many had worked through transitions from TAFE to higher education; and the experiences and values they espoused reflected a wide range of institutions in Australia and the United Kingdom. In every case, interviewees catalogued significant moments of change in industry through technology innovation, e.g. the arrival of the Macintosh, and also referenced key design figures as formative influences. These biographies reinforce the significance of commercial practice and experience for the identities of the majority of interviewees.

B. Design research as industry practice

All interviewees clearly articulated definitions of industry-based design research, most alluding to the fact that socializing students to this form of design research was the primary aim of undergraduate training and TAFE programs. One interviewee teaching part-time in honours design did not know of any non-industry definition, equating design research types with studio styles. Following a full explanation of the parallel between commercial and university design research, I asked whether he had encountered any other forms of design research.

Um not that I can think of really. Uh having only really worked for one major studio and their techniques and their styles are quite similar to what I've known and learnt through university.

The consultancy oriented definition was the common denominator for all participants and clearly the one most anchored in their personal experience in industry.

C. Design and conventional academic research

A range of definitions for academic research were given few of which suggested any of the hybrid forms or autochthonous forms that the literature proposes are unique to design. The clearest vision of design research was offered by a young industrial designer completing a PhD.

Acknowledging the importance of issues like sustainability

So I believe that design research is about innovation and creating a better quality of life through design. So design is a creative discipline but it involves consumers it involves um politics there's a lot of different issues that you have to think about.

Conventional academic design was acknowledged as dominant and of continuing relevance to design research. One interviewee whose own PhD was 'a traditional history' and 'big solid thesis' suggested that traditional text-based research would (and should) continue in academic design. However, its positioning against new hybrid forms, while welcome, was contentious.

Traditional research is - there's always going to be a place for it I think it's ... because of its sort of you know the historical foundations in traditional universities. But design is fairly uh young and it's a different world and I think that there's a lot of room for a whole new way of - of uh approaching research. And we should be open to these different forms of research and - and in particular we shouldn't be judging them um in terms of traditional research

Responding to a question about the separation of industry and academic design based on the rigour of the later but not the former, one interviewee countered that

I've also seen commercial work out there particularly say if they're large projects which might have reporting functions that are quite extensive where there's an enormous amount of documentation.

Particular processes such as academic peer review were seen to have changed some of the existing practices of scholarship in design as one interviewee noted

When I was teaching in the UK um my exhibitions counted because it was peer reviewed. Um and colleagues - things like books - international publication of a book counted as research. Um and the content didn't matter too much it was the fact that it had been published and it had been reviewed that mattered. Um but I'm aware that there's been a shift to um academic review as opposed to just peer review.

Thus, there was some evidence of the need for alternative forms of research to academic convention but also recognition that such recognition would be difficult to achieve.

D. Significance of artifact to text

Particularly in discussion of practice-based research there is a constant search for a balance between artifact and text. All interviewees were aware of the need to position product or artifact) and text in the thesis submission. Most were also reluctant to admit that the artifact could stand on its own without text as a representation of disciplinary knowledge, a claim made for the Fine Arts and other performance based fields. Stressing the interpretive ambiguity of the object by itself as a representation of knowledge, this interviewee said

You know personally I think that um re- research should be able to be explained beyond the article beyond the artifact. Um how much of the effort needs to be put into the explanation is something that's up for grabs I think but I don't think uh zero effort is um for me personally I don't think that that's suitable.

E. Research training needs

All interviewees saw postgraduate research programs bringing conventional academic skills to those designers
already possessed. These included exposure to multiple methods and methodologies, the finding and critical evaluation of sources, time management understanding of the ethics of research – moral not just administrative. In one case the need for projects that were socially responsible and also connected to the interests and values of students was seen as important. Also the possibility of publishing work in journals as an outcome of writing was promoted by one interviewee.

The need for training in academic argument was linked to limitations in the sequencing and narrative skills of undergraduate designers

I think within design a lot of things we do with students is about ideas and articulating ideas not necessarily sequencing those into arguments and presenting a well rounded defendable position on something.

It was acknowledged that given the non-textual sources of design precedent that finding and evaluating sources would require different skills to conventional literature reviewing. Responding to a question about such sources in film television and multimedia, this interviewee noted

I think that I’ve had conversations with people who’ve sort of said well that’s not really relevant that’s not - the industry that I’m looking at or the project that I’m doing doesn’t privilege those sources and (this and that) I don’t think that means you shouldn’t be looking there. And I don’t think that means you can’t find links

Responses such as this show the continuing tension between a ‘native’ version of design research and conventional academic design.

V. DISCUSSION

The limited scope of this paper has only allowed a limited analysis of the discourses of academic design available to design educators in an Australian higher education institution. However, even this small sample shows that a range of tensions and definitions exist in the field. Academic design is an emergent discipline which is still defining the relationship of theory to practice and industry academia relationships. This paper has argues that too many prescriptive and essentialist positions exists in the literature and greater attention should be paid to empirical studies of design perceptions. Among design educators, the proposal for an alternative disciplinary scholarship incorporating knowledge embodied in visualizations, artifacts, and non-textual sources is a return to the commercially familiar terrain. It is also a claim by individuals about the kinds of academic research communities of practice they wish to belong to. There is recognition of the competing discourses that may define design research and the ideological weight of taking a position on this. This paper claims that there is a need to interrogate academic design research on the basis of empirical investigation with design educators rather than theorizing definitions in the abstract. Further analysis of the interviews and further empirical studies of the interpretations of designers in similar institutions will provide useful complementary data and a greater potential for generalizations.

REFERENCES