

## Vision- and strategy for Design Studies at RUC

The newly established departmental structure and the new bachelor programme opens up for a unique possibility to establish a new powerful research area and related branches of educations at RUC: Design Studies.

Design Studies is purpose-driven, constructive and problem solving research that aims at meeting identified needs or solve identified problems. Design Studies is thus different from traditional analytical oriented sciences where the primary purpose is to understand and describe. Design Studies focus on the society's growing demands for information technology, communication, planning, services, experiences, etc. It is a creative science that aim at change and innovative practices; includes a principle of involvement and participation of the affected stakeholders; and it always include ethical considerations. The research methodology is characterized by action research and case studies of intentional projects driven by experiments, participation, critical evaluations, and the pursuit of specific goals and effects.

RUC have had, since the establishment in 1972, tree bachelor programmes: Natural Science, Humanities, and Social Science. These programmes represent the traditional university faculties which are characterized by analytical and mainly descriptive research approaches. During a number of years a growing number of educations and research environments at RUC had developed which are characterized by being normative, application-oriented, and innovative. It is this group of educations, research areas, and researchers within these creative disciplines that now face a possibility of being united in a new innovative main subject area. RUC must focus on this potential for the following reasons:

- Design Studies is an emerging international research area where RUC can get a leading position because of the university's unique competencies in interdisciplinary, purpose-driven, and problem-solving research.
- Design Studies can form a bridge-building between research environments that up until now did not have any general and mutual platform. United, these research environments represent a great potential unparalleled at the old universities (University of Copenhagen and Aarhus University).
- There is a great political attention towards new initiatives in interdisciplinary research [1] and this is also a core part of RUC's strategy [2].
- Design Studies may comprise the core of the research in a new main subject area at RUC in continuation of the Hum-tek Bachelor Programme.
- Design Studies is very appealing to students and it attracts students with a different profile.
- Design Studies is useful for the community as the students' general interest in the humanities is combined with technology and entrepreneurship.
- A focus on Design Science will put CBIT in a key role.

### Vision

RUC should aim at establishing a shared platform and identity comprising all academic staff with an interest in Design Studies. In short: The establishment of a new fourth main subject area focusing on Design Studies – a main subject area in parallel with the three existing subject areas in humanities, natural science, and social science. The new main subject area should comprise a dedicated bachelor programme in the form of the Hum-tek Bachelor Programme, a number of graduate and post-graduate studies initiatives, and a strategic and ambitious research initiative.

The Hum-tek Bachelor Programme has been realized by the support from large environments at RUC which in the past did not have any dedicated student enrolment channel. The Hum-tek Bachelor Programme does not challenge the established bachelor programmes (in humanities, natural science, and social science) since Hum-tek seeks student with different (creative) interests. The enrolment for Hum-tek in 2008 was very promising. We should strive for a future enrolment equivalent to two houses (240 students) and this is realistic as related programmes (among others 'Humanistic Informatics' at Aalborg

University, 'Information Studies at Aarhus University, and 'Design' and 'Digital Design and Communication' at the IT University of Copenhagen) are experiencing a large, stable, and increasing enrolment. The challenge for Hum-tek is to establish a scientific identity, a research-driven environment, and an engaged and consistent group of academic staff pursuing a shared objective.

The Hum-tek Bachelor Programme offers undergraduate and graduate studies in Computer Science, Informatics, Geography, Technological and Socio-Economic Planning, Health Strategies. Students enrolled in the Hum-tek Bachelor Programme must choose at least one of these options. There is a potential for a number of interesting and highly attractive combinations with studies as Communication, Performance-Design, and Journalism. A number of other relevant studies might also be involved as combination studies, including studies from the humanities such as Psychology, Educational Studies, Philosophy, as well as studies from social science such as Business Studies, Economics and Business Administration, and Public Administration. The challenge is to consolidate the most apparent combinations which include the mandatory studies and at the same time open up for combinations with a wider range of disciplines. At a post-graduate level several of RUC's existing Ph.D.-programmes are relevant, but in a longer term a dedicated Ph.D.-programme in Design Studies might be needed.

A new main subject area at RUC requires that a professional anchoring in national and international research environments. The university must take the lead and prioritize an ambitious and coherent strategic research initiative. RUC has many competent and acknowledged researchers within Design Studies, but they are relatively dispersed and initiatives to develop a coherent research effort – that might entail mutual inspiration, synergy, and collaboration – have only just begun: In the past year two research workshops and a conference has been organized. They were attended by researchers from different research groups and departments. This new and emerging research community has undertaken an interdisciplinary research agenda and aim at establishing a shared epistemological and ontological platform based on case- and action research driven empirical research conducted in collaboration with public and private organizations. RUC's management has supported this initiative among others by prioritizing the PODES-UNIK application [3]. There is a need for sustaining and further developing this interdisciplinary research initiative and to provide substantial support for the new main subject area forming the university's most important and strategic area of research. RUC's unique competencies, and RUC's characteristic profile and structure provide the best possible conditions in order to be a leading university in Denmark as well as in an international perspective.

## Strategy

Development of a new main subject area must be based on prioritizing and consolidating existing research as well as establishing supportive conditions for teaching. In specific it is a central part of the strategy to provide appropriate occasions and conditions that enable meetings between researchers at RUC where they can exchange results and experiences and build up collaboration across different research groups and departments.

As mentioned above, the first steps towards this strategy has already been taken: After CBIT's strategy seminar in August 2007, an initiative to gather researchers from RUC interested in Design Studies was made. The first meeting was held on August 31<sup>st</sup> 2007 a one day workshop was held on November 15<sup>th</sup> 2007. This further resulted in to main activities: The creation of the UNIK application, PODES, and the conference "Perspectives on Practice-Oriented Design Science" held on May 15<sup>th</sup> 2008. The PODES-UNIK application was prioritized by RUC and it involves 7 research managers, from which 6 are from CBIT. The conference resulted in a proceedings which during fall 2008 was used as a compendium at Hum-tek and where the contributing researchers were invited to make lectures. 14 researchers contributed to the conference papers and these papers are currently being redeveloped and rewritten aiming at an international book release. The network of researchers from RUC with a declared interest in Design Studies now counts almost 40, from which more than half are from CBIT [see appendix A].

The Design Studies research area is relatively young and only few dedicated international conferences has been held so far (in 2009 the third conference in 'Design Principles and Practices' and the fourth

conference in ‘Design Science Research in Information Systems and Technology’). But Design Studies is also a research area where some of the related interdisciplinary research disciplines do have a mature experience: For example was the 10<sup>th</sup> biannual conference in ‘Participatory Design’ held in 2008 – an international conference which has been held since 1990.

The overall research strategy at RUC should at first let the existing research traditions inform and inspire each other. As a starting point we have a number of well established research groups, each with different networks, research domains, backgrounds, approaches, and theories (information technology, services, experiences, communication, health, working life, landscape science, regional planning and development, urban studies, etc.). The meeting point is the overall hypotheses, that there exist a set of universal common features and approaches that characterize all strands of research disciplines addressing practice-oriented Design Studies. This is the strategy that the initiatives in terms of workshops and conference as well as the UNIK application is based on. One of the contributions on the conference held on May 15<sup>th</sup> describes for example a general, iterative model for research and development within all large experimental and practice-oriented design projects [4].

RUC can get a long way by letting existing the research communities inspire one another and stimulate collaboration. But in the long run the development of a new main subject area requires a strategic research effort implying substantial resources to establish large joint interdisciplinary research projects – as proposed in the UNIK application.

A strategic research effort will provide the ideal conditions for the development of related educational studies. Hum-tek forms the shared platform. An engaged, visionary, and competent management of Hum-tek is of vital importance. The development of Hum-tek’s identity and content and the establishment of Design Studies at RUC must be considered as a mutually inspiring symbiosis: The students must experience Hum-tek as the meeting point for the foundation and development of a new science; and the researchers must experience Hum-tek as a core meeting place where the newest initiatives and results from Design Studies are presented and discussed.

Management of Hum-tek must be combined with the management of other educational studies at undergraduate, graduate, and post-graduate levels. As a start attractive combination studies at graduate level, which include the mandatory studies, must be developed. The combination study (‘toningsuddannelse’) ‘Interactive Medias’ (combining Communication with Computer Science or Informatics) may be a role model because of its highly specified study plan. Within a short number of years combination studies between the mandatory studies (Computer Science, Informatics, Geography, Technological and Socio-Economic Planning, Health Strategies) as well as between these studies and other relevant studies. The latter includes especially Communication, Performance-Design, Journalism, Business Studies, Psychology, Educational Studies, and Philosophy. Finally, attractive post-graduate studies must be established associated to our existing Ph.D.-programmes (among others Design and Management of Information Technology, Technology and Society, and Communication, Journalism and Media). In the longer run a Ph.D.-programme dedicated to Design Studies should be established.

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- [1] ”Tværfaglige løsninger kan styrke dansk konkurrenceevne”, *Mandagmorgen*, d. 23. juni 2008 pp. 28-31.
- [2] *Strategiplan for Roskilde Universitet 2020*, RUC, April 2008.
- [3] *Practice-Oriented Design Science Research for Experiences and Services (PODES)*, UNIK application submitted by RUC to the Danish Agency for Science, Technology, and Innovation, April 1<sup>st</sup>, 2008.
- [4] Simonsen and Hertzum: ”Participatory Design of Large-Scale Information Systems – A Reconstruction of the Iterative prototyping Approach”, in Bærenholdt, Simonsen, Scheuer (Eds.): *Proceedings of the conference on Perspectives on Practice-Oriented Design Science*, 15th of maj 2008, Roskilde University, pp. 57-72.

## Appendix A: Researchers interested in Design Studies

All have actively indicated their interest either directly or by their contributions noted as 1.-4. below.

Researcher	Department	1	2	3	4
Ada Scupola	CBIT		X		
Anne Hatting	ISG				
Anne Jensen	ENSPAC		X		
Annette Aboulafla	PAES				
Arne Thing Mortensen	CBIT				
Bent Søndergård	ENSPAC	X			
Bente Halkier	CBIT			X	X
Bente Kjærgård	ENSPAC				
Birgit Jæger	ISG				
Bjørn Laursen	CBIT			X	
Hanne Louise Jensen	ENSPAC				
Henriette Christrup	CBIT			X	
Jan Mattsson	CBIT			X	X
Jan Pries-Heje	CBIT	X		X	X
Jesper Brandt	ENSPAC				
Jesper Holm	ENSPAC	X			
Jesper Simonsen	CBIT	X	X	X	X
John Damm Scheuer	CBIT	X	X		
John Pløger	ENSPAC	X			
Jon Sundbo	CBIT			X	X
Jørgen Lerche Nielsen	CBIT				
Jørgen Ole Bærenholdt	ENSPAC	X	X	X	
Keld Bødker	CBIT			X	
Kirsten Mogensen	CBIT				
Kristine Samsum	ENSPAC	X			
Lars Fuglsang	CBIT			X	
Maja de Neergaard	ENSPAC				
Maria Duclos Lindstrøm	SamBas	X			
Martin Frandsen	ENSPAC				
Michael Haldrup Pedersen	ENSPAC	X		X	
Morten Hertzum	CBIT	X			
Niels Christian Juul	CBIT				
Niels Jørgensen	CBIT				
Olav Harsløf	CBIT			X	X
Ole Erik Hansen	ENSPAC	X			
Poul Bitsch Olsen	CBIT	X			
Simon Heilesen	CBIT				
Sisse Siggaard Jensen	CBIT				
Troels Andreasen	CBIT				

1: Paper submitted to the conference 'Perspectives on Practice-Oriented Design Science'

2: Editor of the conference and proposed international book release

3: Applicant, UNIK application PODES

4: Principal researcher, UNIK application PODES