

Master's degree in design

– Research-based master's programme for professional designers

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Abstract:

Governments in many countries around the world are currently investing in design research and design education. In Denmark, a new research-based master's programme has been launched at the Royal Danish Academy of Fine Arts, School of Architecture. The purpose is to offer new theoretical and methodological skills to trained designers with several years of practical experience. The article outlines the background for and the underlying ideas behind the programme and argues for the necessity of making the design discipline research-based in order to give the design profession a similar status to that of architecture. The claim is that the interaction of practical and academic knowledge in the design training will take the graduates to a higher level than if they only mastered either a professional or an academic competence.

Keywords:

Design education, design skills, interdisciplinary studies in design, design theory, design methods

Design has historically been a craft-based and artistically oriented field of practice. Only in the middle of the 20th century did it develop into a discipline in its own right, and a related research tradition has only been underway for a few years. The earliest initiatives toward establishing a scientific practice for design came in the early 1960's with the English Design Methods tradition (circa 1960), which focused on the need for a scientific design practice centred on design processes and methodological development (Lundequist, 1992). The Design Methods efforts were unfolded through conferences and publications that examined aspects of and conditions for the design process (see, e.g. Jones (1963, 1970), Alexander (1964), Rittel (1973)). The early methods in this tradition stemmed largely from the architectural profession with its centuries-long tradition for reflection on practices, which formed the basis for new developments in design theory and methods. In the following years, insights from other disciplines were included and helped establish design as an independent field of practice and knowledge on a cross-disciplinary platform. In the legendary Hochschule für Gestaltung in Ulm, Germany (1953-1968) practical experiences and scientific insights went hand-in-hand in shaping an educational programme based on insights from architecture as well as studies in maths, philosophy, psychology, and cognition theory. As an aspect of the growing independence of design, articles and publications addressed the conditions for design thinking and design development combining practical knowledge with insights from such fields as philosophy, psychology and education (see, e.g. Rittel (1984), Schön (1983), Lawson (1980)). The so-called Design Studies tradition, which was initiated in the early 1980's, further consolidated the status of design as an independent discipline. This movement arose in the USA in schools of architecture, design schools and universities with the stated goal of gathering and developing multidisciplinary insights to stimulate the discipline and offer a source of methods for developing design as well as the establishment of an actual design science (see, e.g. Margolin (1989, 1992), Margolin & Buchanan (1995), Frayling (1993/94), Cross (1999)). Today, design studies are carried out in schools of architecture, design schools and universities, and the goals and methods of design research are debated worldwide. As in the field of architecture, the establishment of design as an independent research area draws on a well-established practice tradition; in the case of design this is combined with new societal requirements for the generation and utilisation of design knowledge to the benefit of industry, the design profession and design education. The following describes a new Danish initiative in support of the efforts to make design a research-based discipline and to open new perspectives for design in both educational and professional terms.

Upgrading the design discipline

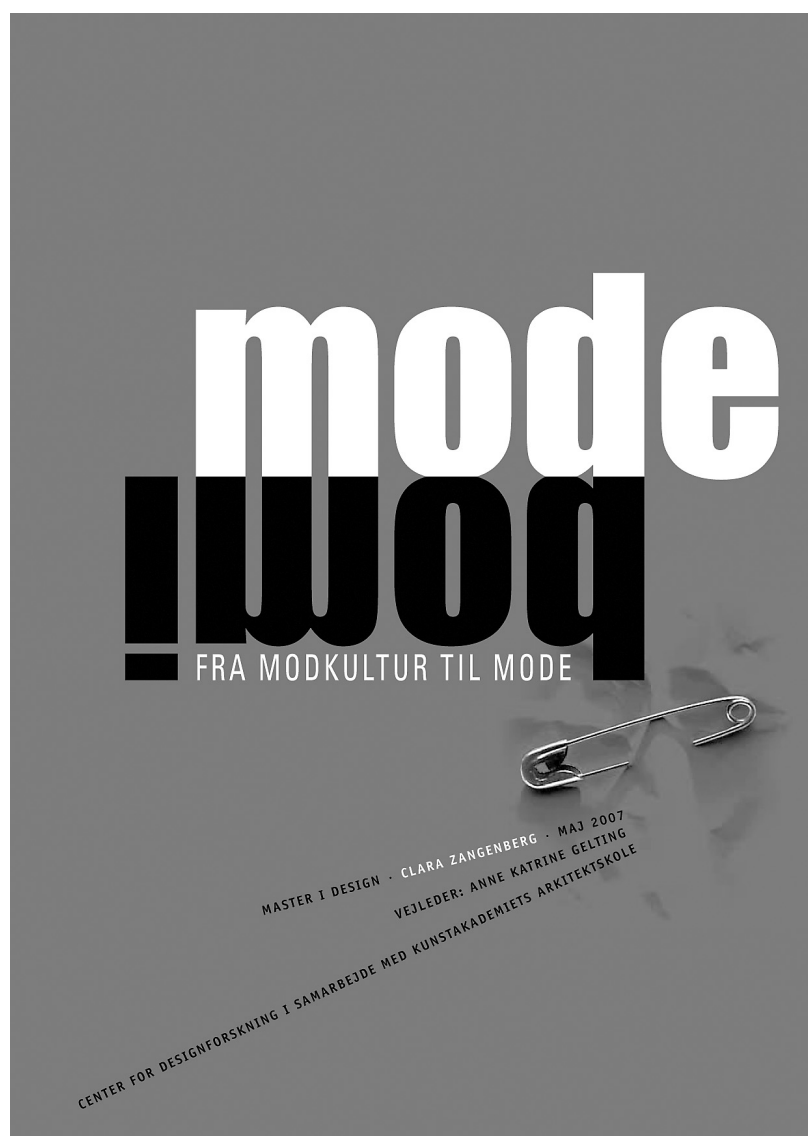
In recent years, efforts to heighten the overall qualification level of the design discipline have been supported around the world by political efforts to upgrade the design education programmes in order to produce better graduates and, thus, enhancing companies' and countries' competitiveness in the global market. In this process, design research is a means of improving the qualifications of the educational programmes as well as the profession. In recent years, a growing number of countries have founded design universities, most prominently the IIT in Chicago, The Hong Kong Polytechnic University, Royal College of Art and Central St. Martins in London and the University of Art and Design in Helsinki. In Denmark, the existing design schools, Danmarks Designskole and Designskolen Kolding, which have had the status of vocational schools, changed in 2003 to meet the requirements in the Bologna Declaration and began to offer bachelors', masters' and Ph.D. programmes in design. This move aims not only to make the schools more academic but also to make them research-based, meaning that research is carried out at the schools, and that some of the courses are taught by researchers in order to ensure that the highest professional level is maintained. As part of this general move to research-based design education in Denmark, added resources have been allocated to the schools of architecture – the Aarhus School of Architecture and the Academy of Fine Arts, School of Architecture. Funding has also been made available to establish the cross-institutional Danish Centre for Design Research, which is charged with coordinating and fuelling the research in the four design education programmes. Also, in 2004/2005, the Danish Centre for Design Research and the Academy of Fine Arts, School of Architecture developed a masters' programme in design, a post-graduate programme aimed at trained designers, architects, design lecturers and people in design-related businesses.

The programme was launched in September 2005, and in 2007 the second class began their studies. In addition to generally strengthening design education on several levels, the master's programme also appears to be meeting a need among professionals for additional qualifications.

Changes in design practices

The master's programme is based on the observation that the design trade is facing a period of transition. Like architects, designers now increasingly work in teams together with other professionals. Previously, designers mainly worked as design specialists, and many had a predominantly practical background, but the growing internationalisation of mass production, the complex global market and the post-industrialist experience economies have led to a growing need to be able to understand and act as qualified partners for specialists from many related fields. In fact, the designer's main role today is not necessarily the classical role of designer; often, it encompasses the role of strategist, consultant, facilitator, producer, etc. That places new demands both on the training of designers and on active practitioners. Individual designers have to acquire experience and expand their knowledge, but obviously, it is impossible to acquire qualifications and stay up to date within all the areas related to design. Thus, on the basis of their own professional background, designers have to navigate in relation to selected knowledge areas and acquire the necessary qualifications for operating in interdisciplinary development contexts with a higher degree of professional competence and insight.

The explicit purpose of the master's programme in design is to offer established designers, who feel the need for additional qualifications, an opportunity to supplement their specific practice-based methods and professional repertoire with new theoretical insights and methods that match contemporary practices.



Layout from master theses about subculture and fashion by master student Clara Zangenberg

Cross-disciplinary approach

The development of the master's programme looked to "The Dublin Descriptors", which state that graduates should be able to "apply their knowledge and understanding, and problem solving abilities in new or unfamiliar environments ... have the ability to integrate knowledge and handle complexity, formulate judgements with incomplete or limited information ... [and] communicate their conclusions." It is assumed that the students have already acquired the full range of skills and competencies through their professional work. The goal is to promote reflection and knowledge production to meet the academic requirements of a master's degree.

In accordance with the cross-disciplinary requirements that are encountered in practice today, the programme is cross-disciplinary, drawing on a range of theoretical insights that spring from architecture, design, the humanities, anthropology, sociology, it studies, etc., subject to criteria of direct practical relevance and applicability. Due to the historical origins of previous design methods in architecture, the programme draws on insights from architectural theory and method, but the curriculum of the master's programme is mainly based on new design theories and methods, developed in practice and in a dialogue with other disciplines. As a characteristic feature of the programme, it focuses on the individual phases of the design process – from initial preparations to marketability. While architectural education programmes mostly focus on process, work and context, the master's programme also emphasises aspects concerning distribution, marketing and branding. With the growing emphasis on internationalisation and marketing within construction in recent



years, these aspects have also begun to play a bigger role for architecture as a profession, and this is an area where architectural education programmes may learn from the design discipline. In fact, several architects have enrolled in the master's programme in design.

Programme content

The programme has two main goals: One is to provide the students with additional qualifications in design theory and method, the other is to facilitate skills in argumentation and written and oral presentation in order to enable the graduates to navigate more comfortably in the increasingly complex professional contexts that design development is a part of. Thus, throughout, the programme maintains a dual focus on design skills and rhetoric.

The focus of the first semester is "When design takes place". The purpose is to give the stu-

dents an understanding of the challenges currently facing designers and design-based enterprises; the focus is on the *role of design and the design process*. The semester addresses sociological issues of professional tradition and ethos and introduces the students to a broad repertoire of methods for planning and managing design processes, drawing on anthropology, ethnography, organisation theory, creativity theory and user-centred design. Throughout the semester, theories and methods are related to the students' own practice with a focus on their design role, methods and processes. The second semester focuses on "Design and meaning", including semasiology and design analysis. In comparison with the first semester, the focus now shifts from the design process to the *design object*. The second semester addresses relevant aspects of the theory of science, philosophical issues concerning the nature of the world and our perception of it as well as analytical methods relating to design semiotics, semantics, phenomenology and material and visual culture. These perspectives form the basis for discussions concerning where and how meaning arises, design value, aesthetics and culture, all in relation to designs by the students themselves and others. The third semester revolves around "Design in context" with a focus on strategies for the distribution and *consumption of design*. This semester presents new insights from management theory and marketing and consumer studies and introduces specific methods from design management, branding theory and strategic design. Contemporary conditions for design and consumption are discussed within in the framework of new theories about globalisation, the experience economy, immaterialisation and sustainability. The theories are related to hands-on exercises in strategy and value-creation.

The fourth and final semester is dedicated to the graduation project. The focus here is on the application and implementation of the theories and methods reviewed during the previous semesters, related to the issue or area that the students choose to address in their master thesis.

Examples of master theses

Throughout the programme, there are writing assignments. The master thesis includes both a written and an oral section. The project involves no practical design work; instead the focus is exclusively on reflections and written and oral presentation skills. The purpose is to teach the students to address an issue in an organised and goal-oriented manner, reflect on theory and method, and analyse selected topics and empirical data. While design includes experimentation and testing, the participants also learn to manage theses and make them explicit and to document experiments and processes. The master thesis should take the students' first-hand "inside" knowledge to a new level and make it explicit while combining it with knowledge and theory from other professional fields. The master thesis helps students articulate their explicit and tacit practice knowledge in interaction with theoretical and articulated knowledge.

Thus, the master theses of the first class placed theory and practice in dialogue with specific challenges from the participants' own fields of work. For example, a trained graphic designer, who had recently founded his own company, used contemporary branding theory to analyse the challenges that he had been facing in his newly established firm and developed an instrumental model for future design entrepreneurs. Another participant used the sociological term 'tribing' as the point of departure in a study of the underlying mechanisms behind subculture and branding with a special focus on contemporary socio-cultural and design-based tribing phenomena in fashion. The thesis explored two main dimensions; one was 'concrete, material' explorations of fashion objects and analyses of their mutual relations on the one hand, the other was theoretical reflections on the mechanisms behind fashion production and consumption. Both papers linked first-hand experiences from the students' own practice with new insights into branding and sociologically oriented diffusion theory.

A third student carried out a quantitative and qualitative study of graphic designers' core competencies with a particular emphasis on tacit knowledge in design work and the ways in which it may be articulated. The assumption was that giving the graphic design profession a more explicit foundation would improve the practitioners' approaches, definitions and ability to cooperate with other professions. In their papers, the students not only demonstrated that they had acquired new knowledge, they also produced new knowledge that supplemented and challenged the established academic insights. In the long term, the master theses contribute to the overall knowledge base for the design field. This will add dynamics and help us meet the demands for new contributions to our existing overall knowledge about design.

Respect for professional design skills and knowledge

When applying for the programme, the applicants are not only required to provide diplomas and documentation for their practical experience, but also have to motivate their application. The motivations received have described a desire to improve one's qualifications in both theory and method and to acquire additional academic qualifications. "I want to gain access to the academic community," as one applicant wrote. As a common feature in the motivations, the applicants say that they want to be able to "take their seat at the table when decisions are made instead of just being included once it's time to pick a colour," as another applicant phrased it.

Several master theses have explored the current research perspective in design education and welcome this development. Some, however, also express concern that this trend may cause some to give up the profession, and that core design competencies of styling, visualisation, aesthetics and design facilitation risk being thrown out with the bath water. However, there is a general consensus that designers, like other professionals, need to be able to reflect on processes and outcomes as well as articulating their competencies.

In the master's programme, practical and academic knowledge enter into a mutually beneficial

Cheap Monday

Bilag 18



HEROVER: ÖRJAN ANDERSSON, CHEAP MONDAY

FJÖRE BILDER, HEROVER TIL HØJRE: GRAFISKE INDTRYK FRA CHEAP MONDAY EKSEMPLER FRA EFTERÅR/VINTER KOLLEKTIONEN 2006

HERUNDER: INDTRYK FRA EFTERÅR 2007 KOLLEKTIONEN



From Master theses about tribing and subculture in fashion

exchange as seen in other practice-based disciplines, e.g. architecture, medicine and engineering, where practical knowledge merges with theoretical and methodological insights. For the design profession, the claim is that the combination of theory and practice, as in the other disciplines, will help take the graduates to higher levels than they would have reached on the basis of either professional or academic competencies alone.

Raising the qualifications within the design profession may lead to a considerable enrichment of the creative competence and the design skills that society needs so sorely, and which does exist, although it has often been overlooked. Adding a research base to the design education programmes gives the discipline more authority and may help ensure design and designers a more central position in companies. Design is already a well-established practice discipline with a vast store of experiential knowledge. Making the educational programmes research-based will enable the design discipline to unfold its full potential in society and in industry.

Facts

The master's Degree in Design is a partnership between the Danish Centre for Design Research and the Royal Danish Academy of Fine Arts, School of Architecture. The first class began in September 2005, the next in September 2007.

Enrolment requires at least 2 years' relevant professional experience following graduation from at least a medium-length relevant programme, e.g. a bachelor programme or a diploma programme. In addition, students' profile must be closely related to the core design competencies.

The programme corresponds to one year of full-time studies, equivalent to 60 ECTS (European Credit Transfer System) points. The programme is only available as a part-time programme (half-time studies over two years).

The programme consists of four semesters; each semester has three obligatory seminars. To accommodate the geographic dispersion of the students, the seminars are held as full-time weekend courses.

The seminars are concentrated work weekends with a combination of lectures, discussions, workshops and group activities. During the time between the weekend seminars, the participants work individually with the curriculum, writing assignments and web-based activities.

The master's programme in design is user-financed. The fee per student is 100,000 Dkr. See also: www.designforskning.dk - Master i Design.

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NOTES

¹ Shared 'Dublin' descriptors for the Bachelor's, Master's and Doctoral awards. A report from a Joint Quality Initiative informal group, March 2004.

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