Research Assessment Panel's report on The Royal Danish Academy of Fine Arts, School of Architecture (KADK)

June 2013

1. General introduction and comments/recommendations

The research assessment panel consists of the following persons:

- Professor Murray Fraser, Bartlett School of Architecture, University College London, UK (chair)
- Professor Oya Atalay Franck, School of Architecture, Zurich University of Applied Sciences, Winterthur, Switzerland
- Associate Professor Karin Helms, Ecole Nationale Supérieure de Paysage, Versailles-Marseille (The Landscape Architect School of Versailles), France
- Professor Fredrik Nilsson, Department of Architecture, Chalmers University of Technology, Gothenburg, Sweden

We undertook our research assessment visit to the KADK School on 29th/30th January 2013. Along with the examples of research outputs sent to us in advance, we were shown a good range of evidence during our visit, and met with a wide spectrum of staff and students who also provide us with a lot of input for our deliberations. It was impressed upon us that the school has in the last decade been moving away from being a largely teaching-led institution to one which is increasingly research-based. We were also informed that the overseeing of research activity within the KADK School has now been shifted from the Ministry of Culture to the Ministry of Science, Innovation and Higher Education.

Within the Danish university research structure, there seems to us to be a prejudicial and unhelpful distinction made between 'scientific research' and what is termed 'artistic development', and this is clearly hampering the emergence of new areas such as design research in schools of architecture. We were informed that it is the KADK School's aim to try to bring these strands of 'scientific' and 'artistic' research closer together, and that it is doing so for two reasons: firstly, to reflect better what happens within architectural practice, and secondly, because there is likely to be an increasing focus in future Danish research funding on practice-based work such as found in the creative industries. Another crucial structural factor mentioned to us was the changes that have been happening within the larger Academy, with for instance the relatively recent merger of the School of Architecture, School of Design and School of Conservation into one institution, with a new Rector, Lene Dammand Lund, appointed to head it.

As a research assessment team, we had been invited by the KADK School to write a joint report on a selection of research outputs from the census period (2005-10), and on the further documentation and information we might obtain from talking to staff and students during our visit. At the first meeting with the management team on the initial day of our visit to the KADK School, and in response to our question about what our precise brief was to be, we were requested to do two things:

- To provide a retrospective report about the research performance of KA during the 2005-10 census period;
- To provide suggestions about the possible future organisation and direction of research activity within the KADK School.

Subsequently, however, our brief was substantially changed, in that we were expressly requested not to deal with the second issue at all and simply confine our efforts to the first aspect. We will hence aim to comply with this altered request in this report even if, inevitably, some of our insights are bound to make some reference to potential future research trends and strategies.

In terms of supporting documentation which was supplied to us, we relied most heavily for our analysis on these following reports by the KADK School:

- The Royal Danish Academy of Fine Arts, School of Architecture, *Research Plan 2007-2010* (Copenhagen: KADK, 2008).
- The Royal Danish Academy of Fine Arts, School of Architecture, Assessment of Scientific and Artistic Research at The Royal Danish Academy of Fine Arts, School of Architecture 2005-2010: Self-Assessment Report, Part I (Copenhagen: KADK, n.d.).

 The Royal Danish Academy of Fine Arts, School of Architecture, Assessment of Scientific and Artistic Research at The Royal Danish Academy of Fine Arts, School of Architecture 2005-2010: Self-Assessment Report, Part II (Copenhagen: KADK, n.d.).

As noted, prior to the research assessment visit we had been sent a decent sample of research outputs produced by KA staff during the census period. Two members of our assessment panel had therefore read each of the sample outputs, enabling a good degree of cross-calibration in terms of how we rated them. In addition, during our research visit to the KADK School we were provided with a supply of written documents, research outputs, and other information that therefore helped to inform our assessment.

In regard to the 2005-10 census period, there were four research institutes operating within the KADK School:

- Institute of Building Culture
- Institute of Architectural Technology
- Institute of Planning
- Institute of Design and Communication

We will report in more detail on each of these four institutes below, as well as upon the sub-groups, termed 'centres', of research staff within each of them. Firstly, however, we feel it is only right to report on our general impressions of the research performance and culture at the KA School during the 2005-10 census period, so as to outline our main comments and recommendations:

1/ The school certainly possesses the potential to become the main research engine within Danish architecture, as well as being important in the Scandinavian/Nordic arena and further afield -- thereby fulfilling the stated aim of the KADK School to become more research-focussed. However due to a lack of management clarity and certain intrinsic structural restrictions which exist within the system, the school is not as yet performing at anywhere near that kind of level. In order for it to progress, the KADK School has to become far more self-critical about its research activities, with an especially urgent requirement being to find effective ways to compare and benchmark itself against significant research universities worldwide. Also, while the four research institutes possess good administrative systems, with four academics placed in charge of the management of projects which also bring in research income, it is surprising that these seemingly sound managerial conditions have not led to more EU collaborations/grants or to greater international collaboration.

2/ As to what can be termed the 'research environment' at KA, we feel that the key structural problem during the 2005-10 period was that not all of the four research institutes were performing at anything like the same level, as will be made clear in our detailed assessments below. Some of the institutes are not producing enough original research work to sustain a healthy and dynamic culture within that group, while others are not adequately integrating their research work into the Bachelors/Masters courses that they are responsible for teaching, which also causes them to underperform. In general, the four research institutes seem to have acted in far too separate a manner in the 2005-10 census period, and therefore urgent measures need to be implemented to ensure greater cross-fertilisation. At the same time, there needs to be more coordination of management between the research institutes, not least to control the highly variable nature and quality of work by the sub-groups/'centres'. Currently there is also no evident strategy for researcher recruitment or the planning of research career paths at KADK, so that too needs to be addressed.

3/ In regard to the 'research outputs' produced by KA, all four institutes undoubtedly provided at least some research work of significance during the 2005-10 period. Yet it also falls upon us to point out that this was by no means a consistent pattern, as was revealed by the huge difference in quality of research of the examples sent to us to review. A decent proportion of these outputs were excellent, and clearly of a high international standard; conversely, however, far more of them were average at best, plus it was alarming that we were also sent items to read which would not be regarded as proper research outputs in other countries. It might be to the KADK School's credit to have sent us a true slice of its research activity, warts and all, but for us it seemed more of a sign that the school is not yet sure of what actually constitutes research of the highest quality. Hence this is another aspect that needs to be tightened up in the future. Stronger processes of peer-review are required, with these based on clear criteria for judging what is of the required international standard, and what is not.

4/ Overall, our considered view is that the Institute of Design and Communication performed best in terms of producing a significant amount of original research during the 2005-10 period, as well as in building up a strong international reputation, integrating this research into a range of teaching courses, and thus enlivening the intellectual culture of the school in general. It is certainly the institute which is most innovative and experimental, and which has the largest international reach. Hence it is the institute whose work we believe ought to be nourished in the confidence that it can continue with this positive trajectory into the future

5/ In terms of PhD provision in KA, there was a steady growth in the number of doctoral candidates during the census period, rising from 21 'standard' PhD students and 1 'industrial' PhD student in 2005 to some 30 'standard' PhD students and 8 'industrial' PhD students in 2010. As a result, there is today a lively cohort of doctoral students -- which, under the Danish system, are employed by the KADK School and

thus have some teaching duties -- who told us that they have been able to learn a lot from each other. They feel they are well supported, and in turn they are admirably keen to contribute to the School's teaching and research ethos. However, the PhD students we spoke to were also concerned about their future careers, whether those happen to lie within the KADK School or elsewhere. Hence this is a crucial matter for the KADK School to look into. Furthermore, it is also apparent that more work needs to be done in setting out the criteria and methodologies for design-based or practice-based doctorates, so as to support that important development. At the moment, the methods and aims of these kinds of research are left as implicit rather than explicit.

6/ During the 2005-10 period there was only, at best, a moderate performance in terms of earning external research funding, whether from Danish or EU research councils or industrial sources. Hence this is another aspect that needs to be developed across all these fronts for the future. One genuine area of promise is the stream of 'industrial doctorate' students now coming into the KADK School, and given the School's close links to the local architectural profession and other building professions, this appears to be something to target even more in future, especially if -- as we were informed -- ever greater amounts of Danish government funding will be targeted towards developing links between academia and industry.

7/ It was of concern that research links to other Scandinavian/Nordic countries, which seem the most obvious linkage, appear somewhat minimal during the 2005-10 census period. This then is another strand for the KADK School to work on (in contrast, we were informed that in the case of the School's teaching courses, around 40% of the students come from either Norway or Sweden). We were also told by staff that there is a national research school programme involving the two Danish schools of architecture and the two Danish design schools, called DKAD, which seems a potentially positive step forward that could be further extended through links to other Scandinavian countries.

8/ Contacts with the Danish architectural profession and wider society appear to have increased to a point where they are now relatively healthy in the KADK School. But in regard to demonstrable and verifiable socio-economic 'impact' outside the academy arising from KA research outputs, this was fairly limited in the 2005-10 period, and was of highly variable quality. Hence while some notable links were established in this period by some institutes and their sub-groups/'centres', yet again this needs to be pushed much harder in future.

9/ Taken as a whole, KA performed adequately but by no means spectacularly in research terms in the 2005-10 census period. It therefore needs to find a way to integrate its different research areas far more effectively, so that the School can form something greater than the sum of its parts and ensure that it becomes a more significant player in the global field. One way to achieve this goal might be to become more tactical in using the excellent opportunities available in The Royal Danish Academy to put on major exhibitions and publish high-quality outputs. Overall

strategies, criteria and priorities for research outputs and publication need to be clarified with urgency, given that at present they vary far too much between the institutes. Above all, the KADK School has to become clearer about where it wishes to head in its research strategies and aims/objectives, and also about how it can then put in place the correct systems and incentives to achieve these goals.

2. <u>Institute of Building Culture</u>

Director: Prof Carsten Juel-Christiansen

Organisation

The focus of this institute, and the key competences it covers, are somewhat obscured by its name. After all, 'building culture' is a term that can hold a variety of meanings. In some architectural schools, for example, 'building culture' refers to the preservation and restoration of monuments, while in others it refers to the development of building technology through the ages and in different societies, etc.

The list of publications from this institute in the 2005-10 census period further accentuates this impression of an uncertainty in focus. According to Part II of KA's Self-Assessment Report, the institute's publications covered topics that are as diverse – and distant – as the architecture of ancient sites in Lykia (Anatolia), the sociology of colour, and Arne Jacobsen's own house. Nor was there a clearly recognizable profile to be derived from the institute's self-description in Part I of the Self-Assessment Report. The institute itself identifies four key subject areas of investigation: architectural theory and history; transformation and restoration; theory and design; general academic competences. But it is not evident from the written descriptions how subject areas 1 and 3 interrelate, or perhaps more importantly, how they differ. Unfortunately, the list of publications and research activities contained in Part II of the Self-Assessment Report does not provide any real information as to which of these subject areas the various outputs count against. It therefore becomes impossible to gauge the relative share of each of these areas in terms of the overall outputs. Also, the assessment panel was not provided with an organization chart of the institute. All this leads to an overall impression of it being a somewhat nebulous, and certainly a highly individualised and fragmented, research body. Hence the researchers gathered under the (nominal) umbrella of this institute seem to operate more as 'lone wolves' than as a research team. The ten examples of research work for which abstracts were provided, or where in some cases the publications were provided for a closer look, seemed to be sufficiently impressive, but there is no

general guiding principle or publication policy which might create a larger picture, or a coherent statement, about the intentions of this institute as a whole.

In essence, it seems to be the history, theory and criticism of architecture which is at the centre of interest of the institute's researchers, with a particular focus on Scandinavian architects and buildings. Side-track lines of outputs then deal with monument preservation, or with methodological aspects of architectural practice and research, or with what is referred to as 'artistic research' (which is usually in other countries called research by design). It appears that research work for this topic circles around the question of how research is carried out by means of the architectural design process, which of course is one of the 'hot-spots' of current architectural discourse. Again, however, detailed information is lacking, leading to a number of unanswered questions: How is this research done? What are the criteria for 'artistic research'? What are the concrete results coming from this research? How can an institute which itself does not itself teach, or practice, design do research on this? Does the institute therefore enter into a form of collaboration with one of the design studios within KADK's teaching department? How are the activities of this institute in terms of the Theory and Design, i.e. research by design, differentiated from what appear to be very similar work in the Institute of Design and Communication? How also do the research findings translate into architectural practice and thereby impact upon the professional community?

Methods / approach / context

A field of research interests that are as diverse as those in the Institute of Building Culture will always require a diversity of methodological approaches. Indeed the institute, in its self-characterization, describes the situation as follows: 'In the research tradition, architecture is linked to the humanities, but the institute's subjects also make use of a number of disciplines that include technical-scientific and social science approaches as well as the practice forms of architectural presentation.' In other words, the institute primarily uses research methods from the humanities – i.e. literature and archival research, conceptual and technical analysis of artefacts such as buildings or works of art, critical analysis, hypothetical speculation and verification/refutation, etc. - along with methods usually associated with other disciplines in the social sciences – i.e. survey-based research or empirical laboratory or fieldwork research. The two main areas of competence in the institute – on one hand architectural theory and history, and on the other restoration of buildings and changes in building culture – certainly legitimize the implementation of different research. Design-based research, however, is obviously of a somewhat different nature. Here, many of the conventional approaches – in the sense of widely accepted, standardized methods from the classic science disciplines – do not suffice. New approaches and standards have to be defined. To what degree this has already happened in this institute is not at all clear, nor was any substantive evidence presented to the assessment panel.

Performance / environment potential

The institute commits itself to a 'holistic' understanding of architecture as idea, work, and culture. Its interests therefore range from conceptual to procedural/product-related aspects of the cultural mindset in which architecture takes place, and which is shaped by architecture, spanning from small-scale to large-scale and from single buildings to broader aspects of urban planning and landscape design.

In the work of some researchers, such as Lars Marcussen or Anders Abraham, a complex in-depth approach to specific questions become visible. Their outputs are original and have rigour and complexity, and of importance in the international context also. As such, they increase the visibility of the institute and KADK generally. The documentary anthologies by Michael Asgaard also deserve appreciation in this respect, plus there are a number of impressive in-depth monographs about important Danish architects which can be commended for their sheer scholarship and their contribution in making known figures who are otherwise overlooked by architectural historians. Having said that, however, those kinds of outputs, also lead to questions about the impact that research from the institute has had, and whether the work is to any real extent questioning the traditional methods of architectural history -- this, after all, is a major issue in many other architectural schools.

In part the problem might be that the KADK School is not that clear about how the fields of research of its institutes are delineated. Weighty scholarly books such as that on Peder Vilhelm Jensen-Klint by Thomas Bo Jensen, but strangely that publication is not a product of the Institute of Building Culture but of the Institute for Technology. Likewise, the very interesting work of Anders Abrahams, notably his major book, *A New Nature*, is a definite contribution to the field of design research which should be supported and indeed encouraged in the future, but it was not clear to the assessment panel why this work was not part instead of the Institute of Design and Communication, where it would seem to fit better.

A more precise declaration of research questions, and the setting up of coordinated research teams -- rather than the prevailing individual efforts -- would allow for a better anchoring of the work done by the institute within the international context. Hence while the diversity of individual contributions is to be respected, the resulting fragmented approach as the dominant form of research practice in the institute is not

sufficiently sustainable to ensure better visibility in the School and in the larger research community.

Integration / exchange

As far as it was possible for the assessment panel to get an understanding of the links of the Institute of Building Culture with other institutes and organizational divisions of the school (especially the teaching units), or of external liaisons and networks, the impression prevails that it is largely autonomous. We strongly recommend that this institute considers possibilities of collaboration with researchers from other institutes and other schools. Also, if the institute claims to be an advocate of advancing and maintaining the quality of architecture within and outside academia (i.e. in practice), then greater collaboration with other academic and professional groups is indispensable.

The question of future continuity, and of reducing the institute's dependence on established individual scholars, should be addressed with priority – for this, the systematical advancement and encouragement of young academics should be a *sine qua non*. The Institute of Building Culture has earned itself a respected position within the Scandinavian context, but a more limited one internationally. In sum, the question this observation raises is whether institute is really being ambitious enough in intellectual terms and in academic performance.

3. <u>Institute of Architectural Technology</u>
Director: Prof Torben Dahl (past); Prof Anne Beim (present)

Organisation

The Institute of Architectural Technology consists of three general research fields, these being Tectonics & Structure, Climate & Comfort, and Production & Process. Each of the general research fields includes three more specific research fields or subject areas. The institute also hosts the Centre for Industrialised Architecture (CINARK), during the period led first by Anne Beim and subsequently by Jesper Nielsen, which was established in 2004 to help architectural education and the profession to understand and make use of potentials offered by ongoing changes in the industrialised construction industry.

This is a well structured and organised institute, and its research areas are highly relevant for contemporary architectural practice and the building sector at large. The institute has during the 2005-10 census period developed important and significant research, and CINARK has become important for focusing and driving research projects, as well as for establishing external collaborations and increasing the international presence and exchange at KA.

We were informed that the number of research staff at the institute has increased from 18 in 2005 to 27 in 2010, while the number of PhD candidates has more than tripled from 3 to 10 students. This shows good development and potential for the continued regeneration of the institute's research fields. The areas led by Anne Beim on Applied Building Technology and on Processes of Architectural Production, as well of course as CINARK, have been built up to create a research environment which produces work of high reputation within the Scandinavian building sector and its schools of architecture. The research group on Structures, headed by Olga Popovic Larsen, also produces extremely interesting research work in the field of architectural engineering, and the work in the areas led by Torben Dahl has not least provided successful educational material about climate and comfort.

Methodology / approach / context

The research methods and approaches used in the institute are very varied, and range from technological and scientific methodologies to methods drawn from humanities and practice-based fields. Research within the institute also employs approaches of architectural design methods as well as history and theory to conceptualize contemporary practice and production. There is a strong focus on relevance for and connection to professional practice and building industry, which is seen as positive by the assessment panel, and several connections and collaborations with external clusters exist both within academia and practice as well as on national and international levels. Good contacts have been established with, for example, the University of Pennsylvania (USA), TU Delft (Netherlands) and ETH Zurich (Switzerland), as well as with other universities in Denmark and Sweden. A number of conferences and exhibitions has been organised by the institute during the census period.

Performance / environment potential

The technologically oriented research in KA, as represented by the institute, is serious, intelligent and significant but also perhaps a bit too understated at present.

The staff team seems to be capable, but could perhaps think of more innovative kinds of research to pursue in future. The institute has been successful in getting external and international funding for certain research projects, and collaborations with the construction industry have led to the positive and interesting development of 'industrial' PhD projects, partly funded by industry. These external and practice-based collaborations could prove a good hotbed for innovation and new approaches, but if not used in strategic ways then they might also be limiting. Hence the institute's research for the moment is generally rigorous and competent, but its creative and innovatory potential has not been taken to the level it could have been.

The institute during the census period produced an increasing number of publications, especially peer-reviewed articles and book chapters, which is a good sign of positive progress in research performance. The research outputs provided for the panel to read were decent, but very few were of the very highest quality. A large amount of the publications produced during the period are actually not targeted for an international audience, and are written in Danish, which was the case for instance for all of the PhD theses provided to the panel. Using the native local language can be a good strategy to develop precision in conceptual frameworks and to strengthen exchange and collaboration with local practices, but the international reach and the quality development suffers considerably. The actual impact on, and exchange with, professional practice and wider society was not clear to the assessment panel, although several of the publications were well-conceived and attractive pedagogical outputs aimed at a broad audience within the building sector. This is positive, but consequently it also means that several of the publications we looked at were not at an especially high methodological and theoretical level, and as such the research contribution was not very innovative or original.

Despite what appears to be good contacts and collaborations with industry, the collaborations in actual research are not yet significant enough, and so could be developed. Especially, more transdisciplinary and multidisciplinary research projects could be formulated more consciously, thereby making better use of the potential of the interdisciplinary ambitions and setup of the institute. Even though there are several initiatives to use combined research methodologies, including architectural design methods, there is little evidence of actual research within the institute that inquires into and develops critical methodological frameworks in themselves. This could be seen as a lost opportunity and something which needs to be developed to strengthen research at the institute, as well as at KADK more generally in the future.

Integration / exchange

The collaborations within the institute seem to be fruitful enough, with CINARK as a particularly integrated and important platform for development, albeit perhaps not as dynamic as it could be. The collaborations and exchange with the other institutes in KA could also be increased, not least to strengthen the methodological and theoretical discussions from which the Institute of Architectural Technology could both contribute to and benefit from such exchanges. The international networks and connections are moderately good, although EU/ international collaboration on actual research projects is not very strong at the moment.

We realise it might be harder for the KADK School to operate and fund an institute of technology that is located within an arts and design environment, but this makes it even more essential that the school devotes sufficient time and resources to developing this kind of research, since it is clearly so fundamental to architecture in general. Until now the institute has shown good progress and has potential to take a strong position in a Scandinavian and international context, but it needs to be far more ambitious if it wants to step up the next level. Indeed there is a real question of how the institute can function in a fine arts academy when its research work needs, through any assessment process, to be put up against the very best technical universities in Europe, and globally.

4. Institute of Planning

Director: Assoc Prof Peter Duelund Mortensen (past); Assoc Prof Jonna Majgaard Krarup (present)

Organisation

This institute is organised around three architectural planning fields, these being Landscape, Urban and Building. Its research topics aim in particular to contribute to contemporary theories and methods linked to the 'consequences of globalisation and democratisation processes'. Associate Professor Peder Duelund Morten headed the Institute during the census period from 2005-10. The institute also now includes four centres:

- Urban Space Research (CBF) as funded by Realdania Foundation and KA, with the main objectives to deal with knowledge and methods about creating urban spaces. It was headed from 2003-06 by Jan Gehl and by Jonna Majgaard Krarup, since when she has run the Center.
- Centre for Urban Planning (CRP), which is related to theorising urban transformation processes in European cities. It was headed by Jens Kvorning during the 2005-10 census period.
- Department of Human Settlements (DHS) as headed by Jørgen Andreassen and Jørgen Eskemose, with its research oriented towards planning in developing countries.
- Centre for Sports and Architecture (CIA), headed by René Kural and set up in collaboration with the Danish Foundation for Culture and Sports Facilities, being aimed to improve architectural quality linked to sports activities and body culture.

A very real problem is that the severe decrease (by some 50%) in the staff team during the 2005-10 census period has not helped the institute to generate new research initiatives or international collaborations. As a result, the Institute of Planning and its four centres do not seem at present to work together well. Certain topics or objectives are similar between some of the centres, while others work autonomously without any relationship to the institute as a whole, such as the Centre for Sports and Architecture. In general, the institute's research objectives and resulting outputs are not nearly visible enough, although it should also be said that two of the centres are well recognised due to their impressive research production. During the 2005-10 census period, the institute had no real programme of visiting tutors, lecturers or guest professors which might have helped to promote and disseminate its research, or to develop new collaborative teams and projects focused on future research topics. On the other hand, the relationship of the institute's knowledge and methods towards teaching is extremely relevant, and indeed seems to be one of its clearest objectives. Likewise, the number of PhD students, now up to around 15 candidates, has remained admirably stable during the period, even if only one of them actually passed their doctorate examination during the census period.

Methodology / approach / context

The research methodology used in the institute is mostly by design or by practice, and has the clear potential for innovation in the field by emphasising first the investigation of the larger thematic issues and then the actual design research projects. This interest in research by design could however be better announced. Its methods made more open and explorative in scope, and if it were to do so, this

would make more explicit the link between the institute's research work and its Masters courses. The examples of research by design in the institute, as presented to the assessment panel, were not self-critical enough and the products we looked at were not projected towards the future enough. Other methodologies and approaches used within the institute consisted of more scientific survey methods or conceptual analyses.

Performance / environment potential

The Institute of Planning has a considerable pedigree and as such it follows the remarkable heritage from the 'golden age' of Danish landscape architecture and urban design. International recognition since the Second World War of the teachings of G.N. Brandt, C.T.H. Sørensen or Sven–Ingvar Andersson has long been the flagship of the School in the discipline of landscape architecture. This tradition however is being lost. Today, the institute seems to be suffering from worsening funding and less staff time, and this feeling of decline appears to have first set in during the 2005-10 census period. This is deeply regrettable given that there are undoubtedly important and capable staff members in KA in that subject area, and our definite view is that it needs to be nurtured.

Within the landscape field, it is notable that some very highly regarded urban planners such as Jan Gehl contributed until 2007 to the school's research activities, and so more needs to be made of this in future. Some excellent work has been done on landscape design from a design basis by Steen Høyer. His book on Landskabskunst is a complete monograph of the author's work from a research orientation, and explains both his design methodology and the ways in which his spatial research analysis is linked to Danish identity. This research material could easily be the foundation of an important PhD study, for instance, but Steen Høyer seems likely to retire soon and so KADK ought to think seriously about how this area will be reinforced, and indeed developed, in the future.

Landscape architecture and its links to urban planning, as well as research into how environmental design is fundamental for creating sustainable landscape designs, represent strong strands within the institute's research work. Large-scale visions for the future capacity to produce food -- a very real and pressing topic -- were researched in a remarkable PhD thesis by Nee Rentz-Pedersen about industrial agriculture. With the title of 'Industrialisered storlandbrug I Danmark', this doctorate also offers an impressive example of design research work. An interesting book which connects architecture, teaching and health, called *APROPOS*, also seems to belong to another topic other than conventional planning or urban design, as does

other interesting work from the CIA centre. Two reports provided for the assessment panel, on Danish examples of dense cities and on strategies for sustainable urban transformation, seem to be well targeted to a public audience but are of low quality in regard to their research content. The net result is that it appears that actual urbanism is not being researched to any great extent by the Institute of Planning any more.

Integration / exchange

In general, this institute seemed to be the weakest performer in terms of the research outputs it produced during the 2005-10-census period. Furthermore, its research centres were more visible externally than the institute as a whole. A major reorganisation that brings together the centres, and redefines in a much clearer manner the main research domains, could in our view help to find increased amounts of research resources, and also give more visibility to the institute's research strategy. Being more open to other institutes in KA, as well as greater dialogue through international research partnerships, would also help to define and then promote the identity of the institute. In this regard, design research or practice-based research appears to be most developed area which has a large enough potential to open up debate again in the institute, as indeed it did in the past.

Thus the Institute of Planning forms a significant part of the intellectual agenda of the school, and as such we would definitely recommend that it should receive more institutional funding and support. One thing which the KDAK School should do is reverse the pattern wherein this institute seems steadily to be losing key staff and resources, and has now diminished even further from what seems was a declining performance anyway during the 2005-10 census period. The question is how can the institute possibly survive in future without major new injection of staff and funding? It is time for the KADK School to take some firm action in this regard, rather than just watch the institute decline further.

Institute of Design and Communication (Director: Assoc Prof Jørgen Hauberg)

Organisation

There are 3 sub-groups located within this institute, these being Design, Visual Communication, and the Centre for IT and Architecture (CITA).

We have to say that this is a very well conceived, organised and communicated organisational structure for the research staff which the institute covers. The coordination of the institute by Jørgen Hauberg is exemplary and he has managed to keep a broad range of staff happy and productive in their research -- especially in building up CITA, led by Mette Ramsgard-Thompson, as a key research group which already has gained a strong international reputation. Then there is a very different and diverse research centre, called Visual Communication, represented by Peter Bertram, which is producing stimulating work in terms of research design thinking. There is also important work being done within the Design sub-group, such as in fields like furniture design, led by Anders Brix, although it also should be mentioned generally the relationship of the Design sub-group to the rest of the institute was far harder for us to define, given that it in effect comes from a long tradition in another school within The Royal Danish Academy. Nonetheless, it was notable that all of those in the sub-groups who we spoke to felt extremely positive about their relationship to the wider Institute of Design and Communication, and indeed felt that the institute structure was supportive, especially for younger researchers coming into KA.

Methodology / approach / context

In general, it is a central aim of the Institute of Design and Communication to find means by which to link -- and ideally bridge -- the tendentious 'scientific' and 'artistic' divide created by the Danish research system generally. Again, this institute openly states that it is especially keen to push the research by design agenda within the KADK School, as part of its search to find and promote a more open-ended and broader integration of thinking about architecture and related design fields. There is also a commendable list of international 'competitors' which the institute, and especially the CITA sub-group, are now closely connected with, showing again that CITA is fully aware of its position as a research centre which needs to operate internationally.

Performance / environment potential

In many ways CITA -- and the wider Institute of Design and Communication -- was the best performing research centre in the KADK School during the 2005-10 census period. Staff members within CITA have produced an impressive number of major exhibitions, books, book chapters, refereed journal papers, design projects, prototypes, conference papers, etc., and so it is hard to see how both a research centre and an institute such as these -- which have only been set up relatively recently -- could plausibly have achieved any more within the short time available.

The institute also seemed to the assessment panel to be the most international of the institutes, with a broad process of exchange and outreach internationally. Its various centres have established a number of excellent links with some world-leading researchers at RMIT (Australia), University College London (UK), University of Waterloo (Canada), and such like.

In regard specifically to the CITA group, the principle of searching for experimental ideas from materials which can either be as new as yesterday or as old as timber, wool, mud, etc, makes this highly relevant kind of research in a period of ongoing financial austerity in Europe, and it is evident there is a wide interest in the group about notions of architectural sustainability. The strength of the CITA group's research in the 2005-10 was evident from the samples of outputs which were sent to us, most of which would no doubt score highly, for instance, were they to be included in the UK's national periodic audit of university research. There is also interesting work by CITA with a number of industrial partners in terms of design suing rapid prototyping and digital customisation.

Integration / exchange

Furthermore, the synergies between CITA and the other parts of the Institute of Design and Communication -- whose research interests are of course so very different -- came across to the assessment panel as being another very positive strength. In the view of the panel, it will be interesting to see what the Institute of Design and Communication will be able to produce during this next research phase, since 2012, given that this institute appears overall to offer the KADK School its best chance to carve out a position of genuine note within the international research scene. It therefore needs to be carefully preserved and nurtured so that it can progress towards higher things in future. It was also highly refreshing that the Director of the Institute of Design and Communication remains so clearly international in his focus, and interesting that he expressed the view that there would be a real benefit if the research culture of the KADK School were to become far more critical and experimental and open-ended than it was, for instance, during the census period we looked at from 2005-10.

6. Concluding remarks

We greatly enjoyed carrying out this research assessment exercise. We found the arrangements to be extremely well organised and as such we were superbly served - both in terms of the pre-visit and our actual visit itself -- by Jonna Majgaard Krarup and Ditte Dahl, so we need to put on record that both were exemplary. We of course wish the KADK School all the very best in terms of its research ambitions and activities in future, and hope that for the current period -- and indeed for any future initiatives -- the policy will be to reinforce and build upon the real strengths achievements of the best of the present institutes, especially that of the Institute of Design and Communication. Conversely, the problems we identified -- a lack of research focus, lack of organisational systems, timidity in terms of comparing work to the best international standards, the need for clearer quality control processes for research outputs, etc -- need to be addressed urgently in the other three research institutes that we looked at, albeit to varying degrees.

Thus while we openly recognise that there are real strengths within these three other research institutes, it is they who are in greatest need of being enhanced or reformulated, and probably also need to be given more resources so they can become more effective, innovative and internationally orientated in future. There is clearly a need for genuine intellectual leadership across the whole research culture within the KADK School, and in that regard, it is a concern that those who now seem to occupy key positions within the School, and who thus have the ability to determine the future research trajectory, tend to be clustered in one specific research area, i.e. the Institute of Building Culture. This sort of situation is always problematic. Hence it is vital that the research management structure is reorganised so that it can more closely reflect the needs and interests and strengths of the KADK School's research culture as a totality.

25th June 2013

Signed: Professor Murray Fraser / Professor Oya Atalay Franck / Associate Professor Karin Helms / Professor Fredrik Nilsson