

Practice, profession and project in interdisciplinary doctorates of design: new responses

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Abstract

The recent emergence of doctorates of design has generated debate about appropriate doctoral curriculum and submission formats. In response to the professional and practice-oriented dimensions of design, doctoral programs including project work, reduced text requirements, and purported industry relevance have developed in several countries. Often recruiting a distinct student cohort, such doctorates are a significant phenomenon in the UK and Australia, while limited in number in North America. Compared to traditional PhD submissions such doctorates purport to address professional and practice values deemed important to design. However, the concept of doctorates addressing professional development, practice and creative project work is still contentious for many fields including design. This paper examines the use of the terms profession, practice, and project work in alternative doctorates of design in three countries – Australia, the United Kingdom, and the United States. There is some discussion of the characteristics of these programs and the paper includes some examples of current and completed student projects in such doctorates. The paper concludes with some questions regarding the discourse of professionalism employed to describe doctorates of design.

Key words: practice-based, professional doctorate, project

Introduction

Roth suggests that academic design research still appears to be ‘an activity in search of a definition’ (Roth 1999, 18) and one possible reason for this definitional obscurity is the lack of consensus on what design as a discipline is. Nigel Cross claims that, ‘design practice does indeed have its own strong and appropriate intellectual culture’ (Cross 1999, 55), however the dispersion of design in faculties of architecture, engineering, computer science, fine arts and other schools works makes this claim more rhetorical than real. Three terms which are often used in relation to postgraduate design research are interdisciplinarity, practice and profession. How these terms are employed to differentiate design doctorates is the first subject this paper addresses.

Design Research and Doctorates

Several international conferences sponsored by the Design Research Society (DRS) on doctoral education in design (1998 Ohio, US; 2000 La Clusaz France; 2003 Tsukuba, Japan) have explored the diversity of offerings in doctoral design. Friedman (2000), for example, identified eight different doctoral models with degrees of focus on Fine Arts, Engineering and Technology – confirming, as mentioned above, the dominance of these traditions. In the related area of architectural doctorates, Moore (1998) examined 23 doctorate of architecture programs in the US finding diversity in curriculum and submission formats, which Moore suggested provided greater options for student choice and selection. Radu (2006) more recently has proposed that architecture could define the nature and content of doctorates of architecture and design according to the practice, pedagogic, and other aims of the field. Rust (2002), however, suggests that many doctoral degree distinctions, e.g. practice-based, professional, traditional, in design on closer examination do not translate into substantive

curriculum differences. However, the development of professional doctorates of design purports to meaningfully distinguish degrees.

Professional Doctorates

Lee, Green & Brennan (2000) argue that the site for the professional doctorate curriculum is at the intersection of profession, workplace and university concerns. The nature and scope of the research projects in the different professions offering such degrees (e.g. Nursing, Teaching, Business) would, in a best-case scenario, reflect these concerns. This triple concern has emerged as professional doctorates in a number of countries have developed. Maxwell (2003), for example, argues that the early development of professional doctorates in Australia (and the UK) has given way to a second generation of professional doctorates where 'the realities of the workplace, the knowledge and the improvement of the profession and the rigour of the university are being brought together in new relationships' (2003, 290). Whether such a professional discourse is appropriate for design is addressed below.

The proliferation of professional doctorates particular in the UK and Australia as competition for the PhD has given way to some considered reflection on the purported differences between the two models (e.g. Hodell, Street & Laing 2002). For the UK, Bourner, Bowden & Laing (2001) note the difficulty in distinguishing the PhD from professional doctorate as neither format is homogenous and variation across and within institutions. In Canada, Allen, Smyth & Wahlstrom (2002) point to a move among institutions to expand the PhD curriculum rather than develop professional doctorates in that country. They cite a number of reasons for this move, including continuing academic and professional questions about the status of degrees not designated PhD and the fact that some PhDs already accommodate professional practice and creative work (where relevant). In Australia, Neuman (2005) identified multiple

‘educational’ similarities between professional doctorates and PhD observing three contrasting features: target population, selection criteria, and charging of fees (particularly to international and other full-fee paying students). Below, we return to this question of distinctive student cohort, and particularly the recruitment of non-designers into professional doctorates as a recent trend.

Some doctorates in design and visual arts fields refer to the ‘professional’ focus of their programs but this is questionable. For design specifically, the designation ‘professional’ doctorate has debatable credibility given the lack of professional status of design disciplines (Chung & Whitfield 1999). For example, unlike its counterparts in the professions such as nursing, teaching, management, etc, the pretensions of professional doctorates in art & design to be addressing workplace (practitioner) issues are questionable. As Laing and Brabazon (2007) point out in relation to the ‘professional’ character of creative arts doctorates, ‘a space for professional doctorates in creative arts – rather than practice-based work - raises a serious epistemological issue: what ‘profession’ is actually being discussed, labeled and described in and through this qualification? While the ‘outcomes’ or ‘results’ are often challenging to existing concepts of artistic creativity and cultural production, they do not often have any immediate practical application in the way required by professional doctoral theses’ (2007, 256). Thus, the subtle intrusion of professional as a concept in the description of design doctorates is somewhat misleading.

The proliferation of doctoral design models has generated debate about the nature of research training and scholarship in design as a complement to the existing professional skills designers bring to the doctoral enterprise (Newbury, 2002). Such debates may be seen to coalesce into various (competing) ‘discourses’ (Durling 2002) currently articulating

doctorates in the doctoral design field. Three prominent themes have emerged in the literature: the place of (creative) project work in such programs, the degree to which professional development is an objective, and how practice and theory are combined. If the agenda for doctorates of design includes advanced professional development then this should translate into research training beyond conventional academic scholarship. Alternatively, as some institutions have developed this, if the professional or practice doctorates is an initiation into advanced professional skills for the non-designer (e.g. University of Baltimore).

Practice and projects in doctoral design

Although Pedgely and Wormald (2007) call it a 'misnomer' since all fields and disciplines would probably identify practice as an intrinsic part of research, the term practice-based research is widely used to refer to research programs in art and design. Dallow (2003) observes that the possible relationships between practice and research allow for at least three specifications – practice-led, practice-based, and practice-oriented (p.53). Focusing his attention on the practice-based category, he claims to focus on 'aspects of contemporary arts research which are not merely oriented towards practice, but those approaches which are quite literally based upon or located in the specifics of the 'problem' posed (op.cit.). Such a 'localization' of the research in a specific problem (and resolution) would constitute something of a challenge to the convention of research to aim for a degree of generalisability. The inclusion of project work (designed artifacts, studio work, etc) in the doctoral submission seems in some cases to be a *de facto* demonstration of the professional character of the doctorate.

Practice-based doctorates of art and design challenge students as they require practitioners to reorient their practice to academic constraints (Hockey 2000; 2003; Hockey & Allen-

Collinson 2000). Prentice (2000) suggests practice-based research in art and design represents an opportunity 'to develop new models that replace the equally limiting and worn stereotypes of the lone researcher in the arts and humanities, and the scientist as a member of a directed project team' (2000, 532). Project work as part of the doctoral submission is an expression of this new model. Some academics view the incorporation of creative project work in design doctorates as a particularly appropriate reflection of the field's real world concerns (Dallow 2003; Hughes 2006; Younes 2006). This incorporation of project work plays out in the text and rhetorical form of the doctoral submission leading to 'hybrid genres' unlike existing doctoral formats (Hughes 2006, 296).

Two recent examples (title and abstract supplied) of practice-led research degrees incorporating project work (from Sheffield Hallam University, UK¹) give some idea about how localization of the problem, project work and generalization have been addressed in very divergent design contexts both craft and science/technology oriented

Transmitting craft knowledge: designing interactive media to support tacit skills learning PhD Sheffield Hallam University

This research used a practice-led approach to explore, from the perspective of an interactive media designer, the problem of how to understand and transmit the practical knowledge of skilled craft practitioners. The most significant problem addressed in this research is how to elicit the practical knowledge of skilled craftsmen and translate it into a learning resource ... The central problem for this research is, from the perspective of a designer of interactive media, how to understand and transmit the expert knowledge of skilled craftspeople, with particular interest in craft skills that may be disappearing even though there are people interested in preserving those skills and learning them. For example, many traditional rural skills are essential for preserving our heritage of buildings and other aspects of rural life, but there are few people left to pass on the knowledge and learners do not have the time for traditional apprenticeships (Heritage Lottery Fund 2002). My main aim is to develop a body

¹ Thanks to Professor Chris Rust for supplying these two examples

of knowledge to assist with the development of interactive learning materials that support learning of craft skills.

An Articulated Skeletal Analogy of the Human Upper-Limb

Graham Paul Whiteley (Practice-based PhD Sheffield University, 2000)

Currently available upper-limb prostheses do not meet the needs or aspirations of the amputee. Many technical challenges have been given as the limiting factors on the further development of these prostheses. Generally developments have occurred as incremental developments on three existing moderately successful archetypes; the cosmetic, body-powered and myoelectric prostheses. Continued development on these archetypes appears to be further separating prostheses into those primarily considered cosmetic and those primarily considered functional. However, amputees have a need both for function and cosmesis from their prostheses. This thesis describes the development, implementation and evaluation of mechanical analogies of the skeletal components of the human hand and arm which have the potential to inform the design of a new generation of upperlimb prostheses integrating cosmesis and function in a single device. The research has been undertaken using a form of practice led design research methodology. This iterative methodology uses physical models for both evaluation and also as a means of encouraging end-user involvement in the design process. These evaluations are then used in subsequent cycles of research activity. The model embodies design principles that appear to have short and long term significance to the field of prosthetics. The production of a tangible model has not only aided evaluation but has also stimulated research in other centres into ways of actuating and controlling a future upper-limb prosthesis. Additionally, the mechanical analogy may have applications in the field of telepresence robotics, aerospace and the entertainment industry.

These two completed practice-led design doctorates (PhD) do not make any specific links to profession in their abstract. They do, however, indicate something of the scope of what is currently labeled the practice-based doctorate incorporating project work; further examples are also given by Wormald & Pedgely (2007). In the context of new doctoral formats, practice and professionalism are alluded to in design programs in Australia, North America, and the United Kingdom but the professionalism and practice – sometimes realized by project work – varies substantially.

Australasia (Australia and New Zealand)

In Australasia, it is the newer universities and those recently converted from technology institutes to universities who have been most prolific in developing such programs. In each case the 'professional' doctorate is contrasted with the PhD. Note the juxtaposition of practice, profession in the curriculum statement (abbreviated in the table below)

Griffith University Doctor of Visual Arts (Design)

This is a professional development program with an integrated program of independent research and coursework. It is designed for graduates seeking to extend their studio research and practice, and make original conceptual advancements within their chosen discipline. Graduates of the program will possess the necessary expertise to provide leadership in their respective fields through the quality of their professional practice, research skills and the ability to articulate a theoretical position within a visual arts discourse. Graduates will possess the necessary expertise to provide leadership in their respective fields in the quality of professional practice, research skills, and the ability to articulate a theoretical position within a visual arts discourse. Thesis is 8-20,000 words plus project component

Queensland University of Technology Doctor of Creative Industries (includes Fashion, Lighting, Multimedia, Sound, and Web Designers)

The course comprises two components—coursework and professional projects. Coursework is undertaken at the beginning of candidature and provides the essential conceptual tools candidates need for doctoral-level analysis and reflection on their professional practice and related contextual factors. Candidates will design, implement and evaluate three professional projects during the period of their candidature. The scale, scope and focus of these projects will be determined in consultation with mentors.

The inclusion of substantial coursework in professional doctorates and the reduced text requirements have made these, in some cases, the degree of choice for fee paying international and other students. In the absence of clear professional relevance of such degrees (e.g. Laing & Brabazon 2005), this economic characteristic has become significant. Thus, Neumann claims that 'capacity to pay rather than the underlying purpose and structure

of the degree' is the major differentiating factor between professional and traditional doctorates. Focusing on Australia and Design, Love (2003) notes the financial agenda for universities 'a university innovation by which universities are able to gain additional funding by attracting a different cohort of students to that targeted by more traditional doctoral education (PhD). Doctorates in design and visual arts disciplines alternative to the PhD are offered in a number of universities and often employ the term professional as a designation for their programs.

Auckland University of Technology (NZ): Doctor of Design (DDes)

http://www.aut.ac.nz/schools/art_and_design/our_programmes/doctor_of_design.htm

The recently approved AUT DDes shows an institution keen to provide a degree for recruits from other design-related areas into an 'interdisciplinary' program.

The Doctor of Design is an interdisciplinary Professional Doctoral Degree designed to instill advanced research and practice in Design and Business Innovations. Critical Research Methods and Analysis; Design Thinking; Brand and Business Strategies; and Design Theory, Culture and Contexts are some of the key focus of the DDes to prepare graduates with integrated insights and approaches for creating value and competitiveness in product, system and service innovations.

The D.Des. Program is suited to "experienced professionals in business, marketing and the creative industries". The Doctor of Design has a first year of coursework (four 30-point compulsory papers) followed by two years for the Thesis. One of the coursework units is preparation for the doctoral proposal. Candidates may use work-based projects as research topics for their thesis. Entry criteria include the applicant having 'at least five years' experience in design practice or in a comparable and related area'. As the program has just initiated no details are supplied of current candidates.

Swinburne University (AUS) Doctor of Design (Professional Doctorate)

<http://courses.swinburne.edu.au/Courses/ViewCourse.aspx?id=15362>

The Swinburne DDes is offered alongside the PhD and Masters (Research) program. Barron, Anderson & Jackson (2005) describe its genesis and its role as a catalyst for the continuing development of project-based research and designing as a scholarship. The authors acknowledge that ‘The DDes, while called a professional doctorate, could better be described as a practice-based doctorate and, as discussed later, is focused on a particular type of practice — the generation of knowledge through product’ (2005, 66). The embodying and representation of knowledge in the (designed) outcome is a somewhat contested area in current debates around design research.

The program requires a project outcome and reduces text requirements accordingly. Judging by existing submissions publicly available through the Australian Digital Thesis (ADT) archives the text component ranges between 20,000 – 30,000 words. The program recruits students into a one-semester research induction program at the end of which students have hopefully developed a research proposal and can be assigned to a relevant supervision team. The research induction program provides an overview of research methods, topics in design and research skills training. Aimed at practicing designers there have now been a number of submissions and continued enrolments.

North America

In North America, which has the longest history of awarding doctorates in design disciplines, beginning with Illinois Institute of Technology, the inclusion of creative work and professional emphases into a professional or practice-base doctorate remains a peripheral enterprise. Certainly it is common parlance in the US system to talk of the Masters degree as the limit for advanced professional training and the PhD. Notwithstanding, at least three institutions – the University of Baltimore (Doctor of Communication Design), Washington

State Spokane (Doctor of Design), and Harvard University (Doctor of Design and PhD), have explicitly differentiated an alternative doctoral format from the conventional PhD curriculum.

University of Baltimore (US) Doctorate in Communications Design (DCD)

http://iat.ubalt.edu/dcd/dcd_student.html

This is clearly offered as a professional entry qualification for student from disciplines other than design and therefore not equivalent to other PhD or professional doctorate programs such as those as Washington State University. The DCD is identified as a 'first professional degree' requiring a minimum of 48 hours of coursework beyond the Master's degree.

Students specialize in one of four areas: user research, interaction design, government and public-sector applications, and educational applications. Students are also required to submit a major project showing 'a high degree of competence' in one digital technology. No prior background in design is required and the degree would be completed over four years (12 credits p/yr x 4).

Two examples of (completed) student work (with some links to web-based resources are offered. Three examples are noted below:

Go Fish (Steve Guynup)

Can a first person shooter engine be transformed into a non-violent educational game? From a developer's perspective, what are the primary differences between playing and learning?

These are questions addressed in his project, Go Fish.

Low-literacy Search Behavior (Angela Colter)

As more and more health information becomes available to people online, the more we need to step back and question whether or not this information is truly available. In an effort to understand how we can improve the presentation of online material to be the most effective, Angela Colter studied the search behavior of low-literacy individuals.

The relationship between the text and project is described in the following terms 'The project must be a significant, useful and executable work of application that demonstrates ability to apply professional skills of design and expression, to analyze a problem, to define an audience, and to integrate content, medium, and market ... each project must include a well-developed, reflective written discussion which will include an audience and market analysis and a business or implementation plan, along with a rationale for the approach taken and a discussion of possible alternatives'. Thus, the Baltimore DCD is discipline specific degree for advanced professional development, emphasizing market and business analysis. It attempts to recruit and train non-designers and includes compulsory project work.

Washington State University (US): Doctor of Design

<http://www.spokane.wsu.edu/academic/design/ddesoverview.html>

Washington State University offers a similar 'professional' characterization while emphasizing the equivalence of DDes with the PhD, and other 'professional' aspects of their program, 'the D. Des focuses on applied research and emphasizes the advance of knowledge in the design disciplines. It is intended for persons who are well versed and professionally advanced in the design profession and who seek to make original contributions to their fields. The D. Des addresses a demonstrated void in design education by specifically bridging education, research, and practice within a philosophical and pedagogical framework of interdisciplinary inquiry and critical synthesis. The D. Des educates students so that they will become more valuable to academic, business, and government organizations that require greater artistic, scientific and investigative skills'. Interdisciplinarity for WSU addresses relationships between Architecture, Landscape Architecture, Interior Design, and other related disciplines.

The Doctor of Design (D. Des) program is intended to advance both the “art” and “science” of design. There is no contemplation of project work as part of the submitted outcome although a series of journal articles is a possibility. The D. Des offers three areas of concentration: 1) History, Theory, and Criticism, 2) Physical Design, and 3) People and Place. These concentrations fulfill specific needs in the design disciplines while at the same time building upon faculty expertise at Washington State University. Candidates must possess a Master’s degree to enter the program and may come from a variety of academic and professional backgrounds. Current students in the program (and their projects) listed on the site are

Maryam Afshar (Master of Industrial Design, University of New South Wales; Bachelor of Arts Industrial Design, Iran University of Science and Technology): Interdisciplinary research to connect the relationship between humans and the objects they create, emphasizing compatible design.

Meaghan Beever (Master of Arts in Interior Design, Washington State University Spokane; Bachelor of Science in Psychology, Hillsdale College, MI): Mapping cognitive processes to points of creative discovery in a prototypical design process. Focusing on "figural synthesis," the process of using mental imagery to manipulate shapes and forms and recombine them in meaning and even creative ways.

Amber Joplin (Master of Arts, Design, Housing & Apparel, University of Minnesota; Bachelor of Arts, American Studies, University of Minnesota): Creating intentional communities for individuals with special needs, while integrating the processes of self-directed community creation with best-practices for health, architecture and regulatory information.

Isil Oygur (Master of Science in Industrial Product Design, Istanbul Technical University; Bachelor of Industrial Design, Middle East Technical University): Redefining the role of designers, especially industrial designers, in today's collaborative teams. Comparing contemporary industrial design practice with past history to uncover necessary reconstruction in the profession, and better address the needs of the future.

Although the program claims that ‘potential students come from a professional orientation rather than a research orientation’ this would imply that their previous Masters degrees did not address research and/or that they had spent some substantial time in industry prior to returning to study. The Foundation Courses will be required of all students and composed of 19 semester hours of graded coursework. In relation to the dissertation the notion of profession again occurs, ‘This scholarly account must advance the body of knowledge, and the art and science, of the declared disciplines. Toward this end, the student must clearly establish the implications of the dissertation on the endeavor of design as a professional practice’

Harvard University GSD: Doctor of Design (DDes)

<http://www.gsd.harvard.edu/academic/ddes/>

Harvard’s Graduate School of Design focuses on the broad built environment disciplines of architecture, landscape architecture and urban design rather than those design disciplines of smaller spatial and material scope, such as industrial or product design. Both the PhD and DDes programs involve coursework while the DDes involves a greater body of coursework. Candidates often Harvard describes the DDes as ‘a doctoral program that focuses on applied research and emphasizes the advancement of knowledge within the disciplines of design and related fields. The DDes is intended for persons who wish to enhance a higher teaching and as also to pursue advanced professional careers’. In both the Harvard and WSU cases interdisciplinarity is referred to and developed through the coursework component and multiple disciplines addressed in the relevant school of faculty.

The site (accessed August 10, 2008) lists a mixed international and North American background cohort of twenty seven current DDes students all with extensive teaching and

practice backgrounds (including often masters degrees from the US); the alumni page lists 102 graduates. The brief descriptions of student projects include topics that would elsewhere be found in conventional PhD programs. One (DDes) 'typical' alumni profile is noted below

Carlos A. Cardenas holds a professional Bachelor of Architecture (Universidad de Los Andes, 1996) and received a post-graduate Diploma in Pedagogy of Technique (ETSAB-UPC, 1998) and a post-graduate Diploma in Multimedia Design (Universidad de Los Andes, 2002). He received a Master in Design Studies degree (with distinction) from Harvard Design School (2003), in the Digital Media and Production Environments concentration. Carlos was Adjunct Professor in 2005 at the Product Architecture Engineering program at the Stevens Institute of Technology in NJ, where he taught interaction design and digital media courses. He has been guest critic and lecturer at MIT, Cranbrook Academy of Arts, Wentworth Institute of Technology and Northeastern University among others. Before arriving to the GSD he was a full time faculty member at Universidad de los Andes, in the School of Architecture and Design, teaching studio, digital media and building technology courses. Current research interest focuses on the role of 3D parametric modeling environments and their impact on the processes of design, fabrication and construction of the built environment.

One distinctive feature is the extent to which projects recruit a range of disciplinary sources, e.g. healthcare, religion, etc. into projects about urban, landscape and built environment projects, among others. Thus, in some respects the program appears to recruit highly visible, experienced architects into projects exploring a wide range of design fields in a diverse range of human and built environments, who then may return to (advanced) practice.

United Kingdom

In the UK and to some extent in Australia the designation of choice for art and design degrees incorporating project work is the 'practice-based' doctorate although the term studio research is also used. In 1997 the UK Council for Graduate Education examined practice-based doctorates in the creative and performing arts (UKCGE, 1997), canvassing a wide range of views and aiming for some consensus. The report suggested a consensus on the need for a

written thesis (between 30-40,000 words) and a creative work of equal weight and significance to the text, and the advancement of knowledge is achieved partly by practice; a reduction in word length merely on the basis of the inclusion of coursework subjects was not viewed as an acceptable pretext for the equivalence of a practice-based with traditional PhD.

In the UK, Candlin (2000) suggests some of the current variation in submission formats that currently exist in practice-based doctorates 'The length of the thesis also varies substantially, from a minimum of 10,000 words at Brighton University to a maximum of 80,000 words at the University of Hertfordshire. In some institutions the written component can take the form of an exhibition catalogue supporting the work, while in others it is more akin to a conventional doctoral thesis with students receiving supervision from the philosophy or art history departments' (2000, 97). Candlin finds fault in the UKGCE report in that images cannot stand alone as representations of research work but must be contextualized with text. This she argues reinforces the theory-practice divide which continues to inform institutional responses to practice-based research. This variation is both flexible and responsive to creativity while also raising questions about the comparative value of project work.

Northumbria University (UK): Design Practice (Doctorate)

<http://northumbria.ac.uk/sd/academic/scd/newpostgrad/>

Practice-based doctorates in design disciplines are common in the UK as alternative submission formats to the PhD. That is many institutions (Royal College of Arts (RCA), Goldsmiths London University, etc.) offer a practice-based or studio option for the PhD incorporating project work and reduced text requirements. Northumbria's recently introduced Doctor of Professional Practice (DPP) takes a different approach.

The DPP is clearly offered as an advanced professional practice program with a portfolio assessment and support document (15, 000 words). This on-line distance-learning course is run over 3 years (P/T 5 years) and has a taught first year shared with the Design Masters course, covering subjects such as Research Principles, Creative thinking and Intellectual Property. The third semester focuses on research bridging modules including Project Management and Systems Thinking. The recruitment profile notes a focus on candidates in 'design-related professions', a profile similar to the AUT (NZ) and University of Baltimore (US) models.

This course is for those practitioners with 2+ years experience in a design related profession, who want the opportunity to develop higher level thinking skills while continuing to practice, with a view to enhancing their personal career and professional entrepreneurship. This Professional Doctorate will enable the development of role and career opportunities in, and towards, upper management, both commercial and academic, including: Strategic planning, Global project community management, New knowledge development and resourcing, Market innovation.

At Doctoral level, assessment involves a publishable Portfolio, with a support document (not normally to exceed 15,000 words), to be orally defended at the Viva. The Portfolio and support document enables practitioners to demonstrate their ability to engage successfully in advanced scholarship, extend the forefront of the discipline, and produce work of a publishable quality. No alumni profiles were available as the course has only recently been accredited.

Discussion

The development of doctorates of design that more adequately respond to practice and profession has been a global phenomenon. The place of project work in such doctorates varies as does the sense(s) of profession purportedly addressed. A move in some institutions (Baltimore, Auckland University, and Northumbria University) to recruit candidates from

design related or non design professions has emerged as a particular direction for such programs. In these and some other cases (e.g. Swinburne University), the incorporation of project work is seen to be an intrinsic part of the creative and profession-oriented direction of the program and, as mentioned above, has become a common studio or project-based option in PhDs in the UK (and Australia). In other institutions (e.g. Harvard University, Washington State University) the professionally oriented doctorates of design rely on a more rhetorical link with industry as they do not incorporate project work and emphasize comparability with the PhD in principle and practice. They may recruit seasoned design professionals and academics into interdisciplinary programs and projects with broad scope and resources demands (e.g. Harvard University).

The professionalism and disciplinary status of design remains an incomplete project. The somewhat tenuous link between the profession, practice and industry in some doctorates of design suggests a rhetorical ploy of doubtful practical significance. A phenomenon already noted in the extant copious literature on professional doctorates in other fields. While the 'practice orientation of a degree seems less contentious as Pedgley and Wormald (2007) have shown it also may be a somewhat empty term; the same may also be true of allusion to design professions. Perhaps design fields and institutions should clarify their curriculum and mission statements before further doctoral differentiation becomes confusing.

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