

**Form and Structure
of the
Doctorate in Design:
Prelude to a Multilogue**

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**A Research Skills Working Paper
Centre for Design Innovation
Swinburne University of Technology**

2014 Reprint

This article was originally published as a book chapter. Page numbers inserted in the running text conform to the original publication. Please cite as:

Friedman, Ken. 2000. "Form and Structure of the Doctorate in Design: Prelude to a Multilogue." *Doctoral Education in Design. Foundations for the Future*. David Durling and Ken Friedman, editors. Proceedings of the La Clusaz Conference, July 8-12, 2000. Staffordshire, United Kingdom: Staffordshire University Press, 369-376.

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Form and Structure of the Doctorate in Design: Prelude to a Multilogue

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Abstract

The form and structure of the doctorate in design involves challenges and questions. This includes shaping a common vocabulary, not to agree on every issue, but to understand one another. The issues include the form and structure of the doctorate itself, the form and structure of doctoral programs, and the form and structure of research. This paper identifies eight kinds of doctorates. It examines supervision, advising and administrative support for doctoral students and doctoral programs. It considers the varieties of research we undertake and calls for the higher level study of research methodology. Systematic inquiry will produce a rich overview of questions and issues. This will shape a context for robust solutions. My co-chairman David Durling asked me to prepare a short paper for the conference on the issues of form and structure. This paper attempts a reasonable -- but not comprehensive -- examination of the central questions we must address in developing robust forms and structures for doctoral education in design..

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Form and Structure of the Doctorate in Design: Prelude to a Multilogue**From Ohio to La Clusaz**

The 1998 Ohio conference on “Doctoral Education in Design” occasioned a serious international discourse. “Global in extent and pluralist in character,” (Doordan 1999: np) the conversation has continued in online debate and dialogue, at research conferences in Helsinki and Milan, and now in La Clusaz.

One of the most important aspects of the Ohio meeting was that it enabled international community of design educators to find each other. Some of us already knew one another by email or through writing. Some of us had met earlier at conferences. We were already interested in one another and in mutual areas of concern.

Even so, this often seemed to be a relatively remote interest. It involved one-to-one relationships among a few friends. It involved gleaning ideas and material from meetings and conferences that we could apply to our own work in teaching, research, or writing. After each meeting, most of us returned to a local environment with little encouragement for pursuing the core issues of design research.

While no one discouraged our interest in design research, good research demands a context. Those of us active in the day to day work of teaching design generally find ourselves immersed in a milieu oriented toward teaching and practice. Those of us who in other research fields face the demands and challenges of research programs in a different context. Despite a good research environment, we pursue design research on our own.

The context of research is vital to a field. Even in strong research universities, the demands of teaching and practice in any field take from the time that research requires. In the context of a research environment, however, the perpetual pull of collegial challenge and the push of the requirement for research and publication keep us active. This has not been the atmosphere of departments in design and art (Friedman 1983a, 1983b, 1997). Alternatively, better said, this has rarely been the atmosphere until recently. Things are beginning to change, and the Ohio conference served as a vital fulcrum for that change.

In Ohio, we began to identify important ranges of common concern. Participants shared diverse experiences and insights on the challenges arising from the development of doctoral programs in design around the world, and considered the benefits these offer to the field of design. Beyond this, we came to realize several issues that are vital to a growing field.

Among these issues are,

- * The way in which doctoral education is inevitably linked to the development of a maturing research field

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- * The need for doctoral candidates to staff the research endeavor, contributing their own vision to the field while building their own research programs

- * The importance of doctoral programs as a social context within we can focus our own research

- * The vital importance of a demanding research milieu to keep our research lively and honest through the concern of colleagues who challenge our findings and discuss our work

- * The healthy effect of a lively research program on the teaching programs, practitioner programs, and professional development programs in a department

- * The need for doctoral candidates to staff the research endeavor, their own vision to the field while building their own research programs

- * The value of a network of doctoral programs in creating the larger field

- * The central importance of such a network in hosting and maintaining a rich network for scholarship and contribution to the larger field

- * The need for a network out of which a range of field-wide activities can grow

- * The need for a rich range and variety of journals, conferences, associations, research projects, and other nodes that serve to anchor the network and provide the content of the discipline

All of these are linked to the growth of doctoral education.

Klaus Krippendorff (1999: 213) identified the importance of a field to doctoral education in a paper that identified a growing field with paradigms, institutional infrastructure, new kinds of problems, jobs, a body of literature, a community of scholars and practitioners, and professional associations. He noted that “Ph.D. education [is] only one feature in these concerted developments. . . . it cannot succeed without parallel efforts to build institutional, literary and community support.”

I will propose a parallel equation. These other attributes of a rich field cannot succeed without doctoral education. Doctoral education is necessary in creating the larger context required by the field and it is necessary if we are to develop the scholars and practitioners who will staff that growing field and become its population.

The research field specifically requires education for the Ph.D. The field as a whole requires other forms of doctorate. I will discuss eight of these below.

One important aspect of the Ohio conference was the way that it seemed to signal a sea change in the growth of our field. After Ohio, loose networks began to form slightly tighter bonds. We observed communication in the field grow richer. New media, new communications vehicles, new organizations, a new sense of purpose started to appear. Some of these had long existed, for [End page 371] [Start page 372] example, the Design Research Society. They began to internationalize and attract new members. Others were new, for example, the European Academy of Design, and the Design Journal.

Although these existed before the Ohio conference, the time was right for developments in the field. The Ohio conference became an important symbol of new development through good timing, a wise choice of issues and the publication of a monumental proceedings (Buchanan et al. 1999).

At the Milan conference, the organizers (Manzini et al. 2000) drew frequent attention to the vital new network that has emerged. Within this “network of designers, researchers, producers, and users, the design research community constitutes a network of individuals and institutions. This network connects individuals and creates a platform of interaction to encourage continuing dialogue among researchers who operate in different ways and in different domains. What this community has in common is a commitment to building a design research culture, which can contribute to a deeper understanding of design itself.”

The line from Ohio to La Clusaz frames these issues. It embraces a richer network of colleagues in so many places that to name a few will neglect the many. In this summary paper, I will instead draw attention to the network – and to the future we are building together – as the background to a consideration of the form and structure of the doctorate in design.

The form and structure of the doctorate in design

Over the past two years on DRS and elsewhere, four themes have repeatedly verged on into the next. This has partly been the case in this debate. These four themes have been (1) philosophies and theories of design, (2) foundations and methods of design research, (3) form and structure for the doctorate in design, and (4) the relationship between practice and research in design.

This spring, the DRS discussion list saw a major debate on one variety of doctorate, the kind of doctorate offered in the UK under the rubric of the “practice-based Ph.D.” Because the debate at times involved all of these themes, it makes for interesting reading (DRS 2000). My posts addressed many specific issues on form and structure of the doctorate.

At this point, debate has had the healthy function of beginning a clarification of issues. It is clear that the doctorate has different forms, structures, and meanings in different disciplines, different fields, and different universities. What has also become clear is that doctoral traditions vary by nation and region, and that colleagues from different domains may use the same words with quite different meanings.

The task we now face is answering unanswered questions, clarifying unclear issues, and establishing a common vocabulary of knowledge and understanding. In this sense, I am not calling for unanimity on all issues. I am asking for clarity and attention to meaning. There are many ways to achieve the [End page 372] [Start page 373] many goals of a community that is, necessarily, “global in extent and pluralist in character,” (Doordan 1999: np).

One foundation for the future is a basis in common understanding. It is not necessary to agree with each other on every point. It is necessary to understand what we are saying when we raise the points we raise.

Challenges and questions

At this point, I want to introduce a number of challenges and questions that deserve consideration.

1. Nature and definitions of doctoral degrees

In the literature and in recent debates, I have been able to identity eight general models for a doctorate in design (Friedman 000604). These are:

1.1 The traditional or “old” Ph.D.

1.2 The innovative or “new” Ph.D. developed for the demands of design.

1.3 The technical doctorate with a title such as Dr.Tech, Dr.Eng., and so on.

1.4 The professional doctorate in the practice of design with a title such as D.Des.

1.5 A studio doctorate awarded for fine art or design practice with a designation such as DA or DFA.

1.6 A practice-based Ph.D. in art or design as a variation within the framework of the traditional Ph.D.

1.7 The studio Ph.D. awarded for studio practice in fine art and design supported by some form of explanatory essay or contextual document.

1.8 A practice-based Ph.D. in design distinct from both the studio Ph.D. and the traditional Ph.D.

Of these, the first six are valid. The last two are questionable, one because the idea makes little sense and one because it doesn't seem to exist at all.

Each of these degree has specific qualities, characteristics and attributes. To develop doctoral education in design, we must examine these. While unanimity is never possible, in this area of defining degrees, we can and should begin to develop common definitions.

Form and structure do not merely involve the form and structure of the degree itself. It also involves the form and structure of the departments and programs that offer the degree. Thus, we must consider the challenges facing doctoral programs in design. [End page 373] [Start page 374]

While this list is far from exhaustive or inclusive, we must begin by focusing on the capacity to handle and support doctoral students (Friedman 000425, 000428).

2. supervision, advising and administrative support.

2.1 A solid, supportive faculty

2.2 A well-trained research faculty for advising research doctorates

2.3 General faculty support for doctoral education

2.4 A department organized to provide proper curriculum development, seminar management, and research supervision

2.5 Available support from other departments and programs if needed

2.6 An environment with senior doctoral students and post-doctoral researchers

2.7 Rich administrative support from experienced administrative staff

2.8 Good academic administration by program coordinators, program heads, and department heads as well a good academic administration by professors whose responsibilities embrace coordination and headship.

2.9 Administrative and program support at the college and university level

Finally, we must begin to untangle the rich but difficult web of research issues and method.

Richard Buchanan has distinguished three kinds of research. These differ from each other by level, by purpose and by scope. They are

1 Basic research

2 Applied research

3 Clinical research

To progress in our field, we must begin to understand the varieties of research we undertake, and recognize the reasons for any specific choice.

It is also vital to begin a tradition of investigating method (Friedman 000606). This involves not merely the study and application of research methods, but the higher level study of methodology.

Design is an interdisciplinary and integrative process constituting a professional field and an intellectual discipline. The six-domain model of design (Friedman 000418) clarifies the nature of design as a discipline. Design draws on (1) the natural sciences, (2) the humanities and liberal arts, and (3) the social and behavioral sciences and as a field of practice and application drawing on (4) human professions and services, (5) creative and applied arts, and (6) technology and engineering. If this model is reasonable, this also opens the design field to methods [End page 374] [Start page 375] from all these areas.

To date, only one scholar has attempted a survey of the rich scope and scale of design research methods. Pirkko Anttila (1996) describes the variety of methods can be applied to design research, demonstrating the uses of dozens of specific methods from a wide range of disciplines. She shows their application in design research, and she proposes a systematic series of tests and choices on the basis of which the individual researcher can adopt, apply and – if need be – adapt specific methods.

Anttila's pioneering work must be extended in years to come to offer design research – and doctoral candidates – an encyclopedia of methods on which to draw.

Beyond this, we must deepen the comparative study of methodology. Despite a growing interest in method in our field, the study of method in a comparative and analytical sense has barely begun. Methodology is the study of method. Mautner (1996: 267) defines methodology as "1. The discipline which investigates and evaluates methods of inquiry, of validation, of teaching, etc. 2. a theory within that discipline. Note that methodology is about method and not the same as method."

Research is at the heart of the doctoral enterprise. To meet the challenge of appropriate form and structure, we must establish a solid foundation for research methods in design by developing a systematic inventory of methods. To do that, we must also engage in the systematic and analytical study of methodology for our field.

Call to a multilogue

A multilogue is a neologism that extends to the members of fields or networks the sense of a larger, durable conversation implicit in dialogue.

When co-chairman David Durling asked me to prepare a short paper for the conference on the issues of form and structure I began by assembling and summarizing my notes in the various studies and debates. At the end, however, I realized that these are the opinions of one scholar in a field. While I have worked to organize the issues and pose questions in a systematic way, I am far from convinced I have not yet developed the issues as fully as the field requires.

As I struggled with this task, I realized that we would have among us at La Clusaz a powerful assembly of scholars, researchers, and practitioners. Among us all, a systemic inquiry will begin to produce a rich overview of the questions and issues, and the beginnings of a rich range of robust solutions to the problems we identify.

In this presentation, therefore, I have tried in a reasonable but not comprehensive way to identify the central questions we must now address in developing robust forms and structures for doctoral education in design..

[End page 375] [Start page 376]

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About Ken Friedman

Ken Friedman works at the intersection of design, management, and art. His research focuses on strategic design and value creation for economic innovation. Friedman has done research in theory construction, research methodology, philosophy of design, doctoral education in design, knowledge management, and philosophy of science. He has done design policy studies for Australia, Estonia, Latvia, Lithuania, Norway, and Wales. In 2007, Loughborough University awarded him the degree of Doctor of Science, *honoris causa*, for outstanding contributions to design research.

Friedman is Chair Professor of Design Innovation Studies at Tongji University College of Design and Innovation, and University Distinguished Professor at Swinburne University of Technology Centre for Design Innovation, where he formerly served as Dean of the Faculty of Design. He is Adjunct Professor at the James Cook University School of Creative Arts, and Visiting Professor at the University of Technology Sydney Business School.

Friedman is Editor-in-Chief of *She Ji. The Journal of Design, Economics, and Innovation* published by Elsevier in cooperation with Tongji University Press. He is Chief Investigator of the Design Capacity Mapping Project for the CSIRO Future Manufacturing Flagship. He is co-editor of the MIT Press book series *Design Thinking, Design Theory*.

Friedman is a practicing artist and designer, active in the international laboratory of art, design, music, and architecture known as Fluxus. In 2015, James Cook University will tour an international exhibition of Friedman's Events.

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An extended biography and bibliography of Ken Friedman is available in PDF format at:

<http://swinburne.academia.edu/KenFriedman>

Suggested Citation

Friedman, Ken. 2014.
***Form and Structure of the Doctorate in Design.* Reprint.**
A Research Skills Working Paper.
Melbourne, Australia: Centre for Design Innovation,
Swinburne University of Technology.

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Originally published as:

Friedman, Ken. 1997.
“Form and Structure of the Doctorate in Design:
Prelude to a Multilogue.”
Doctoral Education in Design. Foundations for the Future.
David Durling and Ken Friedman, editors.
Proceedings of the La Clusaz Conference, July 8-12, 2000
Staffordshire, United Kingdom:
Staffordshire University Press,
pp. 369-376.

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