ETHICS IN PRODUCT DESIGN CURRICULUM: AN EXAMPLE FROM THE OSLO SCHOOL OF ARCHITECTURE AND DESIGN

Martina Maria KEITSCH and Nina Bjørnstad
Oslo School of Architecture and Design, Maridalsveien 27, 0130 Oslo, Norway

ABSTRACT
The scope of design research and practice has successively changed - from a focus on material aspects to a focus on the intangible, from functions to pleasure, from goods to services and values [1]. Due to this development, and in concert with an increasing public concern for the environment, ethical issues are getting more attention than ever in product design [2]. Even if being aware of changes, design curricula are often not able to meet the challenges and opportunities connected with these issues methodologically. This article discusses a didactic approach to include ethics in design teaching in a course at the Oslo School of Architecture and Design. The approach is a pioneering one at the school and thus in the beginning phase. It does not focus on ethical design but on how to integrate ethical decision-making in design curriculum. However, when fully developed, it can serve hopefully as an education tool which bridges the gap between design and ethics. The authors focus on the conditions, implementations and results to illustrate how this approach works. Following the introduction, the second section of the article describes the background for integrating ethics in design education and examines advantages connected with this endeavour. The third section deals with specific educational requirements, shows the method applied, and the results achieved, here exemplified by some students’ works. The final section reflects about values in the design curricula relating to professional and individual moral obligations by trying to answer questions such as: To which value system and assessment criteria do we refer to? What role do products and services play in value systems and how are individual and/or collective values addressed by designers?

Keywords: Ethics in design education, pragmatic approach, ethical decision-making

1 INTRODUCTION
“There are no passengers on Spaceship Earth. We are all crew.” Marshall McLuhan [3]
Based on individual research, literature reviews and investigations conducted in the design classroom, this article argues that an increased appreciation of ethics in design education is central to how future design problems are understood and how solutions will be executed. The main objective is to present and discuss a methodical approach to introduce ethical reflection and decision-making in the course: “Identity and Interaction (GK5 Identitet og interaksjon) at the Oslo School of Architecture and Design (AHO). The motivation for this approach was an acknowledgement that the students, during their Bachelor studies, mature as humans and consumers and develop as critical designers. According to this development their focus changes towards a deeper social engagement through their projects. To shift between the fisheye perspective on product contexts and the creative work with subtle details is, however, a complex situation for a future designer as well as for a teacher. Besides the goal to recharge design curricula, the article is also meant as a contribution to the ongoing discussion on value mediation at different design schools in Scandinavia. Conflicting values in education are of course not limited to the field of design. However, it might be wise to think about them in order to help future designers to deal with questions such as: “As a designer, am I fully responsible and accountable for my designs and to whom? Can I be relieved of responsibility in some way? If not, how can I prepare for this responsibility and assume the liability of being fully accountable for my design judgments and actions?”[4].
2 BACKGROUND
According to Swann [5] the development of industrial design as profession and research field started with intuitive and applied approaches in the mid of the 19th Century that grew more commercial in the beginning of the 20th Century. During this period, many designers promoted highly reformative and ethical views to base their practice and methods upon. One of the main ideas was e.g. that only designers were able to solve problems of public taste or of function and utility since the public was too ignorant and the manufacturers too profit-oriented [6]. During the 1960ies and 70ies design became closely allied to engineering as well as it gained status as a marketing tool. Since then design is inherently linked to companies’ commercial interests [7].

The importance of a critical stance towards commercial business imperatives and marketing prescriptions has long been promoted within the design community. Papanek argued for instance for the moral and societal responsibility of the designer: “As a politically disinterested but morally motivated animal, the designer should not be a ... pimp for the excesses of big business interests” [8]. Instead, Papanek asserts that designers should focus on producing products with ‘real’ benefits for people, and by doing so contribute to the societal and moral needs of society.

Despite this strong statements and programmatic undertakings e.g. to educate a “responsible designer”, where “education should be directed to the development of an individualistic ethics” [9] there exists little evidence for how this is done in a systematic way. A brief survey of courses offered by design schools [10] showed that ethics related to environmental art and sustainability are favoured (e.g. Aalto University School of Art and Design), besides professional ethics e.g. business, engineering ethics (e.g. TU Delft). Many schools have ethics connected to case studies (e.g. Twente University), few have explicit ethics curricula such as the Royal Academy of Engineering, UK (An engineering ethics curriculum map) partly also Purdue University, West Lafayette, USA.

2.1 Why integrating ethics in design decision-making?
Epistemologically, ethics in design curricula is needed to explain the difference between social engineering and human-centred design. Considering the interests of real people instead of proving ready-made solutions is currently a core of different design theories, methods and practices. Making good products rests **sui generis** on principles that imply the values humans put on things. In this perspective attitudes about morally appropriate products, user groups and settings of use play an important role. While ethical attitudes are a part of the human condition and our challenge is to understand what is right or wrong and act accordingly, the task for a designer is to learn to recognize these values, to decide which have to be met and to realize them in a product or service. A designer, who is able to cultivate such skills, is equipped to comprehend users’ ways of behaving. In a business context, comprehending and expressing ethical implications of products or services might be a competition advantage. Ethical consciousness in a company can contribute to a good reputation and promote a brand. This is even more important since the appearance of social responsibility and sustainable development movements in the 1950s and 1980s, which brought increased public consciousness about the ethical role of business in society. Today, companies, in line with governments, planners, designers and consumers, are required to take their share of responsibility of what they consider as good ethical solutions. Due to these reasons the advantages of introducing ethics in design curriculum are widely acknowledged. From our point of view the epistemic question: "Can the insights central to the contemporary study of science, technology, and society make us more responsible designers?" [11] might, however, be supplement by a pragmatic one: How to enable students to better understand how responsibility in design works?

3 ETHICS IN DESIGN EDUCATION
3.1 Some General Thoughts
Design educators inevitably struggle with the issue of complexity of subjects. Moreover, theoretical foundations of methods in design are rarely made explicit. Some entail philosophical anachronisms, such as naïve empiricism1 or materialism, assuming e.g. that the immediate sense experience is suffi-

---

1 Naive empiricism claims that humans have to have experiences before they can say something about the world. However, each experience is based on a fundament of expectations and hypotheses, namely those that constitute
cient to provide knowledge, or that meaning could be ‘designed into’ a product. Others draw from individual practice, possessing a lot of tacit knowledge but sometimes limited possibilities to articulate it. Summarizing design as an academic discipline, one could say with Lakatos that it has a rather small core of scientific “truths”, and a rather wide area of “intruders” [12]. These intruders may be a threat to an established science. However, for design research they could also provide an opportunity to learn from other disciplines and cumulate knowledge to advance research and curricula.

The AHO teaching approach had the main goal to show the students how they can discuss ethical problems related to products and services. They should also realize that it is not only possible but useful. This means: Not only to appraise “big moral issues” such as the dangers of cloning, artificial intelligence, or nuclear power, but to be able to reflect on ethical questions in one's daily professional life and day to day design decision-making. The students should learn to identify, analyze and discuss ethical problems connected with design solutions. Besides becoming familiar with ethical theories and questions, they should improve reflection and discussion skills and their professional argumentation. An educational goal is to learn to understand and assess ideas and concepts and to build up arguments. Practicing these steps trains a person to work creatively with the learning material and not just repeat ready-made opinions - also in one's own field. Eventually, one does not study design or architecture to replicate what others think but to learn to think as designer or architect and to become able to exceed boundaries in the concerned field.

3.2 AHO Course: Identity and Interaction, autumn 2009

The design process describes a synthesis in all respects: Identity and interaction are much more than an assembly of diverging requirements. To meet this systemic aspect the course literature includes marketing, graphic design, culture sociology and business administration. Ethics is not a profession in itself but most professions have their own established ethics. Like priests are true to the bible, some designers write manifests concerning ethics and moral attitudes and treat those as para-religious codes of conduct. The goal of this course was not to discuss such manifests but to see whether the students recognize ethical dilemmas and to provide tools to find and analyze such. Giving them a free context for the semester their first challenge was to choose a focus for themselves.

A lecture named “Ethics in the design process” by philosopher Martina Keitsch, introduced the students to ethics as a topic of product design and suggested three categories of ethical considerations/criteria2 for possible solutions:

1. Technology: does the solution contribute to a sustainable development?
2. Use: does the solution promote the participation and inclusion of actors?
3. Aesthetics/semantics: does the solution enhance the aesthetic and communicative experience of the user?

Further, sociologist Erling Dokk Holm gave a lecture about companies’ different positions on ethical issues. Finally, product designer Tore Gulden introduced the students to cradle to cradle thinking and related tools. AHO’s internal designers gave introduction lectures, and showing examples such as social responsibility connected to sale of shoes, branding festivals, corporate identity etc. The formulation of the task description in the course in the course catalogue, autumn semester 2009 was as follows: “This semester the course's theme is 'Recharge'. The theme has a background in the global financial crisis and a desire to inspire innovation within the discipline. Recharge is an open issue. This means that students can solve the task in different ways based on individual preferences and interests. Common for all, however, is the exploration of how competitive companies in today's market can integrate sustainability and ethics in their brand message. The course explores the role of designers in relation to the theme, branding of products and in the context of sustainability. The title shall also provoke to re-think; recharge, charge something with something new.”


2 The epistemological choice between ‘considerations and ‘criteria’ is not an easy one. 'Considerations” leave a certain openness and freedom to interpret ethical claims for the design student, while ‘criteria’ provide more exact measurement to evaluate the solutions. We would appreciate feedback from the reader and audience for this discussion, which also relates to the role of ethics in design and the question: Is there an ‘ethical design’ anyway?
3.3. A Pragmatist Method
Integrating ethics in design decision-making, we propose a method to find socially, economically and ecologically acceptable answers, which we called: “Ethical analysis”. Design students are interested in ethical questions, but need a tool for decision-making. Therefore ethical analysis is a “pragmatist method” i.e. the evaluation of a product/service according to the following steps:

- Status quo of the product/service in a system
- Potential ethical problems
- Conflicts of values and interests, norms
- Possible alternatives
- Other

Detailed steps of the analysis related to products and services are:

1. **Case description**: Describe a product or a service and connect it to a user group.
2. **Definition**: Identify the need for the product, the information structure and the users’ opportunities.
3. **Analysis**: Include aspects of moral intuition, ethical theories and cultural beliefs. The case presented in the lecture was a wrist watch device for older people. The results of the analysis give some value criteria for evaluating the options in 4.
4. **Options**: Discuss alternative options for product, process and systems solutions related to the value criteria. Find ways to integrate the users into the discussion about alternatives.
5. **Trade-off**: Compare pro and contra of the chosen solution with help of value criteria (preferably enlarged by values from the user group).
6. **Discussion**: Respond to questions such as: What are the social, ecological and political implications of the proposed solution? Is the solution realizable? Are there any objections from other stakeholders?

3.4 Results and Reflections
Looking back at this first attempt to discuss a complex area as ethics in design curricula, we find several clusters of foci. Related to the ethical considerations/criteria above the most frequent one is to analyze the material used in the products, (i.e. their contribution to a sustainable development). Some students’ work related however also to the two other ethical considerations (promotes participation and inclusion and enhance the aesthetic and communicative experience of the user). The three following examples illustrate to what degree and in which way the single projects met the ethical considerations

**Technology/material close up**
Without taking into consideration that the manufacturing, transport and packaging often are the main polluting parts of the products life cycle, students tend to dive into the details of the main product. Primarily, there was too much focus exclusively on the product. The material focus brings recycle solutions for diminishing the amount of garbage. The students reuse/redesign materials often to less functional but funny stuff. Figure 1 is a good sample on use of thrown away furniture, where the student brakes down and uses the materials to make new objects.

![Figure 1. Reuse of building materials](image)

**Aesthetic storytellers**
Some students rethink the user’s hunger for renewal. Instead of proposing new products with small changes, students focus on the *history the objects have been a part of*. That means living with the same
stuff but look at it in a new light. Not through repair or redesign, just through artistic storytelling. The reflective approach from Marianne R Arnesen resulted in an example in add on tags with high artistic qualities, Figure 2. An enlargement of Arnesen’s design related to ethical decision-making would be to integrate the users in the storytelling thereby meeting the consideration of aesthetics, communication and participation.

![Figure 2. Storytelling that adds value](image)

**Economical/global services**

Despite our limited introduction to global issues, we received Niteo, Figure 3, a lamp and a charging station for small electrical devices. Niteo converts chemical energy, available in a bio-convertible substrate, directly into electricity. In addition to the product Armand Bentzen drafted how the distribution is planed and that the local craftsman here from Nepal, gives the exterior form and expression. A discussion on the durability of the technological solution and how the competitors disturb the cultural landscape with solar cells followed the presentation. The main ethical consideration is here the aesthetic experience and the cultural integrability of the product, i.e. its capability being integrated in a specified cultural context. The latter was a criterion that we didn’t consider explicitly. The culture criterion will be integrated in the autumn course 2011.

![Figure 3. Cultural integrability](image)

**4 FURTHER DEVELOPMENT FOR ETHICS IN THE DESIGN CURRICULUM**

More attention has to be paid to the examples shown initially in the course by the teachers as well as to best practices, methods and strategy diagrams. These are decisive to what the students choose to work with. Using categories of ethical considerations/criteria (see above) it is easier to keep an approximate statistic of involvement in ethical issues.
Brand building is value driven and so is design [13]. One reason for giving this general introduction in 5th semester was the need to construct a wide angle lens to look through when writing a brand strategy. Questions regarding ethics in a design project and the evaluation of the student’s ethics are also an institutional issue at the department of design at AHO. These were raised before we started the autumn semester; we decided to evaluate the argumentation of their focus on ethics and their project values, not their personal attitudes. Further, it is crucial to develop professional ethics and assessment criteria. Not choosing examples on design for all/ inclusive design in the course introduction is perhaps a disadvantage. Likewise is the lack of focus on cultural identity and consumerism, i.e. how product solutions can be integrated in cultural context and how they can meet the need to protect and inform consumers. This has definitely to be integrated in the course as an ethical consideration/criteria but exceeded its capacity the introduction phase. The omission of user needs is a frequent issue in the design community. Likewise is the lack of considerations over the importance of users and designers aesthetic choices. Build up knowledge in applied aesthetics where ethical discussions also take place seems required. The students do not see the relevance of these problems either and the preparation for next semester’s course must take awareness rising into consideration as well.

Conclusively, the current environmental and social demanding situation seems to be a forthcoming concern in product design curricula, which makes it necessary for teachers and students to acquire skills in ethical decision-making. For the AHO course remains to clarify and expand the ethical considerations/criteria for the development of product solutions and to implement them systematically in the overall product development decision-making and its trade-offs.

REFERENCES