PhD in Art and Design

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PhD in Art and Design

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Universities around the world are now debating the PhD degree in art and design—and whether to award it. Among the central questions: Is this a research degree as in other fields or a degree for advanced professional practice? If it is a research degree, how should we define artistic research or design research? Should there be multiple models for the PhD degree or several? If there are several, should all degrees represent any common standards? As the world's leading journal of art, science, and technology, *Leonardo* has a crucial stake in the answers to these questions. Over three years from 2017, the Leonardo Symposium on the PhD in Art and Design will serve as a forum for expert inquiry and debate on the PhD degree in the creative arts, in design and in the interdisciplinary field of artscience.

THE LEONARDO SYMPOSIUM ON THE PHD IN ART AND DESIGN

Universities around the world are debating the PhD degree in art and design. What is it? Should they award it? If so, what standards and criteria apply to a PhD in such fields as art and design? Should universities move to the PhD in place of the MFA?

In the 1970s, the College Art Association (CAA) established the master of fine arts (MFA) degree as the terminal degree for professional practice in art and design. The MFA qualified people for teaching art and design at North American universities, including such top-ranked research universities as Stanford, Yale, University of Michigan or the many campuses of the University of California.

The MFA is not a research degree. It is a degree in professional practice. Since most universities accepted the CAA position on the MFA and there was no PhD in art or design at the time, the MFA has been a terminal degree for many years, the highest in the field, long predating the PhD in the creative arts [1]. While not the equivalent of the PhD as a research degree, it is deemed so for decisions on hiring, tenure and promotion up to the rank of full professor. The MFA is a degree in professional practice for art, design and some fields such as creative writing or theater performance.

In contrast, the doctor of philosophy (PhD) is a research degree. In many universities, the PhD in art and the PhD in design are research degrees, as in other disciplines. MFA students learn the practice of art or design. PhD students learn the practice of research. One question in the current debate is often confusing. What practice do PhD students study to earn a PhD in art or design? Should they receive a PhD for the advanced practice of art or design? Or should they master a series of robust research skills for advanced research in art or design?

The debate on the PhD for art practice began with changes to higher education in the United Kingdom, when standalone art and design schools and polytechnics merged into universities. Some art and design schools, such as the University of the Arts London, also gained university status. Similar transformations took place in continental Europe, as art schools and academies merged into universities or achieved university status. As these changes took place, many universities—including the new universities of the arts—began to question standards for academic appointment in university-level art and design programs. Universities typically require that scholars and scientists hold a PhD to qualify for university positions. When art and design entered the university, the question of the appropriate degree was on the table.

Artistic merit and professional experience were the key criteria for appointing teachers and professors at independent schools of art and design and the academies. In North America, this shifted to the MFA. In Europe, Asia and Australia, some universities now seek a PhD. As a result, many universities have established PhD programs in art or design to fill the perceived need. With the spread of such PhD programs around the world, the debate on the merit, need and proper design of such programs has now come to North America.

The debate is muddied, however, as people from different academic traditions use the same words in very different ways. This lack of clarity even applies to the words "academy" and "academic."

The label "academy" means one thing in academies that descend from the artisan craft guild tradition of the medieval workshop and the artist studio. It means

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something else in universities that descend from Plato's Academy.

Universities began with a curriculum anchored in the trivium and quadrivium—logic, rhetoric and grammar, followed by arithmetic, geometry, astronomy and music [2].

The sciences and the humanities use the word "academy" in very different ways than do art and design. Plato's Academy was rooted in Sophia—studies in episteme, the curriculum of philosophers. There were no art academies in ancient Greece. Artists studied techne—making, much like people who built ships, made pots or cut stone. In Europe, guild apprentices studied the making arts before becoming journeymen. Later makers studied in technical schools and polytechnics [3].

It is no wonder, therefore, that people who come from a culture anchored in art academies speak of the PhD in very different ways than those with a culture rooted in the research university. People from these two traditions generally do not know what people from the other tradition know. They do not know what the others mean when they use the same words.

Some artists and designers believe that universities award a PhD to designate the fact that the recipient is good at doing something. They don't seem to realize that the "something" that PhD graduates are good is the skill of research. Others, coming from a background without research training, don't recognize that research involves the ability to master and apply a range of skills. These skills differ across fields. Even so, they answer problems in a world outside the personal decision of the researcher. Many artists seem to believe that anything creative is a form of research. From this perspective, solving an artistic problem is as much a research act as solving a problem in chemistry, logic or history. There is a difference: An artist can decide that he or she has solved a problem. In such fields as chemistry or mathematics, the problem itself plays a role in determining whether a researcher has indeed solved it. Facts play a role, not only in the natural sciences, but in the social sciences, and in such fields in the humanities as history. Philosophy is a bit different, but no philosopher can decide alone that he or she has managed to solve a philosophical problem.

The question of the PhD for art and design, therefore, raises challenging issues. The first set of questions involves the nature of research, research training and the PhD. While PhD programs in the natural sciences, social sciences and liberal arts answered these questions long ago, the idea of awarding a PhD for professional practice complicates matters.

The difference between research degrees and practitioner degrees is relatively clear in fields such as medicine. Professional practitioners in medicine earn the MD degree, becoming doctors of medicine. Those who teach the clinical skills of medical practice, such as diagnostics or surgery, are people with an MD. Those who teach in the scientific disciplines related to medicine hold a PhD in such fields as anatomy, biology, biophysics, chemistry, neurology and pharmacology.

Because the curriculum leading to medical school is in great part dedicated to the natural sciences, undergraduate students headed for medical school take many of the same courses as those who go on to earn a PhD. The nature of medical research and medical education means that there is also some ambiguity in the system for qualified doctors with an MD. Following the MD, many physicians work toward board-certified specialties in a well-established series of advanced programs. The heavy emphasis on science in undergraduate training and professional education means that an MD degree is also an appropriate foundation for many kinds of research. The foundation for research may be different in nations where the bachelor's degree in medicine is the degree for professional practice. And there are examples of physicians with an MD who also earn a PhD to prepare for a research career.

In such fields as art and design, undergraduate degree programs in studio practice are different from programs preparing students for a research degree. Undergraduate courses in art and design fields emphasize studio work. In North America, general education requirements mean that art and design students undertake the same kinds of breadth courses as students in other disciplines, but undergraduate breadth courses are only the first step. In nations without a general education tradition, many undergraduate programs focus exclusively on studio skills for professional practice.

This foundation leads to a serious question. How can any research university build a research program for students with a background of professional practice skills from programs that do not teach or require research skills? This problem is fundamental to the PhD in art and design.

What is the PhD in art? What is the PhD in design? What should a PhD be in a field of professional practice? Should there be several kinds of PhD in art and design, or should all models involve generic research skills? Why pursue such a degree? What is the nature of such a PhD for research quality as distinct from the quality of art or design practice? How are we to evaluate PhD projects that present a wonderful work of art or music or a beautifully designed artifact in a PhD thesis that presents false truth claims, inaccurate facts or demonstrably inapplicable research methods?

Why are so many programs struggling and why have so many gone astray, graduating PhD students who are incapable of doing research and unable to supervise

research degrees? Why do universities and accrediting agencies permit problematic programs to continue?

While artists and designers are often interested in research, they often add research training to their training in art or design. In the past, artists interested in research often took a PhD in disciplines outside art. Would this still be the case today?

And—most important—does a PhD degree suggest some specific skills that all researchers require without respect to their specialty field?

Past studies [4] identified eight different kinds of doctoral degrees in art and design: (1) The traditional or "old" PhD degree; (2) different forms of innovative or "new" PhD degrees developed for the demands of creative and performing arts; (3) the technical doctorate with a title such as DrTech or DrEng in some areas of the creative arts, including digital media, software and design; (4) the professional doctorate in the practice of creative art, performance or design, with a title such as DMus or DDes; (5) a studio doctorate awarded for artistic practice or artistic research in fine art, design or performance, with a designation such as DA or DFA; (6) new forms of PhD in creative arts, performance or design that function as variations within the framework of the traditional PhD while being designated as practice-based degrees; (7) the studio PhD awarded for studio practice in creative or performing arts or design supported by some form of explanatory essay or contextual document; and (8) a practice-based PhD in creative and performing arts or design that is somehow distinct from both the studio PhD and the traditional PhD.

The fact that these different and divergent models exist for a doctorate in art or design raises additional questions. What are the proper dimensions of a doctorate? Is any doctorate as reasonable as any other for all purposes?

While the first international conference on doctoral education in design took place in Ohio in 1998 [5], a larger debate on the PhD for art and design is only now taking place in North American universities.

Because this debate has global implications, we will consider models of doctoral education from around the world. Is it reasonable to earn a PhD for an exhibition and a 20,000-word essay? Should doctoral programs admit students to research training programs with no undergraduate courses in analysis, rhetoric, logic or mathematics? Can undergraduate art and design students from studio programs succeed in doctoral work with no experience in the research or writing skills that form the basis for earning a research degree? Is it possible to award PhD degrees for capacities entirely different from those in any established research field?

In North America, an exhibition of artifacts with a short thesis is the basis for an MFA degree. In some universities in the United Kingdom, Australia and Europe, the same criteria apply to a PhD in art. Is it advisable to merge these two traditions?

One of the challenges we face internationally is finding new ways to enable collaboration between science and engineering with the arts, design and the humanities. This issue is beginning to influence the debate on the PhD in art and design.

One particular set of questions is also important. Universities hire researchers with the expectation that they can publish their research and secure grant funding for research programs. While statistics indicate that many people with a solid PhD do not publish, and others rarely secure grant funding, the record in art and design suggests that these fields rank at the bottom for publications and funding. The advent of widespread university rankings with an emphasis on publications and external funding make this question vital to the universities that hire people from new PhD programs.

These are questions to consider, and there are people with something useful to say, including experienced supervisors. This symposium begins with comments from scholar-practitioners with experience in doctoral education.

As these questions develop, we are learning that sorting out the answers is harder than it once seemed to be. The doctoral systems of North America, the European Union, Asia and Australia–New Zealand all differ in significant ways [6]. These differences have been partially obscured by the common traditions and shared cultures of the disciplines in which PhD degrees have been common. The introduction of new research fields combined with a call for practice-oriented PhD degrees highlights the differences between and among higher-education systems in a new way.

There is still a broad consensus across nearly all fields on the skills that a PhD candidate must develop and possess to graduate. Gordon Rugg and Marian Petre offer a partial list of these skills:

> [Use of academic language] correct use of technical terms; attention to detail in punctuation, grammar, etc.; attention to use of typographic design . . . to make the text accessible; ability to structure and convey a clear and coherent argument, including attention to the use of "signposting" devices such as headings to make the structure accessible; writing in a suitable academic "voice"; [Knowledge of background literature] seminal texts correctly cited, with evidence that you have read them and evaluated them critically; references accurately reflecting the growth of the literature from the seminal texts to the present day; identification of key recent texts on which your own PhD is based, showing both how these contribute to your thesis and how your thesis is different from them; relevant texts and concepts from other disciplines cited; organization of all of the cited literature into a coherent, critical structure, showing both that you

> can make sense of the literature—identifying conceptual relationships and themes, recognizing gaps—and that you understand what is important; [Research methods] knowledge of the main research methods used in your discipline, including data collection, record keeping, and data analysis; knowledge of what constitutes "evidence" in your disciplines, and of what is acceptable as a knowledge claim; detailed knowledge—and competent application of—at least one method; critical analysis of one of the standard methods in your discipline showing that you understand both its strengths and its limitations; [Theory] understanding of key theoretical strands and theoretical concepts in your discipline; understanding how theory shapes your research question; ability to contribute something useful to the theoretical debate in your area; [Miscellaneous] ability to do all the above yourself, rather than simply doing what your supervisor tells you; awareness of where your work fits in relation to the discipline, and what it contributes to the discipline; mature overview of the discipline [7].

A PhD candidate who cannot demonstrate these skills cannot teach and supervise research students. It is likely that he or she cannot conduct research either. One must therefore demonstrate these skills to earn the PhD degree. The thesis is the journeyman piece in which a PhD candidate demonstrates mastery to the journeyman level of necessary research skills.

In one sense, the question of the PhD in art and design rests on a deeper question. Is the PhD to remain a research degree? If it is, what do we mean by the word "research"?

The word "research" first entered the English language in the 1500s. It came to English from a Middle French word, *recerche,* from *recercher*: to go about seeking. According to Merriam-Webster, the word "research" means

> 1: careful or diligent search, 2: studious inquiry or examination; especially: investigation or experimentation aimed at the discovery and interpretation of facts, revision of accepted theories or laws in the light of new facts, or practical application of such new or revised theories or laws, 3: the collecting of information about a particular subject [8].

Physicist and philosopher Mario Bunge describes research as

> Methodical search for knowledge. Original research tackles new problems or checks previous findings. Rigorous research is the mark of science, technology, and the "living" branches of the humanities. . . . Synonyms: exploration, investigation, inquiry [9].

These definitions are clear, and they do not cover most of what takes place in the art studio or the design studio. Artists and designers often create knowledge—but we should not confuse research with knowledge creation. They are not the same and not all knowledge creation is research.

There are many legitimate ways to create knowledge—not all ways are research. Learning creates knowledge. Learning how to do something creates knowledge for the learner. Research creates knowledge for the larger community of human beings beyond internal mental or physical world of the individual researcher. This is why we describe research as a contribution to the knowledge of the field. Research produces knowledge for all members of a research field, a discipline or a profession. This is also why one criterion of the PhD as a research doctorate involves making "an original contribution to the knowledge of the field"—sometimes described in shorter form as "an original contribution to knowledge." Research creates knowledge for researchers and information for the field. When other members of the field integrate this information into their knowledge, it becomes the knowledge of the field. All legitimate modes of knowledge creation are important. Even so, these legitimate modes of knowledge are only research acts when they involve investigation or experiment to discover and interpret facts, when they involve revising accepted theories or laws in the light of new facts, or when they involve applying new or revised theories or laws. This is not the case when knowledge creation involves developing or mastering skills that are new to the individual without being original or new to the world at large.

There has never been a single perspective on the nature of the PhD. In the medieval university, the terms "master," "doctor" and "professor" were somewhat interchangeable. The university itself was a guild of masters and scholars, and the formal awarding of degrees and titles was often confusing [10]. Many medieval doctorates were professional doctorates in such fields as law (LLD), medicine (MD) or theology (ThD). There was no PhD as such.

The PhD degree as we understand it today was born in the early 1800s with the Humboldt reforms of the German university system [11]. This degree was, and remains, a research degree.

There is a rich history to the PhD degree and a broad international understanding of what this degree has meant in university life for the past two centuries. The PhD in art and design raises many questions. Much of the debate so far has been less than informative, especially in contexts where one group or another deliberately excludes well-informed experts to ensure that the debate concludes with ill-informed but predetermined answers. This has often been the case at debates staged in art and design schools newly promoted to university status, and it has sometimes been the case when art and design schools have been merged into the self-accredited universities of education

systems that lack the moderating influence of the great regional accreditation bodies.

The new and lively context of this debate makes this a global opportunity. The context involves some of the world's leading research universities. While the debate begins this time in North America, the worldwide Leonardo community is far larger. This community and the debates in which we participate involve artists and scientists, designers and technologists, scholars and practitioners in many fields. This is an outstanding forum for a broad debate on the PhD in art design.

We welcome your participation.

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