

Design for Society

Bridging user concerns with societal ones through implication design

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Abstract: Products mediate our relationship with the world. In doing so, products appear to have significant influence on our behaviour. This article reports the outline of a PhD project that aims to gain the knowledge that is needed for designers to actively anticipate on this inherent influence for the benefit of society. By varying the role of societal concerns in design processes and systematically varying design steps, the research will deliver a methodology that enables designers to take responsibility for the role of design in shaping society; either by preventing undesired or by stimulating desired effects on user behaviour.

Key words: *Societal concerns, user behaviour, implication design.*

1. Introduction

There is little we do without the help of designed artefacts around us. We prepare and consume food with the help of mixers, microwaves, plates and cutlery; we travel around the world by bikes, cars, public transport and planes and we communicate with our beloved ones through e-mail, mobile phones, text messages and Skype. These examples show that design offers us a way of living. And, by doing so, design as well co-shapes this way of living. Artefacts co-shape our relations with the world [11], and thereby co-create society.

A car for instance, offers us in the first place a means to get from one place to another. The car's primary function hereby is no different from the primary functions of a bicycle or public transport. However, the ways these different products offer this function is not only different for the user, addressing different needs and concerns, but also creates a different societal impact. The type of transportation the car offers, addresses user concerns like comfort and independency. This for example has made it easier to maintain friendships over a larger distance. On the other hand this logically means we have become less dependent on our neighbours. Our decreased interest in our neighbours thereby has paved the way for a possible lack of social cohesion in the neighbourhood, an impact on society that wasn't intended by the car designer.

Now the question rises: can we speak in terms of products that 'have' societal impact? Without excluding the human role in this phenomenon, we do need to acknowledge that we don't live as autonomously as we might think we do. The car has made long-distance relationships easier to maintain which has implicitly influenced our behaviour towards our neighbours. Design thus has the power to affect our behaviour and thereby to impact society. As designers we should not only be aware of these effects of products on human behaviour,

we also need to get more grip on these effects. This would help designers in preventing us from undesired impact of design and opens up possibilities to create a society we desire.

2. Design and behaviour

The notion that products affect behaviour and society is no breaking news. Both philosophers and sociologists have repeatedly laid bare the, often unintended, effects of products on behaviour and society. Extending the frequently used concept of affordances [3], Akrich [1] introduced ‘product script’ that refers to the world-view of designers that is embedded in the product. Latour [5] elaborates on the term script, and tries to understand how non-human actors like products impose behaviour back on the human. Product script is what the designer inscribes in the object, while prescription is what the object imposes on its users. Verbeek [11] reflects on Ihde’s term ‘intentionality’ that refers to the own weight technology has in interaction with humans. Intentionalities do not refer to intentions of designers, but explain the directionality of products. According to Verbeek, a product is not a neutral intermediary, but a mediator that actively mediates the relation between its user and his/her environment [11]. Although terms as scripts, intentionality and mediation allow reflection upon the phenomenon, unfortunately they give little guidance for designers’ actions.

Within the design discipline we see increasing attempts to stimulate or discourage specific behaviour by means of design. Since Fogg [2] introduced the term ‘persuasive’ to the field of human-computer interaction to refer to all software based systems and designs that intentionally try to shape or change people’s attitudes or behaviour, the question rose to what extent product design is and can be persuasive. While Fogg excludes unintended effects from his scope, Redström [9] argues that design is inherently persuasive. Lilley et al. [6] add to this that in conjunction with persuasive advertising, products already subconsciously influence our behaviour. Regarding the term ‘choice architect’ that Thaler and Sunstein [10] introduced to refer to someone organizing the context in which people make decisions, implies someone can be held responsible for this subconscious influence. This means designers are choice architects who have the power to deliberately nudge people, i.e. to give a mild poke that alters people’s behaviour in a predictable way without forbidding any options.

When we look at deliberate attempts of designers to alter behaviour, especially the field of sustainability receives increasing attention [6,7,8,12]. Nonetheless, at this moment there is still little theoretical knowledge and no methodological support available that concerns the design of the inherent influence of products on behaviour. Moreover, when the possibility is there to deliberately affect behaviour, the societal position of the designer should be reconsidered. This means societal concerns need to be incorporated in design methodology, integrating current user-centred approach into a more society-centred approach.

3. Research goal

The research aims to clarify the inherent influence of product use on human behaviour in order to enable designers to purposefully design this influence. The goal is to provide the designer with the knowledge to anticipate the effect from a societal perspective; either by preventing undesired or by stimulating desired effects. Therefore we need to understand how behaviour can bridge individual concerns addressed in the product-user interaction, with societal ones (figure 1).

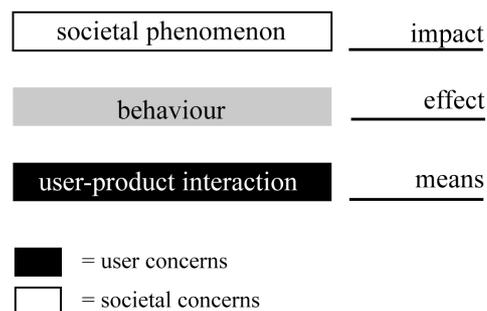


Figure 1 Behaviour; a link between user and societal concerns

The questions addressed in this study are:

1. How can we conceptualize the inherent influence of products on social behaviour from a designer's perspective?
 - a. What processes are underlying this particular behaviour change?
 - b. What role do products play in these processes underlying the phenomenon?
2. How can designers anticipate the effects of products on human social behaviour from a societal perspective?
 - a. How to define a desired effect?
 - b. When and how to apply knowledge about the inherent influence of products on social behaviour within the design process?

4. Methodological approach

This PhD research is intended to deliver insights for designers who are interested to design for societal concerns. Within this research, the emphasis is on the applicability of the knowledge for designers. Therefore the overall trajectory can best be described as design inclusive research in which the *design process* is the research means to generate and construct contextualized knowledge [4].

The research will contain three design cases represented in figure 2, and two experiments. Based on social theory and an empirical investigation into existing effects of products, an initial understanding of the phenomenon is conceptualized, providing initial answers to research question 1a and 1b. Together with own experience from the graduation project 'Designing Social Cohesion', this serves as the basis for case 1. Case 1 concerns the design of a police vehicle that needs to link concerns of the user to societal ones. This case delivers preliminary answers to research question 2a and 2b and provides insights that will steer the development of the conceptualization of the phenomenon [research question 1]. The second case is a design case that puts societal concerns at the centre stage and specifically aims at behavioural change. In this case we need to understand how to define the user concerns that need to be addressed by means of the product in order to elicit the desired behaviour. Within this case we will incorporate two graduate design students, which enables us to systematically vary predefined design steps. The third case puts user concerns at the centre stage, but takes into account societal concerns in order to prevent undesired effects. In this case we need to understand with what societal concerns the user concerns might conflict and how the design can solve this conflict. Again we will incorporate two graduate students to systematically vary predefined design steps. The incorporation of graduate

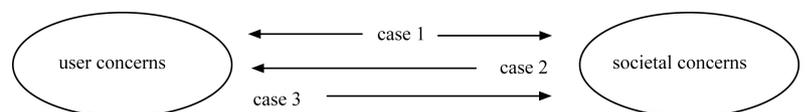


Figure 2 Different starting points of the design process

students will not only provide a means to gain knowledge in a structured manner, it will also convey information about the applicability of the methodology for other designers. Hereby the research goes beyond the possible bias that can occur when being researcher and designer at the same time.

The product-service combination designed within the graduation project 'Designing Social Cohesion' is currently being tested upon its intended influence on behaviour. The outcomes of case 2 will also be tested. The measurement of the intended effects will provide insight in the success of the methodology.

5. Implication design

Based on an inventory of products with both intended and unintended effects of behaviour, three categories of influence have been defined: coercive, persuasive and implicit influence. Enforcing, explicitly propagating for, or subtly implying behaviour, are different approaches concerning the societal phenomena one designs for. One can imagine that using design to enforce safe driving behaviour will be more accepted than to enforce social interaction with neighbours. Safety, a societal domain around a societal concern that can be easily adopted as user concern, differs largely from domains such as social cohesion or immigration and thereby allows different interventions. To encourage social behaviour such as small talks with neighbours, design might be more effective and acceptable if it influences in a more subtle and inviting manner. Within the categorization inherent influence of products has been ascribed to implicit influence. Implicit influence, due to its subtle and often subconscious character, can be an effective means when designing for societal domains that don't focus on to what extent implicit influence of design, implication design, can be used to contribute to society.

6. Citations

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