

Introduction

CAMERON

Since the Ohio Conference on Doctoral Design Education in 1998 much has happened.

Most significant is that Design PhDs, including ones that are distinct to the nature of design practice, have become prevalent, but primarily outside the US. This suggests that the obstacles to practice-oriented design research in the US are not philosophic but pragmatic.

We at the School of Design at CMU have formulated opinions about those pragmatic constraints, and structures for PhDs that renegotiate those constraints. However, we want to check in with our peers on our 'crit' in order to validate our restructuring. Hence this event.

And by the way, we have not communicated this well, but we did mean 'critique' (as in Critiquing the North American Design PhD) in the sense of a design studio crit – which can be positive, and must be constructive – not 'criticize.'

One of our observations is that the US university system is centered on what could be called nested autonomy. Institutions are only ever lightly regulated in ways that allow each institution to function in its own way. Within those institutions, systems tend to remain highly federated with respect to disciplines – colleges, schools, even departments, get to determine the nature of degree programs. And within those disciplines, cultures of tenure, which often extend to untenured faculty as well, allow complete autonomy with respect to what occurs behind the closed door of the class-room – due diligence having been done at the hiring phase.

This system has its merits and detractors, but a major issue is the limited capacity for institutions to collaborate, in ways that work in more emerging domains such as design research could and should benefit from. Consequently, a particular agenda we have, which we will engage in the last session today, is the creation of networks that allow design research candidates to interact more regularly and to greater effect. Given that this is already being recognized in Scandinavia and Australia, US networks must not perpetuate US exceptionalism.

But I have skipped over an important question: why promote practice-based design research degrees? It cannot be merely catch-up to the international market. Our answers come from what else happened since the Ohio Conference:

- interaction design, service design
- design thinking
- social design
- climate change
- higher education economics

Design is more important, which also means that it has more responsibilities – both short and long term. Critical reflection is required about its processes and outcomes, but that criticality cannot occur outside of some responses to our current challenges. As Terry indicated, we are now determined not merely to have a PhD program in Design, but to use the privilege of such a program to further transitioning our societies toward more sustainable futures.

There is therefore an even greater demand than 15 years ago for design research. But there is also an urgency that that research occur in applied domains, by, alongside and feeding into professional practice.

Our opening session is therefore directed at this question of the distance between PhDs and practice. In some academic fields, the profession reads disciplinary journals. In others, the relation between research and practice proceeds by way of teaching. In design, in the US, even the latter indirect relation is often absent since ideally practitioners, without academic research activity, do the educating in studios.

Further, the not-for-profit status of universities and associated research ethics protocols on the one hand, and the shorter-termism of commercial corporations sponsoring research on the other, can obstruct the kind of applied critical research that design can, at its best, do.

HCI and Architecture has faced and found ways of negotiating these difficulties. So what can Design learn?

Pragmatically, the new Doctoral Programs in Design at CMU are responding by:

- a) having an emphasis on practice-based research in order to encourage candidates with practitioner background, who can then also teach studio while undertaking their PhDs, but with increasingly research-based perspectives
- b) initiating a DDes for mid-career practitioners seeking to use a guided research practice to redirect their professional life, though not toward academic futures.

What we have not determined is how to deal with:

- i) research funding
- ii) corporation-sponsored research topics
- iii) professional bodies as venues for bringing research to practice

Partly at issue in the relation between research and practice is the media of research. Modes of academic communication are rapidly diversifying. This affords opportunities for formats

other than the “Too Long Didn’t Read” Dissertation, ones that allow design research outcomes to be more easily memed into practice. This is topic of our second session.

Importantly, one of the other things that has happened between the Ohio Design PhD Conference and now, is the social and mobile Web 2.0, which affords not only different ways of disseminated research, but different ways of learning and doing research.

Consider for instance that if the aim of practice-based design research is to better enable practitioners to do research, then perhaps part-time, e-distance-based design research should be more the norm than the exception. A PhD usually entails a long withdrawal from the market – this is the source of its unique insights.

CMU is world-renowned for its online learning innovations. Can Design PhDs be MOOCed, and if so, should they?

In the end, the PhD, as the highest qualification awarded by a university, should be the zenith of the university’s responsibility for developing new, but justifiable, insights. That rigor comes from slow-moving evolution. But new kinds of research in new fields presented in new ways obviously raise questions of quality assurance.

At the CMU School of Design, we wish to engage with this issue by having regular public external reviews, following the model of RMIT, and external examination. And by having Symposia such as this in which we transparently debate these proposals. This will be the topic of our third session.

And as indicated at the outset, our last session will explore practically how to create networks that allow wide, critical benchmarking.

We are very excited that you have taken the time and expense to come to our Symposium. We wanted a deliberately focused conversation on quite pragmatic issues. Our way of communicating the event caused some to believe that we at CMU School of Design were breaking with and deprecating a conventional dissertation-based Design Studies PhD, which has been characteristic of our program over the last decade. But in fact we are merely diversifying our offerings and continuing with that pathway. The very strong interest in this event – which surprised us – suggests that it is timely, and that we must therefore finish the day with some shared outcomes that can better establish practice-based design research in the US.

LAURENE

I would describe myself as a friend of the School of Design at CMU – over the past 18 months I have had the opportunity to work with members of the school as a visiting professor. As outlined by Terry and Cameron this has been a vibrant time of critical reflection and redesign of the focus of CMU's design programs, including the PhD program.

As an outsider or recently connected academic to the North American design education systems and process and this has been a fascinating education for me. I came to CMU with over 10 years experience of advising and chairing design PhD programs at RMIT University – most of which have been undertaken through practice by practitioner researchers. Over the past 5 years I have had the pleasure of working with many of the invited presenters and others in differing capacities around doctoral education in design.

I'm old enough to remember when degrees in design were new. And over the years, our institutions, design programs, and industry and university expectations of faculty – have expanded to where graduate degrees are increasingly the norm. Students come to graduate degrees for a range of reasons –

- To retrain or learn about new modes of design practice – such as interaction design, or service design
- To learn about design when they come from other affiliated fields
- To up skill so that they can be better practitioners, or take up more senior roles in organisations
- And to pursue careers as academics.

So put simply designers engage in graduate education because they either want to be better practitioners, and/or academics.

Internationally there is a growing requirement for academics/professors to have higher degrees, and PhDs in particular. In Australia it is not possible to a position as an Assistant Professor – what we call a lecturer without a PhD no matter which discipline domain you work in. And this is increasingly the norm globally.

Not only must you have the degree above the courses that you teach, you must also have a PhD and be actively engaged in research. The term research is broad and includes practice – scholarly rather than purely commercial practice.

For those that work in more regulated education systems than the USA these issues have pertinence and have direct implications for design education – in systems often dominated by the discourses of science, the creative and applied arts and humanities can no longer make claims of difference and exception – they are having to stand up to the measures whilst also creating the structures to communicate and evaluate their contributions on their own terms. This is particularly the case in the UK, New Zealand and Australia – where

national research assessment exercises that evaluate balances of quality and impact are now the norm.

At the same time that these changes have been happening in Universities with regard to expectations of research and research education (PhDs) – there has also been a growing discourse around design research in the professions.

What once was dominated by research in the form of social sciences or marketing has expanded to include design R&D, and design research for broader social issues.

Design – conceived of as thinking – has become prevalent in the domains of business and management.

Digital technologies and ubiquitous computing have seen the rise of interdisciplinary research labs including designers in major corporations.

Service designers are being employed by corporations and governments to work outside of traditional design roles.

Design as research for the benefit of industry and society is growing in recognition and demand – and with that the demand for design researcher practitioners. In this way the design PhD is not purely a training program for design academics but also for design and its associated professions. This creates new demands for our PhD programs – they can no longer be dominated by discourses and practices of history or theory, and must engage with design in practice, through practice.

Across the UK, Australia and Europe – PhD programs, and networks have taken up this challenge - student in programs aren't nascent designers – they include leading practitioners – challenging themselves through practice based research to be better practitioners and researchers – able to address the wicked problems of contemporary design practice and its social and economic contributions.

In panel two – we will explore what these changes mean in how research is undertaken, presented and evaluated - *how can we educate design researchers who not only know about design but are able to enact this knowledge and expertise at this advanced level?*

These expansions of our institutional programs to include PhD programs is of course a resource challenge for us all. Not only do they require physical infrastructure, but also more challenging in the early days – they require academics to advise or supervise the student through the process, and still more to examine them. In recognition of this institutions have designed differing strategies to support the students and build robust communities. From regular public presentations, peer supervision, inter-institutional networks such as in Scandinavia and the UK, and in my own institution.

In the final session today we will hear more about these and explore how this might manifest here in the USA.

Last week I was in Barcelona, where RMIT has a research hub. Amidst their many activities they are currently preparing for the RMIT EU Practice Based Research Symposium – which my colleague Pia will explain more about later. This event will bring together 64 design and architecture PhD students from across Europe and Australia, there will be 4 public examinations – one of which includes a senior academic who has gone back and undertaken a critical reflection on his own practice in order to be challenged into the future.

This is just one part of my own institution – more students will do similarly in Melbourne in October. I know that if I were to ask each of the people here who come from institutions who have Design PhD programs how many students the numbers would grow exponentially.

This tells me that the discussion we need to be having here in North America is no longer one of should we or shouldn't we have design PhDs – because the phenomenon quite simply is that the rest of the world is, and it is growing.

Internationally PhDs for design academics is becoming the norm. PhDs for practitioners is increasingly the case as well. But these changes haven't happened overnight – they have been evolving in my own institutions for around 20years.

For me the greatest thing that all this signifies is that design is reaching maturity as a professional and academic domain.

The flow on from this for education and for design's contribution through this increase in advanced critical and inquiring approaches to design, including design in collaboration with other disciplinary domains, is the exciting and essential stuff for the future.