Doctorates and the Berlin declaration

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Chapter 2. Doctorates and the Berlin Declaration

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Abstract: *K. Doevendans, S. Hanrot 2003. Doctorates and the Berlin Declaration. USO-Built Report Series 2:11-17.* The Berlin declaration of September 2003 has placed education for a doctorate even more strongly in the Bologna Process. This is also the case in domains, such as architecture, where the different countries of Europe are at variance as to the presence and content of such a degree. The meaning of this development for joint supervision and joint degrees within USO-Built summarizes the content of this chapter.

Keywords: Bologna process; University education; Architectural education; ERA; European Research Area; EHEA; European Higher Education Area; Cultural diversity

In this chapter we take the Bologna-declaration, and its successor, the Berlin-declaration of 2003, as starting point to reflect on USO-Built. The Bologna-declaration formed the major framework for USO-Built. This declaration proclaimed the emergence of a European Space for Higher Education (EHEA). But not only this proclaimed educational structure forms the framework for USO-Built, also the European Research Area. The Berlin-declaration of September 2003 states: '*Closer links between the higher education and research systems in the respective countries; the EHEA should benefit from synergies with the European Research Area, thus strengthening the basis of the Europe of Knowledge.*'

In this chapter 3 issues are treated (i) Map differences in doctorate trajectories and conditions, and propose a way of cooperation to overcome these differences pragmatically; (ii) Make a thorough analysis of the contribution of a doctorate network to the European Union, especially the EHEA and ERA; (iii) Work on Joint Degrees.

2.1. Bologna

The Bologna-declaration introduced the so-called Anglo-Saxon-system, mostly reduced to a Bachelor - Master - system. However, this is a reduction, for the Bologna-declaration speaks of education in two main cycles, undergraduate and graduate, and states, that the second cycle should lead to a master- or doctorate degree. This means, this 2nd cycle is not only a master-stage, but also the stage of which the doctorate, or PhD education is a part. This is why the Bologna-system is often called the 3/5/8-structure.

2.2. Three types of certificate

Consequence of this structure is, that there are in principle three types of certificate: Bachelor, Master and Doctor, and there are also three entry moments: you can enter into the Bachelor after secondary school, you can enter into the Master-stage, AND you can enter into the Doctor (PhD)-structure. For the Netherlands, for instance, this is a new situation, especially the entrance after completing the Bachelor: you can enter in the middle of a course program that was until now undivided. The question is then: can you enter all masters in architecture, in every school in Europe, after having completed a bachelor in architecture? We think, this will not be the case. Mutual recognition of certificates will be limited to networks of universities that made strong appointments on this subject.

Another question is: do we develop our master as a master of architecture, a master of science, or even a master of art?

2.3. Bologna Mathematics

Let us do now some Bologna-mathematics. A 3/5/8-structure means: 3 + 2 + 3, interpreted as 3 years bachelor education, 2 years master and 3 years doctorate. For the Netherlands, this is a problem, for the Doctor-stage at this moment in our civilization is 4 years! If we translate the bachelor and master-stage in ECTS, then we get a Bachelor of 180 credits, and a master-stage of 120 credits. Another interpretation is, and this is according to the Bologna-declaration, a first cycle of 3 years: the bachelor; and a second cycle of 5 years, comprising master AND doctorate program.

But then we did not solve the Dutch problem of the 4-year Doctor-program, which seems to the Dutch to be a minimum duration to become a good researcher. So we continue our mathematics and combine (3 + 2) and (3 + 5) to (3) + (2 + 3). But, (2 +

3) is also (1 + 4), and in this way we can solve the Dutch problem: the second cycle is, or just a 2-year master, or a 1-year master and 4-years doctorate training. We could also say: the last year of the master is the first year of the doctorate.

If we conclude: the 3/5/8-structure is also a 2/4/5/8-structure.

2.4. Berlin declaration
A next step in the formation of the European Higher Education Area is the Berlin-declaration of September 2003. Ministers of education of European countries stressed their joint objective to develop a coherent and cohesive European Higher Education Area (EHEA) by 2010. It includes a strategy on doctorates for all academic disciplines. But the declaration is not clear at all points. It looks as if the two cycles of the Bologna-declaration have been replaced by three cycles:
'*Ministers consider it necessary to go beyond the present focus on two main cycles of higher education to include the doctoral level as the third cycle in the Bologna Process.*'

We could consider this as a step backward, however, we also read:
'*Following their commitment in the Bologna Declaration, all ministers commit themselves to having started the implementation of the* **two cycle system** *by 2005.*'

According to the Berlin-declaration '*networks at doctoral levels should be given support to stimulate the development of excellence and to become one of the hallmarks of the EHEA*'. This is very stimulating for USO-Built, a fore runner in the field of doctorate-networks, which is also true for the following statements:

'*To increase the role and relevance of research to technological, social and cultural evolution and the needs of society*', and: Ministers '*emphasise the importance of research and research training and the promotion of interdisciplinarity in maintaining and improving the quality of higher education and in enhancing the competitiveness of European higher education more generally.*'

2.5. Doctorates in Architecture
The existence of doctorates in architecture is not shared equally throughout the different European countries. Italy, for example, has doctorates in architecture since a long time (even when 'research doctorates' were rather new), while France had no doctorates, even though an architectural research existed since a long time, as long as in Italy[2]. The doctorate appears to be dependent of nature and specificity of architectural research. A number of ontological and epistemological papers have appeared on the subject. Since then the issue of a European doctorate arose.

First, the EAAE (European Association for Architectural Education) has organised, and continues to organise, a series of Conferences to discuss research development in the field. Several events have occurred:
(i) April 1998, Raleigh, NC: Architectural Research and Teaching. Amongst others, the following questions were tackled: is Architecture a discipline, as this is understood in other fields? What is the meaning of research and theory in the field of Architecture? Can Architecture be considered as an object of research? Does Architecture need a specific methodology?

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[2] Doctorates in architecture. EAAE Conference 1996. Volumes 1-3. Delft: Delft University of Technology; 1996. ISBN 90-5269-199-1

(ii) July 2000, Paris: this conference tackled topics such as: could design activity be considered a research instrument capable of unveiling new knowledge and insights in Architecture? What is research in the Architectural field? How can the activity of practising architects be valued as input for research?

(iii) November 2000, Delft: What is the role and function of research by design within an academic tradition? Can design result from research and can research emerge from design? How can research by design be evaluated and valued? How can a new frame of reference be developed?

(iv) May 2002, Montreal: International Conference on Architectural Research continuing these discussions.

(v) In May 2003, a Workshop was organised in Stockholm with the following challenge: *"...to develop strategies that allow focusing on the specific in architectural knowledge, but also open up broader viewpoints on architecture to learn from (other) fields."*

Secondly, the third symposium on Doctoral Education in Design did take place in Tokyo (Japan) in October 2003 following earlier meetings in Ohio (USA 1998) and La Clusaz (France 2000). Its themes included:

(i) Best practice in design research;

(ii) Doctorate in design practice;

(iii) Continuing professional development.

The existence of this symposium indicates a need and a strongly felt determination to develop models of research appropriate to design. The closeness of the themes to those of this proposal lends credence to the proposal.

We do not always agree with the opinions presented at these meetings. But their existence forcefully indicates a long overdue breakthrough in the field of research by and into design

Thirdly, at RMIT University (formerly the Royal Melbourne Institute of Technology, Australia) a PhD by Project is established and has been running for several years with excellent results emerging. The Masters and Doctoral programs based in practice use reflection and recursion as forms of investigation into bodies of personal work situated within a wider context—their academic field. Methods developed at RMIT are largely based in the theoretical work in second-order cybernetics. Students who have taken part confirm the value of the learning (and the value this adds to their practice) and the experience of being part of a collegial body of researchers. The program has an excellent reputation in Australia and with those, internationally, who know it (often from experience as examiners). The program also helps researchers develop a deeper understanding of the act of designing, and of research emerging in the field.

2.6. Legitimacy

How to make architectural research not dependent on a 'host discipline', such as history, philosophy, or technical science? Is design a possible heuristic for research? Epistemological debates have arisen about architectural discipline and research. A distinction appeared between specific researches that refers to an object of study and to methodology that belongs to the architectural discipline, and, on the other hand, architectural research that crossed the line between architecture and other disciplines[3].

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[3] Hanrot S. A la recherche de l'architecture; épistémologie de la discipline et de la recherche architecturale. Paris: l'Harmattan; 2002. ISBN 2-7475-2837-5

Although the specificity of architectural research has been touched[4], the role of design within architectural research is not clear. Halina Dunin-Woyseth proposes an epistemological specificity within "profession of the making" comparable to the status of medicine. Architectural research would have to invent its own domains and resources of research, not just copying those of the natural or social sciences[5].

2.7. Doctorate Networks

European doctorate networks have been implemented 2-3 years ago. The 'Millennium Project' gathering the Nordic countries, USO-Built (http://www.uso.tue.nl) driven by Eindhoven University, and Architectonics by Barcelona (arquitectura.3000@upc.es), are networks that are based on European partnerships and are involved in research and doctorates. This approach gathers highly competent professors and creates a real dynamic interaction between students. In some networks workshops are hosted by all partner university; one after the other. Seen from the outside, this network organization is attractive and helpful to reinforce a fragile discipline.

2.8. Sorbonne, Bologna & Berlin

A major factor of change is the implementation of the European Higher Education Area (EHEA). Debates have started on Bachelor, Master and Doctor cycles and many schools have modified their own organization to fit in the European framework. Others are entering the process with resistance as in Greece by refusing the bachelor level, or with inertia, as in France, because of a previous pedagogical reform, in 1998, that is not compatible with European developments. The doctorate cycle is generally not appreciated, as could be heard during the Chania Meeting of heads of schools[6]. The normal way to obtain a Doctorate in Architecture is to first obtain a Bachelor and a Master Degree, usually in science, not in arts.

2.9. Remaining questions

A number of questions remain. Will the ' Architect' title be obtained with the Doctorate Degree or already at the Master level? How about interdisciplinary and the ability to enter a Doctorate in architecture coming from a bachelor from another discipline than architecture? Suppose the student does not thrive towards an Architect title, but to a Doctorate in Architectural Research only?

Other questions are related to the content of studies follow these more basic ones. Should a specific course be added to the Bachelor curriculum to teach the undergraduate what research is, so s/he can choose between a research and a professional trajectory? This question also to defines the relationships between doctorates and professional activities.

Will the doctorate be a key condition to enter architectural education? And what about the place of practitioners within the schools of architecture? Will professional specialities emerge that introduce research skills in architectural offices?

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[4] Research by Design. EAAE-conference 2000. Delft: DUP Science; 2000. ISBN 90-407-2119-X; 90-407-2213-7; 90-407-2114-5
[5] Dunin-Woyseth H, Michl J, editors. Towards a Disciplinary Identity of the Making professions. The Oslo millennium reader n°4. Oslo: Oslo School of Architecture; 2001. ISBN 82-547-0119-9
[6] Spiridonidis C, Voyatzki M, editors. Towards a Common European Higher Architectural Education Area. 2002. ISBN 2-93031-09-0

Doctorate networks are efficient laboratories to experiment with different systems. Schools that take part will set the scene. Schools that do not will have to follow the decisions of the others.

Appendix to Chapter 2: Main Issues of the Berlin Declaration

As an annex we list below the main issues of the Berlin-declaration:

General

(i)   Competitiveness should be in balance with the objective of improving the social characteristics of the EHEA, aiming at strengthening social cohesion and reducing social and gender inequalities.

(ii)   Higher Education is a public good and public responsibility.

(iii)   In international academic cooperation and exchanges academic values should prevail.

(iv)   Closer links between the higher education and research systems in the respective countries; the EHEA should benefit from synergies with the European Research Area, thus strengthening the basis of the Europe of Knowledge.

(v)   Preserve Europe's cultural richness and linguistic diversity, based on its heritage of diversified traditions.

(vi)   Fundamental role of Higher Education Institutions and student organisations.

Progress

(vii)   To make higher education more transparent and to enhance quality of European higher education at institutional and national levels.

(viii) To promote effective quality assurance systems, to step up effective use of the systems based on two cycles.

(ix)   To improve recognition systems of degrees and periods of studies.

Quality Assurance

(x)   By 2005 national Quality Assurance systems should include:
  a. A definition of the responsibilities of the bodies and institutions involved;
  b. Evaluation of programs of institutions, including internal assessment, external review, participation of students and the publication of results;
  c. A system of accreditation, certification or comparable procedures;
  d. International participation, co-operation and networking.

Degree structure: Adoption of a system essentially based on two main cycles

(xi)   Following their commitment in the Bologna Declaration, all ministers commit themselves to having started the implementation of the **two cycle system** by 2005.

(xii)   To improve understanding and acceptance of the new qualifications through reinforcing dialogue within institutions and between institutions and employees.

(xiii)   To describe qualifications in terms of workload, level, learning outcomes, competences and profile.

(xiv)   To elaborate an overarching framework of qualifications for the EHEA.

(xv)   First and second cycle degrees should have different orientations and various profiles in order to accommodate a diversity of individual, academic and labour market needs.

(xvi)   First cycle programs should give access to second cycle programs, second cycle degrees should give access to doctoral studies.

Promotion of Mobility

(xvii)   Mobility of students and academic and administrative staff is the basis for establishing a EHEA.

Establishment of a system of credits

(xviii)   ECTS becomes not only a transfer but also an accumulation system.

Recognition of degrees: Adoption of a system of easily readable and comparable degrees

(xix)   Every student graduating as from 2005 should receive the Diploma Supplement automatically and free of charge.

Higher education institutions and students

(xx)   Commitment of Higher Education Institutions and students to the Bologna process.

(xxi)   Institutions need to be empowered, and reforms become fully integrated into core institutional functions and processes.

(xxii)   Constructive participation of student organisations; increasing actual student involvement in higher education governance.

Promotion of the European dimension in higher education

(xxiii)   Ministers stress the necessity of ensuring a substantial period of study abroad in joint degree programs as well as proper provision for linguistic diversity and language learning, so that students may achieve their full potential for European identity, citizenship and employability.

(xxiv)   The development and adequate quality assurance of integrated curricula leading to joint degrees.

Promoting the attractiveness of the European Higher Education Area

(xxv)   To develop further scholarship programs for students from third countries.

(xxvi)   Transnational exchanges should be governed on the basis of academic quality and academic values.

(xxvii)   Co-operation with regions in other parts of the world by opening Bologna seminars and conferences in these regions.

Lifelong learning

(xxviii)   To make lifelong learning a reality; to improve opportunities to follow lifelong learning paths into and within higher education.

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Additional actions

(xxx)   Ministers consider it necessary to go beyond the present focus on two main cycles of higher education to include the doctoral level as the third cycle in the Bologna Process. They emphasise the importance of research and research training and the promotion of interdisciplinarity in maintaining and improving the quality of higher education and in enhancing the competitiveness of European higher education more generally.

(xxxi)   To increase the role and relevance of research to technological, social and cultural evolution and the needs of society.

(xxxii)   Networks at doctoral levels should be given support to stimulate the development of excellence and to become one of the hallmarks of the EHEA.

Stocktaking

(xxxiii) Detailed reports for the 2005 summit on: quality assurance, two-cycle system, and recognition of degrees and periods of studies.