How to validate an 'Unthinkable doctorate'?

Without considering the conditions and criteria of evaluation and validation necessary for the academic recognition of a design-based doctorate, a PhD in architecture would, indeed, be 'unthinkable!' The many contributions and discussions that took place concerning the question of validation, especially in the round table session on validation that we jointly chaired during the "Unthinkable Doctorate" Conference, have provoked both reflections and statements, and (equally importantly) raised questions, which we summarize and comment on in these remarks.

In order to validate work in any field, one needs first to characterize that field. In contrast to conventional doctoral dissertations in more traditional subjects, which are so well established that we rarely consider there's any need to discuss the well-known academic requirements—objectivity, innovation, research methodology, evaluation, assessment, communication and publication etc.—debate concerning the essential requirements of a doctorate specific to architecture is both vigorous and endemic. Many open questions result from the fact that it is still not clear, to several of us, what the defining constituents—the necessary and sufficient conditions—of a doctorate in architecture are, or even how one should name the degree and describe the research appropriate to it. Several names were explored during the conference, from the more conventional 'doctorate in architecture' or 'architectural design doctorate' to the more striking 'Design PhD' or 'PhDesign.' Of all these names, in our view perhaps the one that fits best is 'design-based PhD,' because it explicitly states that the particular research is based in or derived from the specific activity at the heart of architecture—making design—while implying, albeit implicitly, that the research doesn't rely upon the design aspects alone.[1]

In point of fact, in our round-table discussions it became absolutely clear that a PhD in architecture cannot be composed simply of designing, and nothing else: there is a critical qualitative difference between designing, and studying for a PhD. The design-based PhD in architecture is quite distinct from, say, a regular studio design project.

Neither can this degree be assimilated into the kind of professional project or research activities currently generated by architectural offices which are, nowadays, more and more inclined both to

publish the products of their own design research and to expect to determine both the research agenda and the means of researching and publishing. We accept (welcome) that, through their active involvement within the institutional framework of architectural education (and also on the global market of architectural publications), practitioners are helping shape the field of architectural research, sometimes even challenging the limits of what is commonly considered admissible.[2] This in turn raises the question of just how to balance the inputs, concerns and judgments of both practice and academy in the several phases of architectural doctoral research—not only in the actual preparation and development, but also in the assessment and evaluation of the resulting PhD. Some at the table argued for a direct involvement of practitioners, benefiting both professional and academic fields, others were more critical of the role of practitioners in the context of a doctoral research, arguing that outsiders or professional researchers are better trained to develop theoretical knowledge.[3]

Since the design-based PhD in architecture cannot be assimilated into either regular studio projects or other kinds of professional projects and/or research, questions about the role and the place of the 'design project' within the whole process of doctoral research arise. In a sense, the design project should not be considered as an objective to be satisfied per se (for instance, as an illustration to an agreement), but rather integrally, as both object and means of pursuing the research.

Perhaps even more significant than the question of the 'design project' is the issue of the 'design act' in its own right—that is, the active involvement of specific architectural tools and methods of, and processes and techniques for designing. This issue is recognized by many as one of the most particular and essential features of architectural research, because the act of (architectural) design embodies the essence of architectural thinking and knowledge.

We may consider this in terms of 'epistemological' validation. The process of design produces a specific mode of knowing, distinguished by Glanville in his Keynote at the conference as 'knowledge for' in contrast to the more normally scientific 'knowledge of.' 'Knowledge for' is closely related to what has been described as a 'knowledge through action,' or as a mode of 'knowing-in-doing.' The specific nature of design knowledge is based on testing and speculation through drawing, modeling and discussion (Murray and Wright). For many, it is important that architectural research involves a kind of thinking 'through' or 'within' architecture, besides a thinking 'about' architecture (Corona-Martinez/Vigo, Hipola).[4] This is in contrast to the frequently held view that would subject research in

architecture to external criteria and conditions applied from without—deriving knowledge from approaches and values developed in and for other fields and applying these to the study of architecture. (This has happened in the case of, for instance, the application of historical methods and values to architecture, which approach has been inclined to ignore the importance of this central act of designing and, indeed, that crucial material of architecture, space.) The process of design, it was argued throughout the conference, actually creates a specific way of knowing, which should be recognized as a legitimate and valid means for involvement in research, and which can be communicated, evaluated and possibly falsified.[5] Architectural design is, we were agreed, a particular and definitive process of knowledge production in its own right.

Following Polyani and Schön's work, it has long been accepted by researchers in design that, in the studio environment, architectural knowledge is often tacit and implicit, frequently gained by reflection and often poorly articulated or communicated. The research activity often lacks the objectivity, repeatability and rigor of traditional academic research, which creates difficulties in respect of its recognition as a proper and valid form of research. It seems to go against the grain of how we currently understand research in a scientific context. The design process is actually mistrusted as a result of the scientific bias in academic understanding, where, all too often, 'academic' is equated with, and limited to, a narrow, modern Anglo-Saxon interpretation of the concept of 'scientific,' and where values such as objectivity, validity and certainty in assessment are highly valued. (Murray and Wright) [6] However, it may be argued that the understandings and value systems we develop both individually and socially can be thought of as the outcomes of design actions. In fact, the problem of the validation of architectural design research may be considered more a problem of academic and social legitimization (resulting from an a-priori judgment on the condition of knowledge) than a problem of epistemological validation (Radu).

Having introduced questions of the 'epistemological validation' of architectural research and knowledge, we move on contemplate the specific requirements and conditions by which we can validate a design-based PhD. We have already argued that design-based research should not be identified simply with a regular studio or professional design project, suggesting that there are additional requirements some of which concern evaluation, assessment, communication, objectivity, methodology, institutional recognition etc., which allow design-based research to be accepted as an

academic PhD.

In our discussions, it became clear that 'academic' recognition doesn't necessarily equate with 'scientific' recognition, and that a research mode as particular as architectural design should not necessarily be forced to satisfy identical conditions of evaluation and assessment as a traditional doctoral research, but should propose other equivalent specifications of criteria (such as rigor) which would satisfy academic standards in a manner appropriate to architecture. These do not have to be scientific in order to be academic.

In our round-table discussions, we decided that possibly, the most significant and essential condition for a design-based PhD, is the close integration of specifically architectural design tools, methods and techniques through which architectural knowledge can be developed, formalized, articulated and communicated. Research should generate new knowledge, through its innovative, explorative or even speculative character—thus creating research based architectural novelty. It is also important that the research is developed with intellectual consistency, integrity, honesty, and the aforementioned rigor. Precedence is often a powerful mechanism by which to demonstrate mastery and original contribution. The research undertaken should be clearly articulated, with a well-defined methodological and thematic framework and with explicit criteria of analysis, assessment and evaluation, so that the findings of the research can be verified, tested and perhaps even falsified—although it is understood that in design there is always likely to be an element of post-rationalization involved in these processes.

The research carried out in the design-based PhD in architecture should also contribute to an explicit and generalized knowledge, so that it can be situated within the larger disciplinary, interdisciplinary and cultural contexts. This requires clear articulation. It is also essential, for the good transmission and evaluation of knowledge, that the results of the research are clearly formalized and formulated, and that the information is made accessible to all who would like to share or benefit from it—from academics, professionals and practitioners to the broader public—by the proper means of communication and publication. These means might include a combination of exegesis, exhibition (and catalogue) and in person presentation.

A final issue raised during the round-table session was the question of the evaluation and recognition

of the doctoral research in examination. In a general sense, one can assume that there might be a common ground held by those involved in the field, by which quality is recognized; and that the research should be recognized as valid by those who are thus qualified to recognize it. One can speak about both a tacit recognition, when the research is recognized as good enough, and about an explicit, academic recognition, within the larger framework of the academic institution. The academic recognition of architectural research is not only a matter of qualification and competence of the examiners: it also raises the question of who is recognized as the custodian of architectural research, and who is finally responsible for the recognition—always assuming such responsibility is relevant to the case.

Nevertheless, it is clear today's actuality is that academic recognition is mainly, but not only, the exclusive responsibility of the organizing academic institution, which ultimately recognizes and validates research by delivering the official PhD title. More and more, academic institutions, i.e. the schools of architecture, have to comply with a complex and restrictive framework of regulations and rules, both on the national and (within Europe) the EU-level, in relation to the funding of research, the qualification and teaching requirements, or the conformation of academic norms and standards.[7] Somehow, this *force majeur* must be recognized, and be accommodated in a constructive way.

Bernard Kormoss

Ranulph Glanville

---

[1] For instance, K. Watt speaks about 'Architectural Design Doctorate', F. Radu about 'PhDesign' and H. Heynen about 'design-based Ph.D.'.

[2] Much innovative architectural research is produced by practitioners, who are, by definition, the professionals of architectural design and excel in many types of creative architectural thinking.

[3] In their contribution, M. Barosio and M. Trisciuoglio argue for a connection between practice and academic research and for the inclusion of practitioners in the doctorate, so that the researchers are constrained to leave the level of abstraction. M. van der Toorn, on the other hand, argues that architects can develop their own theory, but that a generalized theory should not be their focus: professional researches are better trained to develop a generalized and theoretical knowledge.

[4] Cf. R. Glanville ('knowledge for' vs. 'knowledge of'); Cf. S. Murray, L. Wright ('knowledge through action', knowing-in-doing'); Cf. A. Corona-Martinez and L. Vigo ('thinking within architecture, rather than about architecture'); Cf. M. G. Hipola ('thinking through architecture,' architecting'); Cf. F. Radu ('architectural design is for architecture what research is for science', ' architecture incorporates and re-constructs knowledge'). M. van der Toorn makes a difference between theory 'in' landscape architecture (design theory), which is based on dynamics of form, action, intervention and practice, and a theory of landscape architecture (landscape architectural theory), which is an abstract theory based on the knowledge, generalization, reflection and critique. Note how these refer back to Frayling's critical paper of the early 1990s.

[5] According to A. Corona-Martinez "architectural knowledge is a legitimate and valid mode of knowledge that can be transmitted, tested, evaluated, approved or discarded." According to S. Murray, L. Wright, design is a form of knowledge production which has to be considered as valid research tool. The process of design produces a new sort of knowing and knowledge, which can be considered as a combination of creation of knowledge about and through designing. For F. Radu, architectural design is for architecture, what research is for science: it produces a

similar kind of o knowledge process which id open-pended, heuristic and reticular; architectural design is a process that incorporates and re-constructs knowledge.

[6] Cf. also K. Watt (architectural design studio includes research activities; architectural knowledge as implicit and tacit form of knowledge).

[7] In the UK for instance, there is a new institutional frame which stipulates that schools of architecture should generate their own research funding and conform to academic norms and standards. Cf. K. Watt, "Reconciling Creativity and Research: Formal Research Training as a Foundation for Architectural Design Doctorates."