Actions and Objects

Design theory and Human Machine Interaction

Sara Ilstedt Hjelm

Background

Design and aesthetics has rendered an increasing attention within HMI the last decade or so. Design is seen as a way of creating better and user-friendlier technical products. But the role of aesthetics and design is still seen as from a technical perspective rather then a design perspective. This thesis attempts to look at and create a basis for understanding of design as both a process and an aesthetic practice.

Concept

I will use theories from sociology, design theory and action theory to map the design process and aesthetics in a larger perspective. The main idea is to reflect on why and how design can function within research and product development.

Theory

My primary focus is on the relation between the internal world, with its subjective experiences and personal relations and the public world of objective facts and technical systems. I believe that design holds a key role in the externalisation of values and actions into an objective reality, a reality that subsequently is internalised back to the individual through the socialization process. In the design process our physical and cultural values are materialized and given a tangible form. This relation and the role of design in the process, is the key object of my study. With terms borrowed from Habermas this could also be seen as the interplay between the "life world" and the "system". The design and development of artefacts usually takes place in the system world in rather tight economic and commercial frames. Therefore, the results of design-processes are products of the system rather then the individual notions of the life world and materialization's of those values.

I find the world of design to be strangely isolated from contemporary theoretical discussions. Therefore I use several different theories and map them on design and aesthetics. For example I use the feministic theory of the double invisibility to criticise the concept of the invisible computer. Semiotics has provided me with a tool for criticising and reflecting about seemingly 'natural' ways of designing. Studying semiotics can assist us to become more aware of reality as a construction and of the roles played by ourselves constructing or designing it. It can help us understand that information or meaning is not 'contained' in the world, in books or products. Meaning is not 'transmitted' to us — we actively create it according to a complex interplay of codes of which we are normally not aware.

I am very influenced by the health sociologist Antonovsky and his work to understand what makes us cope with the strains of life. His methods can be used on the material world to understand how this affects us mentally and what we could do to improve it. Here I am beginning to look at the concept of meaning and how important it is to experience the world as meaningful. Meaning, sense and understanding are concepts that are closely related to aesthetics, in the Greek meaning "what meets the senses", the total experience of a product. I am starting to think of aesthetics as a kind of tacit knowledge that make the world meaningful.

Methods

The role of theory and practice and the close relation between them is important to me. Therefore my empirical studies will both complement the theoretical discussion, and stand as a base for developing new design methods. The focus of my empirical work is on general unhealth issues and the use of information technology in domestic environments. Since I am interested in the relation between the personal and the public, I'm looking into common diseases and how they reflect the current state of the society. The "Virus" project focuses on general health problems and how artifacts in a "smart" home can prevent them. The project points out two related areas for unhealth: Mental overload and Physical under load. Those two syndromes together create the most common unhealth problems today like stress, insomnia, back problems, heart problems and depression. Stress is considered one of the largest reasons for sick leaves today and costs for social insurances are peaking. The Virus project makes design suggestion in three related areas: Room for movement, Sleep and relaxation and Communication. One of these suggestions The Photo answerer is now being developed into four functioning prototypes that will be tested in different settings.

Discussion

My general problem is that my scope is too wide and that I seem unable to focus. I'm. Also not sure whether the research question comes out clear. Do you understand what I'm trying to do? I find it very difficult to summarize my work in two sentences and make it sound clear, important and of general interest. But then again, does research always have to be so sure of it self? Isn't that a positivistic myth?

Gunnar Ekelöf once wrote a poem that pretty much sums up my feeling about my research:

Dock: detta att leva, vad är det mer än treva sig fram I ett sparsamt och hemligt ljus, att famla såvarsamt mot dagen i öster, att tyda dessa roster till vad de innebär, att hålla sin aning kär, att bli den man är!