

The Swedish Higher Education Authority (UKÄ) Programme Evaluations

Self-evaluation

HEI: Lund University
Third-cycle programme subject: Architecture
Degree of Licentiate: Yes
Doctorate: Yes

Submit one self-evaluation per programme that leads to a degree within the third-cycle programme subject to be evaluated. The self-evaluation should be based on quality aspects and assessment criteria within the aspect areas:

- environment, resources and area
- design, teaching/learning and outcomes
- follow-up, actions and feedback

and the three perspectives:

- working life perspective
- doctoral student's perspective
- gender equality perspective.

Briefly describe, analyse and evaluate, using examples, how the evaluated programme meets the assessment criteria for each aspect within the aspect areas and for the perspectives. The self-evaluation should be based on the current conditions for the programme. Describe both the strengths and identified areas in need of improvement as well as how follow-up, planned and taken actions and feedback occur both to improve the programme and to ensure that the programme is of high quality.

More detailed guidelines for HEIs on aspects and assessment criteria can be found in the *Guidelines for the evaluation of third-cycle programmes*, Annex 1.

The self-evaluation should not exceed 75,000 characters, including spaces (approximately 25 A4 pages, 12 point font size), excluding the tables completed by the HEI.

This report is structured in correspondence with the requirements of UKÄ. The report is written in collaboration by the supervisors within the third-cycle programme subject of architecture at The Faculty of Engineering, Lund University (with Prof. Mattias Kärrholm as project secretary). The report was written in communication with (and with input given by) the PhD students.

Aspect area: Environment, resources and area

Aspect: Third-cycle subject area

Assessment criteria:

The demarcation of the third-cycle subject area and its connection to scholarship or artistic practice and proven experience are adequate and appropriate. The third-cycle subject area's relationship to the area for third-cycle education is adequate (for the HEIs that have degree-awarding powers for an area in third-cycle education).

The subject area of architecture is interdisciplinary and is described in the general syllabus as follows:

The subject addresses the significance of architecture and spatial design for the relationship between people and the built environment. The applications of the subject are to be found in the planning, artistic shaping, design, creation, use and change of the built environment.

Research in the subject aims to develop theories and methods, and to collect and systematise information and experiences supporting the development of the subject and discipline of architecture. The field can encompass issues in the social sciences, science, engineering, humanities, aesthetics and art.

The research deals with topics such as the properties of the built environment and its significance for different forms of societal life, including cultural and social aspects; spatial design techniques and their implications; participatory design; artistic methodology; and distinctive environments with regard to climate, culture and architecture.

Architecture, as a subject and a department, was part of The Faculty of Engineering (LTH) already from the beginning (1964) and the first PhD thesis in architecture was defended in 1973. Initially, several subject areas were examined at the Department, apart from *architecture*, also *stadsbyggnad* (urbanism), *byggnadsfunktionslära* (building functions), *arkitekturhistoria* (architectural history) and *formlära* (theoretical and applied aesthetics). This range of subjects has, however, successively become integrated into the overall subject of *architecture*, which means that the strategic importance and scope of this third-cycle subject area has increased over the years. The general syllabus of the subject area of architecture (see attachment) was revised to reflect this in 2014. The proposed mandatory parts regarding basic subjects, the course-HEC part, and the requirements for recruitment were then updated. This was also partly a consequence of the new national collaborations

through the Swedish national research school, ResArc. ResArc, comprising the Swedish Architecture Schools in Lund, Stockholm, Gothenburg and Umeå, provides the main course-related mass of the third cycle education today. Apart from the ResArc courses and events – which are devoted to a subject-specific curriculum related to architecture, urbanism and design – research students within the subject of architecture may also take courses designed within their local faculty, or in surrounding subject areas like sociology, anthropology, technology, and pedagogy, i.e. in neighbouring areas that supplement and help define the expertise in the subject area of architecture.

A PhD education in Architecture comprises 240 HEC, including a thesis of at least 120 HEC and courses of at least 60 HEC, and the progression of courses and thesis work can be seen in Fig 1. The progression follows the most typical development of a thesis, namely the monograph, but can also consist of a compilation of articles with a comprehensive summary. When research studies are financed by industry or another third party, progression through the programme may deviate slightly from the standard.

Aspect Phase	Courses and subject area development and training	Thesis	Working Seminars	Outreach / Teaching / Extramural /
Year 1-2	Introductory Basic Pedagogical Architecture theory and method	Literature Position and Theme Statement Empirical work	First seminar	Social intro Presentation, courses
Year 2-3	Themed Basic Individual-spec. Pedagogical Architecture theory and method	Thematic refined Overview statem. Adv. Literature Empirical work	Midway seminar	Presentation, courses Popular presentation Conference pres. Teaching Article Administr. / Colleg.
Year 3-4	Complementary Themed Architecture theory, method, communication	Reflections on Scope, Logic and Epistemology Results Conclusions	Final seminar	Conferences Popular presentation Transdisciplin. pres. Teaching Article Administr. / Colleg.

Fig1. A typical research education progression in Architecture.

The on-going concretisation of the subject area and the Swedish research school ResArc.

The subject area gets its more concrete form through the way in which it is practised in the research environment, which will be discussed throughout this report. However, an important factor in recent years for the concretisation and development of the subject area, which could be mentioned already at this stage of the report, is The Swedish Research School in Architecture (ResArc). ResArc provides basic courses in architectural theory, method and communication, as well as specifically themed courses, events, seminars and conferences (for detailed content, see <http://resarc.se>).¹

ResArc is nationwide and was initiated by *Arkitekturakademin* (a cooperative platform set up by all four Swedish Schools of Architecture: Chalmers Gothenburg; KTH Stockholm; LTH Lund; and Umeå University). It was formed to promote research and education of high contemporary quality for all Swedish PhD students in architecture, also allowing international students and students in neighbouring subjects to take part. ResArc started in 2012, managed by a coordination group located at the Department of Architecture and Built Environment, LTH, and directed by Professor Lars Henrik Ståhl, LTH. Its steering committee has representatives from the four Swedish Schools of Architecture. The research school has currently 38 registered PhD students (December 2016). When the four Schools of Architecture started to cooperate in the ResArc framework, it was immediately seen as a great advantage that each school took main responsibility for one basic (7.5 HEC) course in a two-year cycle of courses. The four courses were labelled Tendencies (in contemporary architecture research); Approaches (to research design and methods); Philosophies (of current architecture theories); and Communication (of research in academic, expertise and popular context). The traditional divide between Theory, Method, and Dissemination was thus deliberately avoided, by requiring from course leaders the obligation (and freedom) to design each course to contain all of these three traditional aspects. The four basic courses are described in a time-line diagram (fig. 1), where the content is also briefly sketched. The national collaboration on the basic course has several advantages: The students of all four schools have a reason to travel to, and spend time at, another school, getting to know not only each other, but the particular profile and expertise that each school can offer, including insights into possible channels of exchange and communication in the future. The course cycle started in 2012 and since then almost 30 gatherings, each consisting of two or three days of scheduled seminars, have been arranged. In this way, the specificities at each school have successfully been activated to construct a course cycle that includes theoretical, methodological and epistemological insight into the field of architectural research.

¹ For information on ResArc ,see <http://resarc.se/about.html>. For the policy and organisational framework of ResArc see http://resarc.se/login/stafflog/organizational/ResArc_Policy_and_Organizational_Framework.pdf . Please use the staff log in username 'ResArc' and the password 'astaff'. If you want to log in to the ResArc website as a student, use the username 'resarcstudent' and the password 'architecture'

ResArc Basic Course Cycle - hosted by Swedish Schools of Architecture

Period-->	Spring 2012	Autumn 2012	Spring 2013	Autumn 2013	Autumn 2014	Spring 2015	Autumn 2015	Autumn 2016
Hosting University ↓								
Lund	Tendencies 7,5 p				Tendencies 7,5 p			
Göteborg		Approaches 7,5 p				Approaches 7,5 p		
Stockholm			Philosophies 7,5 p				Philosophies 7,5 p	
Umeå				Communications 7,5				Communications 7,5
Starting Month	February	November	January	September	September	March	September	-> September 2017

Lund LTH	Course responsibility: Mattias Kärrholm/ Gunnar Sandin Tendencies introduces current research topics, transdisciplinary and experimental modes of research, discusses modes of dissertations, as well as research dissemination/publication/exhibition including visual culture-oriented, ethnographic and artistic modes of presentation.
Göteborg Chalmers	Course responsibility: Krystyna Pietrzyck / Marie Strid Approaches has a focus on the history and theory of knowledge landscapes, knowledge production methodologies and situatedness, in relation to architecture in the making, including the craft and criticism of research, and to the student's own research design.
Stockholm KTH	Course responsibility: Helene Frichot / Daniel Koch Philosophies investigates theoretical tools for a critical and creative/projective societal analysis of architecture, planning and design by addressing key philosophical texts and how they have influenced architectural theory. Interactive course format.
Umeå UMA	Course responsibility: Roemer van Toorn / Ambra Trotto Communications focuses on how image/text production in research can communicate different kinds of cultural values, in order to develop a dialogical, professional and political understanding of different communication devices. Seminars and design exercises in relation to the material of the thesis.

Planned courses 2017: Tendencies (April - September); Communications (September); Approaches (October - December)

Figure 2. Basic courses in the ResArc framework. For a more detailed description of each course content and schedule, see the ResArc website at <http://resarc.se/>. For course descriptions specifically, see <http://resarc.se/courses/index.html>. There are also course evaluations etc. on the website.

Apart from this basic cycle, ResArc also provides thematic courses with higher specificity as regards subject matter, context or research issue (see fig. 4, later on in this report). Taken together, this joint research school collaboration guarantees meetings and debates between different strands of the field. We see such diversity as crucial to ensure an ongoing and living dialogue about the subject area of architecture on a national and – by way of regular invitation of lecturers – international level: it has become a way to ensure that topical issues are broadly and deeply raised and that the subject area is allowed to transform over time while still keeping its relevance and specificity. All ResArc courses and activities are held in English, which allows for international collaborations and support during the education, and also prepares the PhD-students for an international context.

Aspect area: Environment, resources and area

Aspect: Staff

Assessment criteria:

- A. The number of supervisors and teachers and their combined expertise are sufficient and proportional to the content of the programme and its teaching/learning activities.
 - B. The combined expertise of supervisors and teachers and skill development are followed up systematically to promote high quality in the programme. The outcomes of the follow-up are translated, when necessary, into actions for quality improvement, and feedback is given to relevant stakeholders.
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In the research environment at the Department at LTH we currently have four employed active principal supervisors tied to the subject of Architecture, who meet the qualification requirements for professor/associate professor (Lars-Henrik Ståhl, Gunnar Sandin, Mattias Kärholm and Thorbjörn Laike) and four employed active assistant supervisors (Anna Petersson, Emma Nilsson, Catharina Sternudd and Mats Hultman). There is also an administrator of the research programme, Lena Andersson, who supports the PhD students in administrative and practical questions. In co-operation with the research coordinator, the supervisors update Individual Study Plans regularly.

Three of the assistant supervisors have recently taken the course necessary for becoming principal supervisor (*Docentkursen*) and will be applying to become an associate professor (*docent*) within the next one or two years (*docent* is the formal requirement to be a principal supervisor at LTH). Other competent supervisors in related subjects are also available and have full time positions at the Department: for example, one professor in environmental psychology (Maria Johansson), one professor in architectural conservation and restoration (Kerstin Barup), one associate professor in architectural history (Tomas Tägil), and one associate professor in construction and architecture (Erik Johansson). Of these, Tägil has in the last year taken part in PhD examinations, but apart from that, this last group of staff is above all available as experts in their areas, although not currently active in explicit doctoral education in the subject of *architecture*.

As it is now, the four principal supervisors are men whereas three of the assistant supervisors are women. Although this will hopefully change soon, as the assistant supervisors are about to be promoted to associate professors in the near future, we have seen this as a problem. A majority of our PhD students are female and we have deemed it important also to have female professors. We have therefore recently recruited Professor Albena Yaneva from Manchester University to work actively with research education during the years 2017-2019. She has been awarded the Lise Meitner professorship chair by LTH, which means that she now has a 20 % position for three years, starting 1 January 2017.

Besides the supervisors mentioned above, we also have active assistant supervisors who do not have a permanent position at the Department but who contribute with their expertise in particular PhD projects. Professor Peter Ullmark has had a 10 % temporary position at the Department in recent years to help with ResArc, but he has also worked as an assistant

supervisor for one of our doctoral students. Other active assistant supervisors include Senior lecturer Lina Olsson and PhD Marwa Dabaieh, both affiliated to Urban Studies, Malmö University.

The supervisors at the Department are engaged in externally financed research projects, interdisciplinary projects and also have assignments outside of academia. Mattias Kärrholm is, for example, part of the jury for the Swedish Architects' prize for best architectural critic of the year, he is a member of the Research council for Svenska stadskärnor (Swedish City Centres) and has ongoing collaboration for example with the City of Lund. Gunnar Sandin is part of Skönhetsrådet i Malmö (Malmö City Aesthetic Advisory Council) and was in 2016 a member of the jury for the design competition OPEN Skåne 2030. Lars-Henrik Ståhl is a member of the Lund University Advisory Council for Public Art. Catharina Sternudd has been a member of the *Swedish Association of Architects'* board of research, Anna Petersson is a member of the Nordic Network of Thanatology (NNT) and was in 2016 a jury member for a competition on the design of reused gravesites held by *Sveriges Kyrkogårds- och Krematorieförbund* (SKKF), Mats Hultman is a member of the jury for *Lunds Stadsbyggnadspris* (The Architecture and Urbanism Award of Lund), etc.

ResArc – the Swedish national research school in architecture.

Through ResArc, several senior researchers and professors, including some from outside the Department in Lund, contribute – as course leaders, as lecturers and as critics – to the research education and research environment.

ResArc is organised with a coordination team in Lund, including the *director* Lars-Henrik Ståhl, the *programme manager*, professor Mattias Kärrholm (responsible for development of strategies, overall planning and realisation of courses), the *director of research studies*, associate professor Gunnar Sandin, (coordinates the courses by collaboration with the other schools and serves as the convener of programme group meetings), the ResArc *coordinator*, senior lecturer Catharina Sternudd (who initiates and prepares regulatory documents, evaluations and assessments). ResArc *administrator* PhD Anna Wahlöö manages the flow of information and is responsible for the ResArc website. The Coordination Team is also supported by professor Peter Ullmark who chairs the steering group meetings and has long experience from both research education and research school management (as a former director of *Designfakulteten*, a national centre for research and research education in design).

Besides the coordination team in Lund, ResArc also has a steering committee, which is the central institution for the visionary work, qualitative follow-up and long-term strategic discussions and considerations regarding ResArc. The steering committee meets two to three times a year and is comprised of representatives from the Schools of Architecture at LTH, CTH, KTH and UMU, but also representatives from the two nationally composited strong research environments 'Architecture in Effect' and 'Architecture in the Making', as well as PhD student representatives. An external member (from the *Swedish Association of Architects*) represents architectural practice.

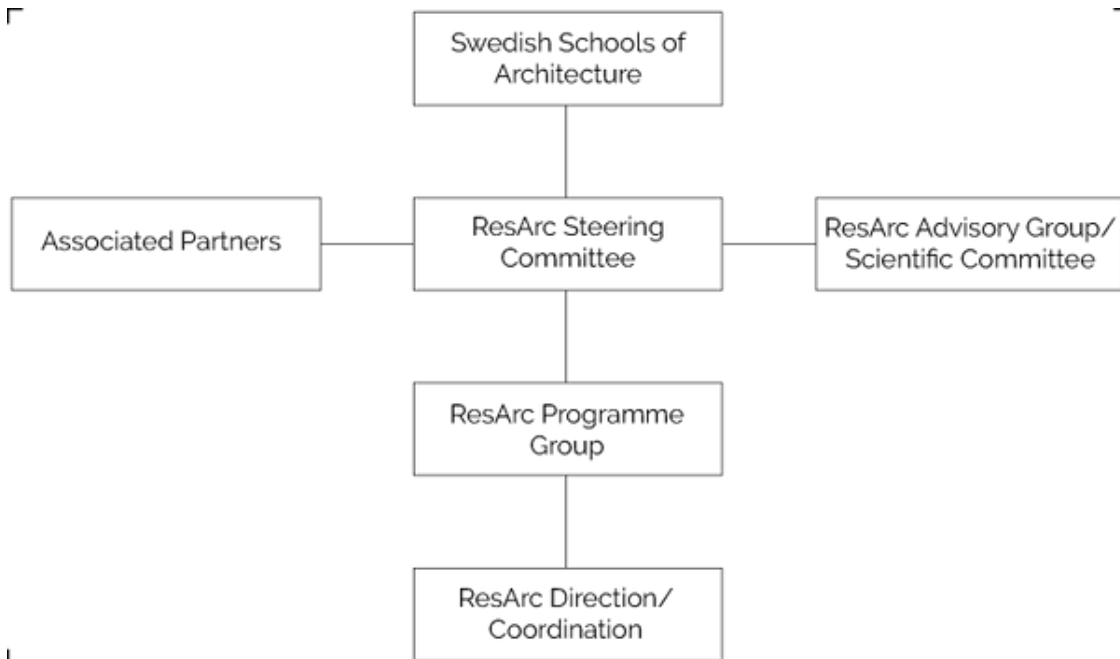


Fig. 3. The organisational structure of ResArc. The Direction/Coordination group is located in Lund.

The content and overall organisation of the courses and events is handled by the ResArc Programme Group, that consists of directors of research studies in the different schools, PhD student representatives, project leaders for planned and ongoing courses, and members of the coordination team. The Programme Group meets 2-3 times a year, and is the working body for concrete and detailed discussions about content, programme, thematic succession, course evaluations and reports from events. Pedagogical considerations also play a major role here. The work of the Programme Group has made it possible to maintain a consistent line of thinking as well as decentralising much of the practical realisation of courses.

On a regular basis, a two-day creative colloquium/workshop has been jointly arranged for the members of the Steering Committee and the Programme Group with additional invited guests, such as research council representatives and publication managers (February 2013, and April 2014 in Copenhagen, and one in Stockholm in November 2015). On these occasions, the management group in Lund have presented course evaluations, as well as statistical outcomes of questionnaires given to PhD students or alumni PhD graduates. These evaluations are collaboratively discussed at these colloquiums and become part of new policy- and programme-drafting.

ResArc also has an international advisory group. The members are Mark Jarzombek, Prof. Architecture MIT; Dana Cuff, Prof. Architecture, UCLA; Hilde Heynen, Prof. Architectural Theory Katholieke Univ. Leuven; Ingrid Elam, PhD and Dean of Faculty of Fine, Applied and

Performing Arts, University of Gothenburg; Michael Biggs Prof. Univ. of Hertfordshire UK and Sven-Olov Wallenstein, philosopher, senior lecturer, Södertörn University. These have been engaged in relation to conferences, courses or seminars.

Besides being led by the most qualified scholars in the field of Architecture Theory and Architecture Research at each school in Sweden, the courses have also comprised professors and teachers from international seats of learning such as: MIT (Mark Jarzombek); Carnegie Mellon University (Laura Lee); University of Hertfordshire (Michael Biggs); KU Leuven (Hilde Heynen); Aarhus Universitet (Tom Nielsen); University of Pennsylvania (David Leatherbarrow); University of Montreal (Alain Findeli); Sint-Lucas Brussel (Nel Janssens); University of Manchester (Albena Yaneva); Leeds Metropolitan University (Teresa Stoppani); TU Wien (Andreas Rumpfhofer) and University of Sheffield (Renata Tyszczyk).

Internationally renowned guests from other disciplines, such as sociology (Andrea Mubi Brighenti, University of Trento), communication design (Els Kuijpers, Leyden University) urban planning (Jonathan Metzger KTH), organisation studies (Barbara Czarniawska, University of Gothenburg), STS (Anique Hommels, Maastricht University) environmental psychology (Karen Franck, New Jersey Institute of Technology) and philosophy (Mats Rosengren, Uppsala University), have also contributed to the courses.

Staff that support environmental, social or experiential matters.

The Department has a director of research studies, and an administrator for the doctoral programme. Apart from these two “local” staff resources, there is a research director also on the faculty level (at LTH) serving several departments. The PhD students at the department can turn to any of these in order to discuss, if necessary without the involvement of their supervisor, any type of issue that may come up. Through the Department’s regular research meetings, established a couple of years ago, the Department’s researchers now know each other (and each other’s competencies) much better, which also gives a broader experience base when discussing socially difficult work environment incidents, conflicts, or disciplinary matters.

Support for change of supervisor.

Regulations at national level (The Swedish Ordinance of Higher Education) and at the University level ensure the possibility for PhD students to change supervisors, and apart from the guidance given by directors of research studies at the local and faculty level, LTH provides guidelines for how to handle situations of conflict on a faculty level, e.g. through the “Ethical Guidelines for the supervisor-student relationship”.² The changes can be initiated by the PhD student and/or the supervisor, and can be made without any specifically stated motivation. The decision to take action in these matters is made by the Head of Department.³ There have been a couple of cases at the Department during the last five years requiring a

²http://www.lth.se/fileadmin/lth/lthhandboken/utbildningforskning/forskarutbildning/SVE_Beslutade_OEmsesidiga_etiska_riktlinjer_foer_relationen_handledare_doktorand.pdf

³ For more information about the right to change supervisor see <http://www.studera.nu/startpage/doctoral-studies/third-cycle-studies/the-supervisor/>.

change of supervisor, which were satisfactorily solved by means of internal changes. In the case of the third-cycle programme subject architecture, there is, however, just one example during this period, and this involved the transfer of a PhD student from another research environment and subject area (industrial design) to architecture.

Aspect area: Environment, resources and area

Aspect: Third-cycle programme environment

Assessment criteria:

A. Research and artistic research at the HEI has sufficient quality and scale for third-cycle education to be carried out at a high scientific/artistic level and within a good educational framework. Relevant collaboration occurs with the surrounding society, both nationally and internationally.

B. The third-cycle education environment is systematically followed up to ensure high quality. The result of the follow-up is translated, when necessary, into quality improvement actions and feedback is given to relevant stakeholders.

In autumn 2016 we had eleven doctoral students, seven women and four men. Two of these PhD students graduated during the autumn 2016. Two more are expected to complete their PhD degree during 2017. Five of the PhD students are financed through external projects or by the faculty's ability to co-finance external projects. As PhD students, they all have a full-time position at the Department. Three of the PhDs – Marwa Al Khalidi, Muna Al-Ibrahim and Sahar Al-Rabadi – are financed by a scholarship from their home University, Yarmouk University, Irbid in Jordan. One of the PhDs (Jesper Magnusson) has a full-time position at another university (Malmö University). Two of the PhDs – Ida Sandström and Thomas Nylund – are employed as planners outside the University. All PhDs but three work at the Department on a daily or at least weekly basis, and they have an office space at the Department. Of those who do not work at the Department, one (Fredrik Skåtar) currently lives in Berlin, so his supervision has been ensured through him travelling to Lund and through regular Skype meetings. Two of the PhDs working outside the Department (Thomas Nylund and Eva Wängelin) have a longer history as PhDs and do not pursue full-time studies. One of them completed a licentiate degree, took a break from his studies and has only recently taken them up again, while the other has recently been transferred from a related third-cycle programme area (industrial design).

We are currently working on the possibility of taking on two new PhD students (one in a collaboration with the Centre for Middle Eastern Studies at Lund University).

All PhD students have the option (and are encouraged) to get an office at the Department (including computer) and the possibility to be enrolled as a ResArc students. All ResArc students have a budget for conferences, travels and research equipment. Eight out of the eleven mentioned PhD students in architecture work on daily basis at the Department, and thus they contribute a lot to the research environment, get daily contact with supervisors and have the possibility to support each other in their work.

Apart from the doctoral students in architecture, there are also other doctoral students within the Department, enrolled in the subject areas of either *construction and architecture*, or *environmental psychology*. These PhD students and their supervisors also contribute to the research and research education environment of the Department.

The four current salaried PhD positions (*doktorandtjänst*) were all advertised in open competition, with some positions more specific than others with regard to the research topic. All applicants to PhD studies hand in written applications that are then evaluated by the relevant research staff at the Department. A shortlist of 3 to 6 candidates are then usually called for interviews. There are faculty resources for recruitment, for example, to test applicants' skills and psychological profiles. This resource has not been used yet, but might be considered in the future.

When there is no PhD position involved, but a scholarship, one could perhaps argue that the recruitment is less in the hands of the Department and more in the hands of the financing party. However, LTH has a series of regulations that set a certain standard for the scholarship (for example, a minimum monthly amount given to the student) in order to accept an enrolment in the PhD programme. Just as in the case of an open application, the Department must also make sure that the candidate has the competences and skills required to be admitted to the third-cycle programme. Historically, these enrolment processes have, however, not been as thorough as in the cases when a position has been advertised.

All the PhD students that have a position at the Department are, to a greater or lesser extent, involved in teaching (although never more than 20%), whereas the ones on scholarships currently do not have any teaching, due to the specificities of the agreement between Lund University and, in this case, Yarmouk University.

Most PhD students in architecture write monographs, but even so some also write articles during their PhD studies (see publication list) and thus to some extent get acquainted with the peer review system associated with the international research journals. They also regularly present PhD project ideas and results in conferences, which also provides training in peer-reviewing and publication procedures.

Meetings and seminars

Since most of the students work and have their offices at the Department, they have daily contact with the research environment and with their supervisors. The PhD students have regular meetings with their supervisors. The supervision is always adjusted to the individual needs of the PhD student and the frequency of meetings may vary between individuals or over the months and years, but one formal meeting every two or three weeks is a typical rhythm. Once every semester we update the ISP (individual study plan) for every PhD student, and also go through their overall time plan, working conditions, etc.

Every PhD has at least three seminars at the Department during their studies: a first-year seminar, a midway review seminar, and a final seminar (which often takes place about five to six months before the public defence of the doctoral thesis). The final seminar, and sometimes also the earlier ones, is always attended by at least one external reviewer. Besides these seminars, we also want all PhD students to present their research at least at one international conference. Most PhD students do this after their first or second year (the conference participation of the PhD students can be verified by the publication list that comes with this

self-evaluation). Historically, some students have taken a licentiate degree after two years, but at the moment no one is planning for that option.

At the Department, we also have a research seminar series, called ABES (the Architecture and Built Environment Seminar series) approximately once a month, where our own researchers (including PhDs) or invited researchers present and discuss ongoing research, new projects, or contemporary issues of interest. For the PhD students, this series represents a broad register of architectural research and is effective for enriching the context surrounding the more specific scope of each doctoral project. The ABES seminars were recently launched as an attempt to integrate the different researchers and research interests of the Department. Last winter (2016-2017) we had five seminars: research on light as a building energy issue (by associate professor Marie-Claude Dubois), artistic research methods (associate professor Gunnar Sandin), design ethnography (by visiting professor Albena Yaneva); architecture photography (by senior lecturer Emma Nilsson); and contemporary urban planning (by the Head of Malmö city planning office Christer Larsson, visiting professor).

Doctoral courses and the ResArc environment

The PhD programme in architecture at LTH has a mandatory course component of at least 60 HEC. ResArc is an important part of the research environment when it comes to courses, but it also provides a network, conference opportunities, etc. for the PhD students. ResArc has a record of 38 formally enrolled doctoral students, and also often includes an additional number of students from other environments in the courses. This recurrent and interchanging context has become important for the doctoral students, as they read and reflect on course content together, travel to seminars and conferences together, build research networks, and sometimes even co-write articles. For example, ResArc supports (financially and with senior researchers acting as peer reviewers) the PhD-initiated and managed research journal *Lo-Res, Architectural theory, politics and criticism*,⁴ whose editorial board currently consists of PhD students from our Department in Lund and from KTH.

The most important contribution by ResArc to the PhD programme is perhaps the basic course package of the four basic courses (described above, and visualised in fig 2). One complete ResArc basic course cycle gives the student in total 30 HEC. With additional thematic courses, also provided by ResArc (fig. 4) and courses belonging to each school's own existing curriculum, the student is well supported, and has no problem achieving the formally required number of course credit points. Already from the start, the Swedish Schools of Architecture and ResArc jointly decided to let interest in the two large research environments "Architecture in the Making" and "Architecture in Effect" become a basis for thematic courses and PhD events (see fig. 4 for a list of these), focusing on recently emerging theories, particular methods, or topics of current interest. In line with this, we have hosted several courses, events, and seminars in Lund, a couple of which were international conferences specifically targeted for PhD students. Sometimes these courses and events,

⁴ See <http://www.lo-res.se/> for more information.

located at our Department in Lund, have been planned and implemented in collaboration with other universities or departments, such as: with Urban and Regional Studies at KTH (in a course on Actor-network theory); with the Swedish University of Agricultural Sciences, Swedish Faculty for Design Research and the Danish Academy of Fine Arts School of Design (in the “Exploring Fieldworks” courses). The international PhD symposium *Facts and Fictions* in 2013 was a collaboration with the UK-based AHRA network (Architectural Humanities Research Association). There have also been (HEC rewarding) collaborations with different kinds of societal bodies, including the municipality of Lanzhou and the New town Lanzhou project in China (2014), the Modern Museum of Art in Malmö (2014), and the Inter Arts Centre in Malmö (2015).

The quality of the third-cycle programme environment is thus followed up on a variety of levels. Whereas the supervision meetings, the ISPs, the different seminars, etc. ensure day-to-day follow up, the departmental organisation, including the Department’s research meetings, the Department Board meetings, the director of research studies, etc., ensure the continuity and structure of the research environment at the Department. ResArc with its organisation (the programme group meetings, steering group meetings, course evaluations, PhD questionnaires, etc.) ensures the quality of the courses and that proper actions are taken for quality improvement if necessary. The most intense work centres perhaps around the course evaluations, but more strategic work is also done. For example, after the questionnaire sent out to active PhD students in 2015, the issues of communication and interdisciplinarity were raised and discussed as a direct result of this. These seemed like two important areas for improvement and we have since tried to widen the scope of some of the courses, and focused more on communication and interdisciplinarity. Another strategic question that we work with is to increase the collaboration and co-authorship. The ResArc conference Co-laboration in 2016 was a first important step in this direction towards collaborations both within and across disciplinary boundaries. However, we still have work to do in this area.

The ResArc initiative was launched at the same time as two strong research environments ‘Architecture in Effect’ (led from KTH)⁵ and ‘Architecture in the Making’⁶ (led from CTH). The two strong research environments (or research labs) are, as ResArc, collaborations between the four Swedish schools of Architecture, with participants from all schools in both environments. Their aim is to create coordinated research environments that approach architectural research from different, strategically complementary, points of view. ‘Architecture in the Making’ emphasises architectural thinking and contemporary challenges for practice, while ‘Architecture in Effect’ accentuates a critical understanding of the built environment and its societal effects. Both environments share a strategic identification of areas of study recognised in contemporary challenges: the environmental, material and social conditions; the role of history and historiography; the process of design as a matter of critical imagination; the roles of media and technologies in professional practices and educational cultures. The two environments have been an important way to secure a good research environment for the senior researchers and supervisors as well as for the PhD students.

⁵ See their website for a fuller description: <http://architectureineffect.se/>

⁶ See their website for a fuller description: <http://architectureinthemaking.se/>

THEMED PHD COURSES 2013-2016

Contemporary Didactics in Architectural Education (5 HEC). May - June 2016, Hosted by LTH.

Theories in Spatial Morphology (7.5 HEC) October - December 2016. Hosted by CTH.

Practising Actor-Network Theory (7.5 HEC) November 2015 - January 2016. Hosted by LTH and KTH.

Exploring fieldwork II (7.5 HEC) April - October 2015. Hosted by Malmö University and KADK.

Transversal Writing (5 HEC) May - September 2015. Hosted by KTH

Transvaluation - Challenging the formation of knowledge (5 HEC) March - April 2014. Hosted by CTH.

Architectural Morphology: Investigative modelling and spatial analysis May 2013. Hosted by KTH.

Exploring Fieldwork I (7.5 HEC) April - October 2013. Hosted by Malmö University and KADK.

(PHD RELEVANT) EVENTS 2012-2016

Images of Desire 3 May 2016. KTH, Symposium on the visual culture of Lifestyles and Architecture with key-note by Rory Hyde.

Co-laborations - Sharing Authorship and Space in Architectural and Urban Research, research conference, 11-12 February 2016. LTH, with Karen Franck, Apolonija Sustercic, Erling Björgvinson

LO-RES: Why architecture needs low-resolution critique 17 September 2015. KTH. Release of the first issue of PhD-produced paper magazine.

Green Utopian Practices 14 January 2015. LTH. Symposium on climate, space and technology with Alf Hornborg and Karin Bradley.

Participatory Practices in Arts and Architecture 12-13 November 2015. LTH and Malmö Inter Arts Centre. Symposium with lectures by Jeanne van Heeswijk, Die Baupiloten and Sofia Wiberg.

Architecture: enduring, ephemeral, moving, dust 2 December 2014. LTH: An Open Lecture Event on space and temporality (with key-notes by Albena Yaneva, Teresa Stoppani and Andrea Brughenti).

China Lanzhou New Area International Symposium on Urban Development 16-18 October 2014. (LTH, Lanzhou and Beijing University). Designed with ResArc as a PhD course including excursions.

Architectural Theory and Methods 10-11 April 2014. CTH. KTH, LTH, UMU. Presentations of ongoing research within the strong research environments of the Swedish Schools of Architecture.

Utopia-Talk-Show-Line-Up, an art-based public seminar on notions of Utopia, 7 March 2014. LTH and The Modern Museum in Malmö.

Facts and Fictions (AHRA-conference for PhDs) 3-4 May 2013. LTH and AHRA. Twenty-four presentations of ongoing PhD projects, with a key-note by Mark Jarzombek.

ResArc Kick Off symposium on current issues of architecture research and its specificities as regards research publication and education 9-10 February 2012. LTH. With Hilde Heynen, Michael Biggs, Laura Lee.

Fig 4. **Themed courses and events organised by ResArc** (and in collaboration with other stakeholders and/or HEIs). The responsible HEI and dates are noted. Please see <http://resarc.se/events/index.html> and <http://resarc.se/courses/index.html> for more details about each course and/or event.

Together with ResArc, they have secured communication, collaborations and debates on a national and international level. The jointly arranged “Architectural Theory and Methods conference” held in Gothenburg in 2014 is a good example of this, where researchers and PhD students from all schools come together for presentations and debates with invited international guests. In September 2017, a new large symposium of this kind is planned as a follow-up of this collaboration (Title: Making Effect, Venue: ArkDes, Stockholm, 14-16 September). Together with ResArc, these two programmes contribute to the overall strengthening of the Swedish architectural research arena, as epistemological and methodological input to a cooperative platform supporting research studies.

The first part of ResArc was co-financed with support by the research council Formas, including parts of PhD salaries. Since the funding from Formas to ResArc will stop after 2017, we are expecting a somewhat lower number of PhDs in the future. However, we expect that external funding in various forms can secure a smaller but steady flow of PhDs at the Department. However ResArc, as a joint programme for architectural research, will continue, regardless of the amount of future external funding. The Swedish Schools of Architecture have agreed to renew the contract to secure the collaboration for four more years. The agreement states that the collaboration will continue, and that the four basic courses will remain a shared responsibility between the schools.

Courses at Faculty and University level

Lund University is a large university and offers a wide variety of seminars, courses, etc. in related disciplines of potential interest and sometimes of great relevance for individual PhDs. Lund University and LTH provide a wide selection of generic PhD courses, including introduction to research studies. Most commonly, PhD students at the Department choose to complement the ResArc courses with one or two of the more generic courses given by LTH as faculty-wide PhD courses,⁷ or by the Academic Development Unit at the Faculty (LTH).⁸ These courses include, for example, Introduction to Teaching and Learning in Higher Education, Academic Writing for Publication, Theory of Science and Research Methodology, Communicating Science – and many more. LU and LTH also have one-off seminars and workshops such as the doctoral writing workshop, and the pitch training day, about research communication, organised by LU innovation.

The Academic Development Unit at the Faculty (LTH) works to develop teaching and education at all levels, including research studies, and also has courses and seminars for supervisors. These courses include, for example, courses in Leadership and Teaching for Higher Education (Introduction to Teaching and Learning in Higher Education, and Ideas for Teaching and Learning in Higher Education). Supervisors need to take an obligatory supervision course (which is also part of the associate professorship course, *Docentkursen* required for professors and associate professors). LTH also encourages good pedagogical work by awarding teachers that work systematically on developing their teaching skills the

⁷ <https://www.lth.se/english/staff/teaching-and-research/phd-studies/phd-courses/faculty-wide-phd-courses/>

⁸ <https://www.lth.se/genombrottet/the-academic-development-unit-at-the-faculty-of-engineering/>

distinction of “Excellent teaching practitioners.” Among the supervisor group, Catharina Sternudd has been awarded this distinction, and all other supervisors have taken the associate professorship course. ResArc also tries to work actively with communication between supervisors, most explicitly in connection with the extended joint Steering Committee and Programme Group conventions (2013, 2014, and 2015, see above), and in a specific one-day seminar for PhD supervisors in architecture led by Mark Jarzombek (MIT) at our Department in April 2013, in connection with the PhD conference “Facts and Fiction”.

Aspect area: Design, teaching/learning and outcomes

Aspect: Achievement of qualitative targets for 'knowledge and understanding'

Assessment criteria:

A. The programme ensures, through its design, teaching/learning activities and examination, that doctoral students who have been awarded their degrees show broad knowledge and understanding both within their third-cycle subject area and for scientific methodology/fine arts research methods in the third-cycle subject area.

B. The programme's design and teaching/learning activities are systematically followed up to ensure achievement of qualitative targets. The results of the follow-up are translated, when necessary, in actions for quality improvement, and feedback is given to relevant stakeholders.

The aim of the ResArc basic courses is to provide rigorous and updated knowledge in the theories and methods of architectural research. The courses as well as (of course) the continuous work with developing a thesis, the stages of which are presented at the Department seminars, are the main ways of ensuring that the PhD student gets a broad knowledge and understanding of the third-cycle subject area. All doctoral students also take other courses, sometimes outside ResArc, and thus get other perspectives on their subject areas, contextualised in relation to other discourses, subjects and disciplines. Almost all ResArc courses so far have had participants from subject areas and disciplines other than architecture, such as political science, human geography, planning and industrial design.

The ResArc courses are evaluated both in a discussion with the course participants and in written course evaluations. The evaluations are then discussed by the course managers and in the ResArc Programme Group and Steering Committee (where representatives from the doctoral students are present), and they play an important part in the development of the courses. The generic or specific courses given at LTH or LU are today mostly evaluated electronically.

The courses are chosen by the PhD student in consultation with the supervisor/s. Generally, the student starts with the basic courses and then progresses into more advanced, themed or subject-specific courses. The progression made through courses and through the ongoing work with the thesis project is discussed during supervision meetings and during the meetings where the ISP is updated. The principal supervisor and assistant supervisor(s) have regular informal talks about the state of progress, and about urgent matters, with or without the presence of the student. The formal seminar during the first year, the midway review seminar and the final seminar are also a stable structure that allows the supervisors and the PhD student to follow the progression of the thesis project, as well as the development of knowledge and understanding that it embodies.

In Lund, as part of our systematic work with quality enhancement, we have (through ResArc) also conducted two PhD student surveys in recent years. One questionnaire was submitted to

alumni PhDs in 2014 (it was sent out to all PhDs with degrees completed at a Swedish school of Architecture in 2004-2005). This provided an overview of how former students experienced their PhD studies and education and to what degree they could make use of their experiences in their subsequent working life. This study was then followed up during 2015 by a questionnaire sent out to all then active PhD students at the Swedish schools of architecture, in order to get an overall view of how they perceived their social and work situation and their education. The survey showed among other things that a larger amount of transdisciplinary contribution to the education, a more straightforward approach towards dissemination contexts, and a strengthened collaboration with architectural and urban practices, were regarded as important. Also future career possibilities were seen as important to develop, as well as methodological guidance and teaching experience.⁹ The results from these surveys were assessed and discussed at the ResArc steering group and programme group meetings, as well as by course managers and parties concerned at each school of Architecture in Sweden.

The views and experiences of PhD alumni are also systematically gathered and investigated by Lund University with the *LU barometer survey*. The latest questionnaire was done in 2013 together with representatives from the students' union (*Doktorandkåren*). The Faculty of Engineering (LTH) made a large enquiry into the conditions of its PhD students during the years 2014 and 2015, together with representatives from the students' union. The material from this questionnaire has then been used as a basis for discussions and developments at the level of the faculty, and among the research directors of the various research areas at LTH. Through the research committee (*Forskarkollegiet*), the results from these investigations have been discussed among all senior researchers and with PhD student representatives at the Department of Architecture and Built Environment.

⁹ A summary of the questionnaires in English can be found at <http://resarc.se/login/stafflog/staff%20login.html> under point 4. Surveys. See also below (under the sub section "Working life perspective") for an example.

Aspect area: Design, teaching/learning and outcomes

Aspect: Achievement of qualitative targets for ‘competence and skills’

Assessment criteria:

A. Through its design, teaching/learning activities and examination, the programme ensures that doctoral students whose degrees have been awarded can plan and use appropriate methods to conduct research and other qualified (artistic) tasks within predetermined time frames, and in both the national and the international context, in speech and in writing authoritatively, can present and discuss research and research findings in dialogue with the academic community and society in general. Doctoral students shall also show they can contribute to development of society and supporting the learning of others within both research and education and in other qualified professional contexts.

B. Programmes are followed up systematically to ensure that their design and teaching/learning activities are high quality and that the doctoral students achieve the qualitative targets. The results of the follow-up are translated, when necessary, into actions for quality improvement, and feedback is given to relevant stakeholders.

There are several ways through which the third cycle programme ensures a development of the PhD student’s professional competence and skills. The supervision strategy of the third-cycle programme aims towards a higher degree of independence as the PhD students gradually become more independent researchers, going to conferences on their own, publishing their own articles, and in the end initiating, and perhaps even writing applications for new research projects, etc. But, besides the traditional competences and skills in ‘doing research’, there are also other skills that are trained in the PhD programme, and needed in academic life as well as in other qualified professional contexts, including project management, communication to peers as well as in more popular forms, teaching and pedagogical skills, etc.

The PhD project is a project led by the PhD student, which means that the skills in project planning and project leading are trained all through the education and discussed at seminars and supervision meetings, for example through discussions around when and how to conduct empirical studies, how to relate them to theoretical development, setting up time frames, etc. In cases where the methodological approach is developed as part of the project’s progression, rather than given from the beginning as an established form, the ability to handle a project’s development is especially foregrounded, since several approaches have to be conceived and judged. Apart from these skill developments within the thesis work, there are also two faculty-wide PhD courses in “Project Management in R&D Projects”.¹⁰

The PhD student works and learns through seminars, presentations at conferences, in dialogues with colleagues and peers, and perhaps most insistently with the thesis itself, how to communicate both one’s own and other people’s research, how to develop, summarise and

¹⁰ <https://www.lth.se/english/staff/teaching-and-research/phd-studies/phd-courses/faculty-wide-phd-courses/project-management-in-rd-projects/>

disseminate knowledge. Here, there are also several PhD courses available. For example, ResArc has the basic course “Communications”, about the alignment between content and form of publishable material, and the themed course “Transversal writing” presenting ways to experimentally connect different topics and traditions of writing. There are also a wide variety of courses that teach basic practical research skills at the faculty level, for example, the courses “Communicating Science”,¹¹ “Reading skills and the discourse of the research article”, “Academic writing for publication” and “Scientific Information management”.¹²

Most PhD students take part in teaching, and teaching skills are thus developed both through active participation in teaching (together with more experienced teachers) and through courses in pedagogy. ResArc gave the course “Contemporary didactics in Architectural education”¹³ in 2016, devoted to the specific tradition of presenting, supervising and critiquing architecture and design. Apart from that, the faculty at LTH has a series of different courses for PhD students as well as for senior staff, dealing with teaching and learning in higher education (see page 15). Most PhD students involved in teaching also take at least one of these generic courses during their time in research studies.

Finally, it should be noted that the important follow-up work and progression related to improving the competence and skills of the PhD student is of course also done in a similar way as for ‘knowledge and understanding’ discussed above, i.e. through seminars, courses, thesis work, conferences, supervision meetings around ISPs, ResArc meetings, etc.

¹¹ http://www.lth.se/fileadmin/lth/genombrottet/KursplanGEM006F_KT_eng_fr2016.pdf

¹² For more information about the faculty-wide PhD courses see: <http://www.lth.se/english/staff/teaching-and-research/phd-studies/phd-courses/faculty-wide-phd-courses/>

¹³ <http://resarc.se/courses/collaborative%20courses/Contemporary%20didactics%20in%20architectural%20education.pdf>

Aspect area: Design, teaching/learning and outcomes

Aspect: Achievement of qualitative targets for 'judgement and approach'

Assessment criteria:

A. Through its design, teaching/learning activities and examination, the programme ensures that doctoral students who have been awarded degrees show intellectual independence, (artistic integrity) and scientific probity/disciplinary rectitude and the ability to make research ethics assessments. The doctoral student shall also have a broader understanding of the science's/Fine Art's capabilities and limitations, its role in society and human responsibility for how it is used.

B. Programmes are followed up systematically to ensure that their design and teaching/learning activities are high quality and that the doctoral students achieve the qualitative targets. The results of the follow-up are translated, when necessary, into actions for quality improvement, and feedback is given to relevant stakeholders.

Norms and values of the research community are learnt from colleagues, through peer reviewing, discussions at seminars, courses, supervision meetings, and even through the daily meetings at the departments. Working with research within architecture relates to society and always touches upon ethical issues as well. Questions of ethics, judgement, norms and different approaches are thus raised already from the beginning, when planning research work, in discussions on how to set up empirical studies, how to use other people's research, references, in teaching involving students, in research that involves studio work, etc. In a way, reflections around judgement and approach saturate all work, and as such it is also part of the same systematic follow-up and quality enhancement strategies as the other aspects. Follow-up work and progression are, in short, done in a similar way here, as with the aspects discussed above, i.e. through seminars, courses, the work with the thesis, supervision meetings, through the ISPs, ResArc strategic meetings, ResArc programme meetings, course evaluations, questionnaires to PhDs, etc. There is thus not just one system in place but a multitude of different and overlapping systems.

In addition to this, there are also courses available that explicitly deal with this at the faculty level, for example the courses "Kurs i forskningsetik" (Course in research ethics)¹⁴ and "Technology, Risk and Research Ethics". PhD students in architecture often also takes courses given at social science departments, for instance in interview techniques or observation methods, for the acquiring of knowledge about how to correctly approach informants.

Through staff representation in the faculty's committees for research strategy (forskningsnämnden) and for research education (forskarutbildningsnämnden), there are regular discussions in the Department's research committee regarding policies on individuals' and projects' relation to the research community at large, regarding for instance challengeability, publication access, and third mission involvement. These discussions reach the student through supervisors, as well as through direct representation in these committees. Several PhD students have also presented their research in contexts outside the University, and find different ways to contextualise their research in society.

¹⁴ <http://www.forskningsetik.lu.se/forskningsetisk-information/kurs-i-forskningsetik>

Working life perspective

Assessment criteria:

A. The programme is useful and prepares students for an ever-changing working life.

B. The programme's design and teaching/learning activities are systematically followed up to ensure that it is useful and prepares for working life. The results of the follow-up are translated, when necessary, into actions for quality improvement, and feedback is given to relevant stakeholders.

Contact with working life (from planning to architectural design and academic work) is important and upheld and followed up in several ways. Several of these have already been mentioned above, such as the inclusion of representatives from practice in the ResArc steering group, teaching assignments and courses. Through the alumni questionnaire, valuable information is acquired about how a PhD student's qualifications are regarded as useful outside academia.

Several of the PhD thesis projects are currently associated with external funding from Formas, which is the Swedish research council for sustainable development, and where societal relevance is one of the important criteria to get funding. For example, Jesper Magnusson's PhD education was partly funded by the Formas project "Local publics in the making", and Paulina Prieto de la Fuente's PhD project is partly funded by the Formas and Urban-net project "Chronotope: Time-Space Planning for Resilient Cities? New Means of Sustainable Planning in Societies of Consumption". The PhDs Sandra Kopljar and Kajsa Lawaczek Körner, both of whom defended their theses in 2016, were financed by The Swedish Research Council (VR), in the project "The Evolutionary Periphery". These projects relate to topical issues in planning, and prepare the students for future collaboration, by involving seminars or collaboration with HEIs, the municipalities, planning offices, consultant firms, and official publishing bodies. For example, a part of Kopljar's thesis was an experimental investigation called 'Audible Dwelling', which was co-organised together with artists, the art association and art gallery Krognoshuset/Aura and the City of Lund, where the latter also co-financed part of the experiment.

One could perhaps also argue that the integration between working life and practice is quite fundamental and well-integrated with the subject field of architecture (as compared to the traditional theoretical disciplines of the University). The School of Architecture in Lund has several teachers that are active in professional practice, and we have visiting professors coming directly from practice, such as recently the Head of Malmö City planning Christer Larsson (mentioned above). A lot of our PhD students also have prior experience from practice, working as planners or architects or teachers before they enrolled in the PhD programme. A couple of them also have ongoing positions outside academia: for example PhD student Ida Sandström has a leave of absence from her position as a planner for the city of Helsingborg, Thomas Nylund is the city architect of Luleå, and Fredrik Skåtar has an ongoing architectural practice. Of the three latest PhDs (who graduated at the Department in

2016), one works as a senior lecturer at the Department of Urban Studies at Malmö University, another is working at the City of Malmö and the third is working as a teacher/researcher at the Department.

One example, through which we were able to follow up the issue of ‘working life perspective’ was the Alumni survey in 2014, targeting students who took their PhD at one of the Swedish schools of architecture during the years 2004-2013. Here, it became clear that career opportunities and professional networks were especially important issues for many of the former students. Among the PhD graduates, 61% were now employed at different HEIs, 16% by municipalities/government and 23% by other employers (for example architectural offices). Since quite a high number stay in academia, it is of course important to prepare the students for a life as researchers and teachers. Through ResArc and the more structured research school with its course cycle, themed courses and events, conferences and not least, large national and international network, we believe that this has improved a lot during the years 2012-2014. From 2015, we have thus focused more on investigating how we can work for potential collaborations and career opportunities for PhDs outside academia. For example, ResArc has initiated a dialogue with the *Swedish Association of Architects* to make the architect studio firms and city planning offices more aware of the PhD graduates’ competences, and are discussing possible collaborations both at PhD and post-doc level. More locally, these kinds of discussions held for example with the City of Malmö (through Christer Larsson), have started to finance doctoral education for employees. Some of the larger firms in Sweden have also started to finance PhD education of their own employees (such as White arkitekter). One of the principal supervisors is also part of a pilot project where municipal planners of Scania get the opportunity to do a PhD as part of their job (in collaboration also with Urban Studies at Malmö University, the Department of Landscape Architecture at SLU, and several municipalities in the region).¹⁵

The relation between the research programme and working life perspectives is discussed at department level (for example, during the regular research staff meetings and by the Department board), at faculty level by the Faculty research programme board, and at national level by the ResArc steering and programme group meeting. It is a question of increasing importance, not only since the working conditions of our profession/s are in constant change but also because research and practice seem to be increasingly integrated through initiatives both from the private sector and from governmental research funders such as Formas and Vinnova.

¹⁵ <http://www.slu.se/narkomm>

Doctoral student perspective

Assessment criteria:

- A.** The programme allows the doctoral students to play an active part in work of improving the programme and learning processes.
- B.** The programme is systematically followed up to ensure that doctoral student input is used in quality assurance and improvement of the programme. The results of the follow-up are translated, when necessary, into actions for quality improvement, and feedback is given to relevant stakeholders.
-

All doctoral students are seen as valued colleagues, they have their own workplace and access to the many facilities of the University (with a number of libraries, alternative study locations, meeting rooms, parks, etc.). Several of them are employed at the Department and are thus covered by Swedish employment law, where the Head of Department is responsible for the work environment, rehabilitation issues, staff appraisals (*utvecklingssamtal*), etc. There is also a safety representative at the workplace.

The doctoral students have representatives on the Department board. They also have two representatives on the ResArc steering board and at the ResArc Programme Group where much of the strategic and practical work of ResArc is discussed and decided upon (including the initiation and development of courses). As described above, the PhD students (and graduates) have also been consulted in larger questionnaires, course evaluations, etc. This evaluative material has then been used in quality enhancement strategies. One example here is the established dialogue with work life representatives described above; this initiative was a result of the discussions following the alumni questionnaires.

The doctoral students of the Departments (of all three third-cycle subject areas) have a self-organised *Doktorandråd* (a ‘Doctoral students’ council’, currently chaired by Paulina Prieto de la Fuente) which discusses issues that concern the doctoral students and research studies. These issues can then be discussed with the research studies director, the supervisors, raised at board meetings and with the union.

Faculty and University level

Strategic questions that relate to Lund University as a whole are handled by the Research programmes board of the University. The board has at most twelve members and the students have the right to be represented by three members elected among themselves. At the Faculty of Engineering (LTH), the management is handled by a faculty board and the faculty management where the students have a representative. Research education is handled by the Research programmes board of LTH that consists of at most twelve members of which three are student representatives. The students’ union at the Faculty has several self-governed units or guilds and the Doctoral unit is one of those. Issues concerning the doctoral students and research studies are discussed here, and the unit also prepares questions for the management group of LTH (the board and the dean).¹⁶

¹⁶ For information at the University level see: <http://www.staff.lu.se/research-and-education/research-support/research-programmes-board>; and for faculty level see: <https://www.lth.se/english/about-lth/management-and-organisation/>. The Student union is described at <https://www.tlth.se/>

Gender equality perspective

Assessment criteria:

- A. A gender equality perspective is integrated in the programme's design and teaching/learning activities.
 - B. Systematic follow-up is performed to ensure that the programme's design and teaching/learning activities promote gender equality. The results of the follow-up are translated, when necessary, into actions for quality improvement, and feedback is given to relevant stakeholders.
-

The work on equality, diversity and equal opportunities is part of LTH's strategic plan and LTH also has a guide about discrimination as support for students and employees. Both at the faculty LTH and at the Department of Architecture and Built Environment, there are also equal opportunities groups (*JäLM-grupper*), working specifically with issues of gender equality, diversity and equal treatment. The group at the Department meets regularly (including representatives from the PhD student group), and has actively worked towards a more equal gender distribution among the teaching staff and professors. As part of our own work with the gender equality perspective we have also, as mentioned earlier, applied for (and received) funding to invite Alben Yaneva to the Lise Meitner professorship chair. The Lise Meitner chair was established by LTH in order to enable and secure more female professors in a still generally male dominated faculty. Additionally, the faculty offers a course for staff and PhD students about gender aspects in teaching "Genuspsykologiska aspekter i undervisningen" (a three week course on gender psychology in teaching).

It is also worth mentioning that, in the Swedish architectural research environment, feminism, gender and queer issues have been important aspects of the research discourse for at least a couple of decades, especially at KTH with researchers such as Katja Grillner, Katarina Bonnevier, Meike Schalk and Hélène Frichot. Through ResArc and the strong research environments, this expertise has become accessible to the PhD students at our Department. Further examples of researchers focused on user perspectives that include gender issues, who trained and graduated at our own Department, are Karin Grundström with a thesis about gender, space and poverty in Costa Rica (2009) and Kajsa Lawaczeck Körner with the thesis *Walking Along, Wandering Off and Going Astray, A Critical Normativity Approach to Walking as a Situated Architectural Experience* (2016).