ABSTRACT
This paper deals with the changing role of the designer. Changes in society and within people’s consumption patterns have increased the demand for products, which are rich on utility, symbolic and systemic qualities - innovative products. Manufacturing companies have realised innovations’ connection to business growth and seen the limits of cost reduction strategies for improving productivity and profit. This notion has altered manufacturing companies’ requirements to designers as they now seek the capability to identify potential design directions. Designers, who have recognized these new challenges, have discovered profound methodologies within social science and the humanistic field. Here they have learned ways of enhancing information of people and their needs, desires, abilities, contexts and cultures. This design approach has increased the possibilities of creating innovation. However it is not common practice within the field of design.

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CHANGING PARAMETERS
A product’s usage-capacity
Products are not only bought out of a utility need, instead they are bought because of their total usage-capacity. A chair is therefore not only bought since it offers a place to sit, but also on the basis of its symbolic and systemic qualities. Seen from a macro perspective this is a consequence of the increased economic level in the Western Society, which has altered our way of living. For instance, more people tend to get an education, and this has led to greater social mobility. In addition, people have moved from small communities into large cities where they only know few of the people they meet. People’s identity is therefore no longer given. As a result of this people find it necessary to take a more active part in creating their identity. This has affected people’s consumption patterns as they now seek other qualities in products.

According to John Heskett[5] products do apart from the utility quality also contain symbolic and systemic qualities. The symbolic quality a product contains becomes vital as people, through their consumption and choice of products, create parts of their identity – the product tells a “story” about the people that use it. This can be exemplified by the increasing amount of four-wheel driven cars that currently are being sold. Buying this kind of car in Denmark is rarely out of a utility need since only few Danish roads are in such a poor condition, and since people rarely, if ever, have to cross open terrains by car. These cars are mainly sold because of the story they tell. The key elements in this specific story are; life in nature, leisure time, adventure, wealth etc.

The systemic quality lies in actual use of the product and is therefore measured in the joy the user experience while using it. The level of systemic quality is therefore highly depended on how well the given product is tailored and perfected to suit people and their day-to-day lives. A product, which is rich on systemic qualities, invites its user to configure and personalize it for private joy.

A product that contains all three usage-qualities, utility, symbolic and systemic qualities, in a coherent way will address people’s needs, desires and dreams. These products have the potential to become not just a good idea and great invention, but an innovation. Chayutsahakij and Poggenpohl[3] distinguish between idea, intervention and innovation as: “While a new idea is a thought about something new or unique, and making that idea real is an invention, innovation is an invention that has a socioeconomic effect; innovation changes the way people live”.

Design-driven innovation
The need for innovation has come to the attention of the manufacturing companies, as they have seen the limitations of cost reduction strategies for improving productivity, profit, and growth[9], and realised the connection between innovation and business growth [3, 4, 10]. The notion that innovation is one of the crucial parameters in striving to stay competitive in the global market has altered the manufacturing companies’ requirements to the designers. At the conference
"Brugerdreven Innovation" (User-driven Innovation) in February 2005 at the IT-University of Copenhagen, Christian Madsbjerg, director of the design firm Kontrapunkt, exemplified this trend with a project carried out for Adidas. Adidas had invited Kontrapunkt to participate in a design-driven innovation project. Kontrapunkt initiated the project with five qualitative field studies, each lasting 14 days. The aim of the field studies was to develop a better understanding of the people who would buy and use Adidas’ products, and hereby define potential design directions. Instead of shaping the actual products, they shaped the conceptual foundation of the project.

This approach to design differs in its form from the common design practice and how designers previously have been involved. Traditionally, business leaders would define the foundation for development projects - often in correspondence with the company’s marketing department. The foundation, which would result in a “design brief”, was therefore based on already recognized needs and problems. The innovation level is thereby limited to an incremental or evolutionary form [3]. The design brief would then be consigned to either an internal design department or an external design firm. Consequently, the designers would convert the design brief into products - ideally inventions and innovations. Today, however, there is a tendency that the leading design firms take an active part in the whole process from analysing the given situation and defining the conceptual design directions to developing, maturing and launching the products.

We have now, from a macro perspective, seen the changes in society and the affect it has had on the requirements that manufacturing companies have to designers. Let us now move closer and focus on the origins of methodologies in regard to the design field and how they become beneficial in the design work.

CHALLENGES WITHIN THE FIELD OF DESIGN

Grasping new ways of working

Designers, who have recognized the new challenges from the manufacturing companies, have discovered profound methodologies in social science and the humanistic field - especially ethnography, sociology and psychology have shown to contain valuable methodologies. The designers have learned ways of planning and carrying out observations, interviews, workshops and analyses with the aim of enhancing a better understanding of people and their needs, desires, abilities and contexts and cultures, as well as creating the ability to predict peoples behaviour[8]. This discipline is commonly referred to as User-Centred Design (UCD).

Some design firms have even made a solitary business out of their new gained knowledge. IDEO has, based on their own experiences, created a set of method cards with four different categories, Learn, Look, Ask and Try. These method cards are developed upon IDEO’s core statement: “Key to our success as a design and innovation firm are the insights we derive from understanding people and their experiences, behaviours, perceptions, and needs.”

Enhancing the utility, symbolic and systemic qualities

Apple Computer’s iPod serves as a good example of how designers within a firm socio-cultural understanding can enhance the utility, symbolic and systemic qualities. The iPod is a portable electronic device with a small screen, a wheel for navigation and a single button. Music and pictures can be stored onto the iPod through a computer. This gives people an opportunity to listen to music at all times and at all locations - as Sony first did it with their invention of the Walkman. The ability to listen to music anywhere at any time shows a firm socio-cultural understanding and is the utility quality of the iPod. The symbolic quality of the iPod arises in the wake of the utility quality as it tells the story of: the music-loving urban nomad, the selective and, thus, individual person. It is therefore in the case of the iPod rather the concept than the actual tangible product that offers the symbolic quality. As an artefact the iPod has a very simple, clean and well-composed form and the choice of material gives an impression of quality and hardiness. The “clean-ness” in the form confirms the systemic quality of the iPod, it reveals that the iPod is “what you make out of it”. The systemic quality is the configuration of it - how it with mp3 songs and private pictures becomes an individual and personal product.

Apple Computers have built a whole system around the iPod. With iTunes Music Store, an internet service that allows you to buy different songs rather than a whole album, the users can continue to configure the content of their iPod to fit their individual needs and desires. This invites to creative and personal use, and there is, thus, a potential for the iPod to become an integral part of our lives and “human system”.

The iPod is a unique product as it is highly useful, compelling in its appearance, joyful and expressive in its interaction, and part of a system that supports creative use and personalisation. It can, therefore, be argued that the iPod holds all three usage-cATEGORIES: the utility, symbolic and systemic qualities, and that it hereby contain the potential to become an innovation.

Embraced in the general practice?

However, the example with the iPod is unfortunately not the general tendency. Instead, product development tends to be technology-driven, which in some cases leaves people with products that they only find partly useful, hard to use and far from desirable. This can even be exemplified in the other end of the complexity scale with bicycle lamps, where the utility need is simple and the interaction level is low. People buy bicycle lamps to be able to travel safe during the dark hours. It is, therefore, a requirement that people can place them on their bicycles as well as turn the light on and off when needed. Today, however, when people want to turn the bicycle lamps off, they have to step through five to twelve different blinking modes. This shows that there still is a poor understanding of people and their needs within some development departments. Instead, a fascination of what technology can do becomes the driving force in product development. Sometimes the technology-driven project, in contradiction to this case, results with a “lucky punch” and a well-designed product, which have utility, symbolic and systemic qualities, but designers can not rely on lucky punches.

Instead designers must, as Charles Burnette[2] described it: “recognize needs and objectives, gather relevant information,
conceptualize and analyze its application, formulate an appropriate plan for a given context, produce the intended outcome, assess its effectiveness, and determine its significance and value.” This statement indicates that design is just as much about understanding the people, their context and culture as it is about giving shape to a product and defining its functionalities.

However, it is also evident that this approach has not yet been embraced in the general design practice. Naturally, this raises some questions: Why are some designers struggling with the integration of methodologies from social science and the humanistic field? Is there an irreducible gap between research in the field of social science and the “conceiving, planning and making” [1] of designers? If this is the case, how to transform the methodologies into “designerly” dynamic and generative methodologies? Are designers moving away from the role of “servile actor” with this new approach and if, which role are designers then to take?

INFORMATION
These are some of the questions that I am confronting while working on my PhD project. The PhD project is entitled “Design-driven innovation through User-Centred Design” and it aims at investigating the potential of video material in design projects. More precisely I am interested in how video material:

1) becomes “seeds of the future”[7]

2) affects designer prejudgement and creates a deeper understanding

3) becomes a creative and generative tool

The PhD project is carried out at Department of Architecture and Design, Aalborg University, within the Industrial Design’s research group. The research interests of this group spans from “Form finding” to Integrated Design including Systemic Design, Creativity mechanism, etc.

ACKNOWLEDGMENTS
I would like to thank my supervisor, Professor Marianne Stokholm for her enthusiastic guidance and ability to question my beliefs.

REFERENCES