Fifth-Year Review of the Ph.D. Program in the Built Environment: Report of the Review Committee

Prepared by

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1. Background

The Ph.D. Program in the Built Environment (hereafter referred to as "the B.E. Ph.D. program") was launched by the College of Architecture and Urban Planning¹ in 2003. It is a college-wide program with faculty involvement from all four departments in the college (architecture, construction management, landscape architecture, and urban design and planning). The B.E. Ph.D. program involves a set of common core courses; subsequently, the students select one of three specializations about built-environment knowledge and practice:

- 1. Sustainable Systems and Prototypes;
- 2. Computational Design and Research;
- 3. History, Theory, and Representation Studies.

The B.E. Ph.D. program was created in order to achieve several objectives, including the broadening of graduate education; offering opportunities for involvement in Ph.D. education and scholarship by faculty who were not engaged in the pre-existing Interdisciplinary Ph.D. in Urban Design and Planning; and facilitating faculty involvement in research by all four departments in the college.

The program is now beginning its sixth year; it has graduated two students and currently has 22 students enrolled. According to the rules of the Graduate School, all new Ph.D. programs must be reviewed after five years. The review serves not only to advise the Dean of the Graduate School of the program's successes and shortcomings, but also provides guidance to the college, program director, and the four departments about the areas in need of improvement.

¹ The College of Architecture and Urban Planning has scheduled a change in its name for January 1, 2009. The new name is "The College of Built Environments." Thus, there is an alignment in name between the B.E. Ph.D. program and the college.

2. Review Procedure

The review committee was formed during the summer of 2008 and held its first meeting on October 8th for the purpose of developing the committee's charge. At that meeting, the committee members met each other, with the external members of the committee participating by speakerphone. The entire committee heard a description of the B.E. Ph.D. program from the Director Robert Mugerauer. He outlined its history and current situation. Subsequent to that meeting and before the site visit, the internal committee members had a conference call with Dean Daniel Friedman and met with a few faculty members and one student in an attempt to understand an array of viewpoints and to identify key issues prior to the site visit. The committee was provided with a set of documents that included the original program proposal and the fifth-year self-study report. The site visit took place from November 12th to 14th, beginning with a working dinner by the review committee on the 12th. The site visit included meetings with Director Mugerauer, Dean Friedman, several faculty and students, and the staff coordinator (or administrator) of the B.E. Ph.D. program.

3. Overview of Findings

In their various meetings with administrators, faculty and graduate students the committee heard many positive comments about the B.E. Ph.D. program, as well as a number of concerns. The review committee's findings are described in the following sections: (4) Comments about the Program, (5) Issues Needing Resolution, (6) Recommendations and Suggestions, and (7) Final Comments.

4. Comments about the Program

4.1 Comments for the University

This Ph.D. program fits directly into the University's mission of providing high quality graduate education and support for scholarly research.

4.2 Comments for the College

The review committee concluded that the disciplinary diversity and the interdisciplinary emphasis associated with the program are important and noteworthy strengths. The program has accomplished the intended goal of **initiating** the development of **collaboration between the four units** in the college and **creating a culture** valuing Ph.D. level graduate education and its associated research and scholarship. One original goal of the program was to move the culture of a historically, strongly professional practice oriented focus in certain disciplines towards a research orientation more appropriate to a tier one major research university like the University of Washington. A further goal was to increase the opportunities for faculty to be involved in research and graduate education at the Ph.D. level (especially those not involved in the Interdisciplinary Ph.D. in Urban Design and Planning; Construction Management was given as a specific example). The current Director, Professor Robert Mugerauer, was the Dean of the college when the program was launched, and as Dean he had strongly supported and assisted in the development of the college-wide B.E. Ph.D. program.

The current Dean, Professor Daniel Friedman, is also very committed to this program. He clearly sees it as a critical component of moving the college's culture closer to university-wide expectations and aspirations, as well as part of his goal to preposition the college as a national and international power house. Dean Friedman also observed the importance of moving the college from traditional disciplinary-bound paradigms to more contemporary and interdisciplinary professional and academic goals, perhaps around a three-part focus on complexity, ecology and integration. He stated, and the review team concurred, that the nascent B.E. Ph.D. program has initiated and shows promise of moving the college towards a stronger culture of scholarly research, including both strong internal as well as external thrusts towards collaboration and an interdisciplinary approach to both research and teaching. The Dean also expressed a desire that the B.E. Ph.D. program expand to address issues of broad contemporary concern to the profession, capable of strengthening links to the profession and offering new areas for research funding support.

Faculty in the college described the students as being of high quality and observed that the presence of such high quality, motivated students served to increase faculty morale and involvement in research.

4.3 Comments about the structure and leadership of the Program

Programs of study were strongly student initiated and driven, facilitated first by the application review process to determine if an applicant's research direction could be supported, then later through faculty facilitation of the student's mentoring relations. The students spoke highly of the intellectual and moral support they received from the Director, supervising faculty and their committee members. Students appreciated the flexibility inherent in the B.E. Ph.D. program and the trust given them as they developed their own curricular research paths. Students uniformly cited that the program contained sufficient structure, sense of community or cohort-building, and felt that programmatic expectations were clear. Students all noted the high level of mentorship and contact they had with both Professor Mugerauer and their advisors. Furthermore, students also noted the ease with which they were able to connect with faculty inside and outside the college. Students were uniformly concerned about funding, although the committee observed that those students associated with the architecture or urban ecology program appeared to have greater and more consistent access to support.

Except for the problem of funding, the students were very pleased with the program, its content, its flexibility, and the culture and communication that it has enabled. The students did point out that the financial difficulties created incentives and opportunities for them to learn about grants and the process of writing and managing grants.

The faculty associated with the program voiced similar positive points of view, but expressed concerns about funding. Additionally mentoring of junior faculty and

students, though informal, seemed good. Several students and junior faculty specifically indicated the positive role that Professor and Director Mugerauer played.

The department chairs from Landscape Architecture, Urban Design and Planning and Construction Management expressed strong support for both the mechanics and the outcomes of the program, though voicing some concern about their formal involvement in the program. The departmental chairs agreed that their programs had a significant vested interest in the program, each from the context of their field. Unfortunately, the committee was unable to meet with the Chair or an alternate from Architecture, the largest department within the college.

5. Issues needing resolution

5.1 Financial Issues

A key challenge for the program is creating financial stability for all incoming students for at least the first year, and preferably beyond.

Moreover, it is critical that the program and the college develop significant sources of outside funding (including grants) to supplement the limited funding for the program that comes from teaching assistantships. These issues can be potentially alleviated by the expansion of research directions proposed by the Dean.

5.2 Relationship between the BE Program and Faculty Research

The importance of developing a culture of research in the college stems not only from the financial needs of the Ph.D. program, but also from the need for intellectual support for, and professional development of, students and faculty. In addition, external research support, typically coming through competitively peer-reviewed funding programs, would validate the research by faculty and students associated with the program.

5.3 Structural Issues

There has been an ongoing lack of consistent and open communication between critical parts of the college and the administration of the B.E. Ph.D. program, e.g., between the program Director and the Dean, as well as between the program and the four participating departments. Communication issues are further discussed below. One aspect of the lack of open communication is that some faculty members expressed concern about what happens to the college and departments' portions of indirect cost return funds.

In its deliberations the committee raised and discussed a long-term issue related to, but going beyond, the internal aspects of the Built Environment Ph.D. program. That issue is whether the two Ph.D. programs associated with the college (the other being the Interdisciplinary Planning Ph.D. program) should be merged.

5.4 Communication Issues

The program has managed to work reasonably well during its first five years using informal, oral channels of communication between the Director and students, the Director and faculty, and between faculty and students. Yet some elements of the program lack clear definitions, protocols and expectations and the committee is concerned about the potential negative impacts of this (e.g. different expectations of students compared with their advisors, different interpretations of the same 'rule' by advisors, etc). We strongly believe that communication must move beyond a strong oral to a written tradition of communication. Specifically, the dissertation proposal phase of the doctoral program needs formal, written expectations (that clarify and lay out that the dissertation proposal includes a written document, a formal presentation and oral defense which elicits feedback from the all of the student's committee members). Also students need to see suggested pathways through the Ph.D. that go beyond a suggested sequence of courses (e.g. First year, second quarter: begin discussions about possible dissertation topics and determine likely committee members. Second year: first quarter: begin looking for and perhaps applying for dissertation research funding; successfully complete Graduate School General Examination requirement by the third quarter, etc.).

The college is not effectively communicating the products of this program within the college or outside the college. The Ph.D. program needs to become more proactive in its communication both within and outside the university.

6. Recommendations and Suggestions

- 1. The appointment of an Associate Director who would assume leadership roles in recruitment, development of written programmatic guidelines, etc. In addition, the Associate Director would bring a different disciplinary perspective and would better assure the long-term continuity of the program. Looking to the future, an Associate Director might be groomed as the future Director of the program, or at least someone in addition to the current Director, who also holds a comprehensive repository of information about the program (given the previous reliance on an oral tradition).
- 2. In order to improve leadership, vision and communication, we strongly encourage the creation of a college-level committee including the Dean, the Director, Associate Director as well as the chairs of the four departments and the Director of the Interdisciplinary Ph.D. program in Urban Design and Planning. These eight people should be on a single committee that meets regularly to discuss doctoral education in the college (this committee should meet at least quarterly).
- 3. The Director, Associate Director and Dean must collective explore productive ways to address the points raised under the section 'Issues needing resolution' above. Following those discussions they should develop a jointly written document that provides a strategic plan for the B.E. Ph.D. program for the next five years. It should outline their strategies to address the above stated issues. The document should also contain a jointly agreed-on plan for the future for the B.E. Ph.D. program that speaks in specifics, such as graduate student recruitment,

faculty hires, internal and external research support, continued leadership, etc. In particular the committee thought the section in the self-study 'VII: Future Directions' lacked sufficient specificity in terms of potential actions, directives and deliverables that could be engaged in order to move the program forward and ensure its longevity, especially given the recently announced budget cuts.

- 4. The dissertation proposal phase of a student's path towards the Ph.D. should be much more formal with a combination of a public presentation of a written proposal and an associated oral examination by the student's committee. A more formal approach to the proposal phase would have the following potential benefits:
 - a. Protect the student
 - b. Provide clarity and rigor to the research and future dissertation
 - c. Assist in the culturally desired transition
 - d. Increase the quality of research
 - e. Be in line with current and upcoming directions from the Graduate School about written documentation for graduate students.
- 5. The two Ph.D. programs should **not** be merged in the near future, but the next major review should re-examine this proposition. However, pending budget cuts may necessitate an earlier appraisal of this merger question.
- 6. Increase the potential involvement of non-Ph.D. holding faculty in chairing/supervising Ph.D. students (should they want to). This is particularly important in the case of the B.E. Ph.D. program, because some of the participating units come from a more practice-oriented tradition where a Ph.D. has not always been a requirement for holding a faculty position. We suspect that this might become less of an issue in the future as it seems that it is increasingly common that newer hires hold doctorates. However, we do want to allow some flexibility here, as it is likely that future hires might still be practitioners with little interest or ability in supervising graduate students.
- 7. Given limited budgets and using best practices, creative ways of stimulating or sustaining externally funded research pursuits of faculty need to be explored.
- 8. Research funding and student support: Opportunities for graduate student and faculty research funding support from within and outside the college need to be provided. Included in this support should be:
 - a. The review of procedures for the use of indirect cost return funds. Perhaps some (even a small) part of them could be **explicitly** allocated to fostering development of new research projects, which in turn could convince faculty that initiating new research activities is valued and encouraged. This is in line with the theme that a good Ph.D. program requires a culture of research and that in turn requires some degree of funding.
 - b. In the development of the Five Year Strategic Plan, define realizable paths for developing research funding: through new areas of activity, collaborative initiatives with other university units, and/or industry related funding.
 - c. Improved administrative support for college-wide grants and contracts, including shepherding proposals through the university system (some

faculty complained that in the past this had not been as smooth as it should be).

- d. The appointment of an Associate Dean for research.
- 9. Ways to stimulate new research within the college (perhaps look towards the older Tools for Transformation and Royalty Research Fund for models of how this might be done).
 - a. It is critical that there is a clear future opportunity for research support from non-University sources.
 - b. The level of funding should be sufficient to stimulate and nurture rather than provide complete support.
- 10. Introduce an annual research symposium featuring the work of the graduate students (perhaps of both Ph.D. programs). Key university administrators could be invited. Consider making this a public event: make it open but also invite key people from the local area (city planning department, architecture and construction firms, etc) with a view to showcasing graduate student research to 'the public' but also potentially attracting donors, prospective employers for the graduate students or graduate student research opportunities.
- 11. We recommend that the program be reviewed again by the Graduate School in five years.
- 12. In the interim, the committee proposes that the Graduate School requests the following:
 - a. By February 9, 2009:
 - i. The joint report (by the Director and the Dean) regarding future directions for the program that includes specific deliverables (see 6.3).
 - ii. A five-year fiscal plan in which sources are identified and strategies for approach and mechanisms for rewarding attempts and successes are developed (see 6.7, 6.8 and 6.9).
 - b. By January 31, 2011:
 - i. Evidence of multiple approaches (e.g., proposals) to obtaining funding from a wide variety of sources.
 - ii. At least two more Ph.D. graduates from the program.

7. Final Comments

The Ph.D. Program in the Built Environment serves an important purpose of bringing research into the traditional disciplines that rely on practice for the generation of new knowledge. The program has had a successful launch, but work remains to be done to attain a solid financial footing, to maximize its positive impacts and to create a secure grounding as a nationally and internationally recognized program.