

Object persona: Should designers let go of the user?

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ABSTRACT

With the emerging of the Internet of Things, researchers propose a shift towards thing-centered design. Making an object persona could be a tool that helps designers to make objects the center of design. The designer steps in the shoes of the object rather than in the shoes of the user and this allows to reveal new insights about a context that would not be obtained by only studying the user. Based on earlier object persona research, designers were asked to create object personas in a workshop and design something based on the insights from the persona. An evaluative discussion showed that designers have strong need for the notion of context and find it hard to think of an object independent of its context. To develop thing-centered design, we should understand better the roles and importance of the context, user and object in designing.

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Miscellaneous

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A NEW APPROACH: THING-CENTERED DESIGN

The Internet of Things (IoT) is an emerging paradigm developing and changing the world around us. Objects and things will get more and more connected, predicted to be over 50 billion connected products in the 2020's [14]. IoT opens doors for new developments, and one of the questions rising is how designers should deal with it. If all products around us get connected and work in systems to improve our lives, than how does this influence our approach to designing products for people?

Thing-centered design is one new design approach that experiments with this question. In this approach, researchers believe that objects will become part of already existing ecologies of devices and practices. Studying these existing use situations could be approached as a potential design situation, enabling us to learn about both people and objects at the same time [2] [3]. In short, thing-centered design does not only take the user as a focus, which is common in the human-centered design approach, but also considers the

object as an artifact that could provide valuable information for designing.

In recent developments of Human-computer interaction (HCI) [6], many researchers [2] [3] suggest the importance of acknowledging the ecology of objects instead of just looking at the human-product interaction. So far, design theory and approaches have mainly focused on people, but with IoT coming up HCI researchers are pleading for a more object-oriented focus.

This study aims to explore and develop an approach that enables objects to tell their stories and in that way provide valuable information on their use to designers. This paper explores the use of object personas as a tool for opening up a non-anthropologic perspective on design. It discusses the placement of thing-centered design in existing design approaches.

OBJECT PERSONAS

"Telling stories is as basic to humans as eating" [7], therefore storytelling methods are often used in human-centered design processes to help designers relate to the users or to create empathy for them. Storytelling methods, such as personas and scenarios, could be applied on objects as well, helping the designer to develop empathy for the object rather than the user.

Cila et al. [2] combined the intrinsic ability of people to address lifelike qualities to inanimate things and technology that makes it possible to give objects a voice to talk by using a lifelog [9] [11] [12] to the idea of object personas. Object personas are similar to user personas, but instead take the object as the subject for the persona. The use of object personas could be one way to analyze practices from an object's perspective and to stimulate creativity in the design process.

This research [2] was one of the first attempts to listen to what objects have to say, but it raised the question how this very experimental approach should be applied in design practice. The study described in this paper aimed to improve the object persona research by providing an understanding in what way object personas can become valuable in the design process and with this knowledge contribute to the development of thing-centered design.

METHOD

As stated by Kuijter [8], qualitative research is necessary to gather a holistic understanding on a context. Therefore, to obtain the understanding of the potential value of the object persona tool a qualitative approach was obtained in two steps.

First, the object persona research by Cila et al. was reviewed by reading the published papers and having discussions with the involved researchers. This would provide insight in which aspects of the object personas were valuable and should be elaborated in this study, and which aspects could be left out.

Second, a workshop with four professional designers was setup to let them experience and evaluate making an object persona and using it for design. This would provide insight in how the object personas are experienced by designers; what its contribution is to the design process and what difficulties arise in application.

Object Persona Research

By providing objects with software and sensors, Cila et al. enabled objects to give access to perspectives and insights that would not have been attainable when only focusing on users [4]. The gathered data can be interpreted in order to imagine the product to be alive: how does it feel when being used? What is its relation to other objects? Is it sometimes lonely?

They took the home practices as a context and put life-logging devices (Autographers) on a kettle, cup and fridge. The Autographers collected many pictures from the perspectives of these three objects and were the basis for creating an object persona for each of these objects.

For the creation of an object persona, the theory and research done on human personas was used. Alan Cooper [13], one of the first researchers to describe the use of personas in scenarios, states that the user's goals and skills are really important in the persona description and that they should be specifically described to make the persona realistic. Nielsen argues that the clear focus on only the actions and goals of the person makes it a flat character and designers will thus not get inspired or create empathy for the intended user. It will create a stereotype scenario, only showing the functions and workings of the described product [10]. In order to create a rounded character, that feels to be a real person, Nielsen suggests to describe the character as somebody who looks for: multiple traits; psychology, physiology and sociology; inner needs and goals, interpersonal desires and professional ambitions. The creation of rounded, complex characters will lead to ambiguity, richness and depth and this will surprise and inspire the designers to come up with new insights [1].

The researches provided the participants (a design researcher and a psychologist) a template to make the object persona. This template was based on insights from literature, such as including goals and skills and considering the psychology, physiology and sociology of an object. As a result, the template consisted of four main categories: Day in the life of the object, Inner life of the object, Social relationships and Life course. These categories all contained small assignments or questions to trigger the participants to think of the object as a person.

The participants were not asked to sketch ideas based on their object personas but talked about them in a plenary discussion where also the whole session was evaluated.

These insights were used to improve the object persona template for this research. The categories were adjusted to place more focus on the social relationships between the objects as this was found to be the most inspiring and useful aspect of creating object personas in the previous research. In addition, this study asked participants to actually design based on their persona to get more insight in how the object persona contributes to the design process.

Workshop with Designers

The aim of the workshop was to explore how the designers could be inspired by making an object persona and how they would use the insights they got from the object persona in designing. By making the object persona, designers are triggered to step into the shoes of the objects so that they can experience the world from the objects perspective, something they also do when creating a persona for a user. Understanding the world from the view of objects could help the designers to get novel insights on the context or design problem, that they could not get from only studying the user. In this way, making an object persona could be an inspiring activity that helps to look at a context from a new and interesting perspective.

To ensure that the designers were familiar with the objects, a common practice from home, the cleaning practice, was chosen as the focus for making the object personas. In order to get in-depth insight in this practice, the author selected three objects (the sink, cleaning detergent and vacuum cleaner) and installed life-logging devices onto them in ten different households. The objects were selected with attention paid to their agency, temporality and movement to ensure a variety in the data for making the object personas.

Four professional designers varying in age, background and design experience were invited for the workshop. In the three-hour workshop, the designers were asked to watch the movies that were created from the pictures of the life-logging devices and create an object persona for all three objects using the adjusted template. The template consisted of multiple sheets with various assignments to trigger the

designers to engage with the object. Each assignment had a short explanation and triggering questions to help the designer filling it in. The assignments were composed in such a way that designers could fill it in to their preferences: with writing or drawing and in the order that they liked.

For each object, the designers were asked to fill in a timeline that describes a day in the life of the object, see Figure 1. With green and red stickers, they could indicate which moments the object liked and disliked and the designers could indicate important moments from the object's past. On another sheet, the designers could develop the inner life of the object, by writing down the psychological profile of the object. For example, they could elaborate on the ideal life of the object, the characteristics, fears, mood, complexes and so on.

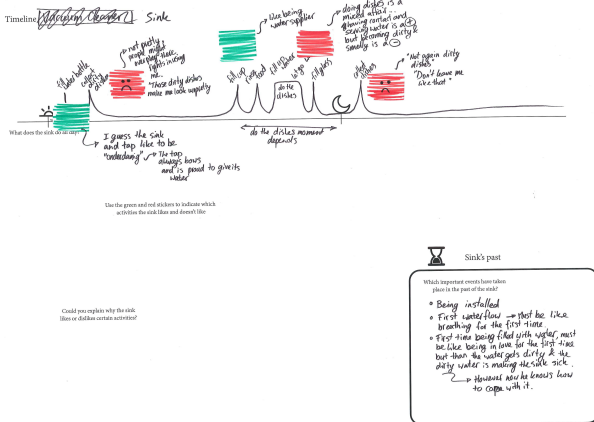


Figure 1. The timeline template filled in for the sink by one of the participants.

For all three objects, a sheet with a grid was given so that the designers could map the social relationships between the three objects and other objects in the house as exemplified in Figure 2. They could add how the objects would communicate and how they move around the house. Another sheet was available for the designers to specifically focus on the relationships between the three objects. They were asked to think about friends and enemies of the objects and to consider what they could learn from and teach to each other.

When the designers had finished their personas, they presented them to each other and discussed about the process of making them. As a final part of the workshop, the designers were asked to design something for the cleaning practice based on their object personas. They were asked to define specific insights from the object personas and use these to come up with ideas. Beside that instruction, the designers were free to apply their preferred design exercises to come up with ideas. The workshop was ended with a presentation of the ideas and an evaluation of the complete process.

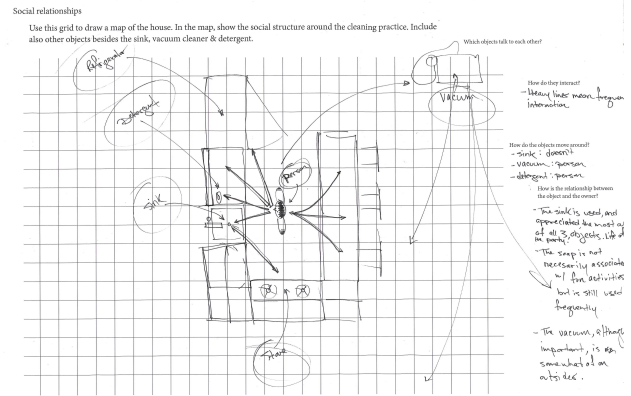


Figure 2. The social relationships of objects mapped out on the grid by one of the participants.

RESULTS

The workshop recordings were transcribed and interesting quotes were highlighted and interpreted. First a separate analysis was done for each designer. These insights were then combined to come to the findings.

Discussion during the workshop indicated that making the object persona was difficult for the design professionals, as the context around the object was missing. With context they meant not only the environment around the object, but also a design brief, problem statement and wants and needs of the user. Participants felt very much that they were creating the object persona based on their own experiences and opinions rather than substantiating it on the wants and needs of the user.

The designers indicated that the environment around the object is important to distinguish its function. For example, a sink in a kitchen is very different from a sink in a bathroom.

The designers also experienced some difficulty when starting to design based on their persona. They mentioned they missed a purpose for designing, as there was not a clear design brief. The object persona provided them with insights on the object, for example problems that the object encountered in its daily life. However, these problems were indicated not to be useful by the designers, as the problems of an object are not necessarily the problems of the user.

DISCUSSION

The results show that the designers kept thinking about the user and had difficulty to take the object as the center of design. The designers experienced the absence of the user in this research to be quite uncomfortable. They presume the human projection on the object to come from the user, not the designer. They felt the relationship between the user and object is very personal and that they need to have background information on the user, so that they can create

a fitting object persona for them. As a solution, they proposed to use object personas as a co-creation technique, so that users can give feedback on the object persona created by the designer, or users could even create the persona themselves.

In addition, the notion of context seems to be of importance for designers. The participants considered the object persona to be influenced by the space around the object, and thus could not see the object having certain characteristics, wants and needs merely on itself.

These insights could make us question whether thing-centered design is the right track for designers. Until now, we have been so much focused on human-centered design and on people, that it seems to be hard to let go of the user. The application of object personas in the design practice indicates that it is still a big step for designers to solely focus on the object and truly making the object the center for design. The question is whether the purpose of thing-centered design is to let go of the user, or just to provide designers with tools to get inspired and look at a design context from a novel perspective.

For this approach to develop further, the HCI community might need to think more about the purpose of thing-centered design and how the human, context and thing perspective can be complemented in design. For example Giaccardi et al [5] have started the discussion on how to make the role of things in design more equal to the role of humans. This study on object personas as a thing-centered tool provokes this discussion further and provides openings for further research on placing thing-centered design in current approaches.

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