Participatory design

Introduction

The design field is changing. The internet and technologies make it impossible for design to remain exclusive, users get access to design processes and different disciplines become increasingly intertwined. These changes can be seen as a possibility to take a closer look at the structures and approaches within the design field.

An issue that every designer has to deal with nowadays is that the boundaries between designers and users become blurred. On the one hand, you have the evolving DIY culture. People with the same interests come together to share their skills and ideas. All the tools and knowledge that they need can be found online or in open workstations. On the other hand, you have the designers and businesses that are looking for products with value that meet the needs of their users.

By giving users access to a design process and seeing them as a source of value, these two issues are used for a different design approach: participatory design.

This participatory approach has the potential to become an important design movement. But before we take a look at the future of participatory design, we have to study the history, methods and contemporary practitioners of this design movement. This will lead to the main question about what the division of roles is of the professional designer and the user within a participatory design process. This question will not only be answered by theoretical research but also by a practical research. The participatory approach is actually already involved in this essay as we will see at the end of this essay.

Marylin Strathern, a British anthropologist who researched the natives of Papa New Guinea, discovered a tradition of this population that involves an interesting form of participation. People are told half of a story and the other half they have to find out by themselves. That is, they can invent it themselves or ask someone else.

However, implementing participatory approaches into design processes is fairly new. In Scandinavia, The Norwegian Iron and Metal Workers Union, led by Kristen Nygaard, invited workers to influence the design and use of computer applications at the workplace via developed strategies and techniques. This began in the 1970s and they focused on the active co-operation between researchers and workers.

This way of improving by engaging individuals in the design process is in line with the theory of Shoshana Zuboff and Jim Maxmin about 'distributed capitalism'. This paradigm serves the needs of individuals and treats them as a source of value. Zuboff writes on her website: 'The purpose of commerce becomes enabling individuals to live their lives as they choose, realizing the value propositions that arise from their unique perspectives in "individual space"' (Zuboff, "The Support Economy," para. 5).

According to Peter Troxler, in his essay *The Need for Open Design*, this focus on the value of the engagement of the individualist is an important element of the third Industrial Revolution. He claims that the first Industrial Revolution was about creating a control paradigm, by developing information processing and communication technologies to control energy and flows of materials within the industry. This also created possibilities for combining social, political and economic demands with technology. The second Industrial Revolution gave birth to a new type of capitalism, called managerial capitalism. It challenged the traditional regime of personal capitalism and was dominated by big firms. In the third Industrial Revolution, it is the costumer who determines what a business is and what valuable is. This focus on the needs and input of the users logically causes users to become part of the design processes.

Participatory design is about involving users in the design process, directed by the designer. The user becomes more than only the 'receiver' of a finished product. That is, he or she becomes an essential key in a process that will lead to a product that appeals to the needs of an individual. The designer becomes a developer of frameworks rather than an author of finished products.

In order to develop a framework that triggers its users to participate, a couple of methods have to be applied. These methods are characteristic for a participatory approach.

According to Dianna Herst (2011), an important applied property of this approach is the usability. This method makes sure the user is getting access to the design process and is not hindered by difficulties or ambiguities.

Besides usability, a design process also has to appeal to the users' emotions. The user has to be personally drawn to the design process, in order to really engage in the process. This can be done, for example, by letting the user feel a certain responsibility for the actual outcome. In this case, it is important to use the appropriate user. Someone that has a feeling with the subject of the design, or who will become an end-user of the end product.

A problem that often occurs in the user-centered design process, and that makes it difficult for users to engage in the design process, is that users have difficulties with understanding the implications of the early ideas and concepts proposed by designers.

The designer himself can solve this problem. He can give examples to give the user a push in the right direction. This method was used by Mickael Boulay, a designer who works on bringing health and care products closer to people. In his project 'Transitions', he developed a set of cutlery that trains the motor skills of a handicapped hand. One by one, the models that Boulay and a physiotherapist created, where tested by a disabled child called Willem. While Boulay and his team watched Willem eat his meal with the models, they brainstormed about new, better models. Step by step, the set of cutlery improved while Boulay stayed focused on how Willem reacted on the example models.

'REPAR Project' of Océ includes another solution to the question of how to make the design process understandable for the user so they can fully engage. This global leader in the printing industry gathered qualitative insights by using virtual reality. The staff of an existing print shop was asked to load paper into an Océ printer, with multiple design arrangements proposed, in a virtual print shop. This virtual print shop imitated a real life print shop setting, with realistic mess, such as clients, space, et cetera. By making such a realistic setting, users have less difficulty to understand the ideas and concepts.

Image 1
Willem testing the example models

Image 2
Example models of Boulay

Image 3
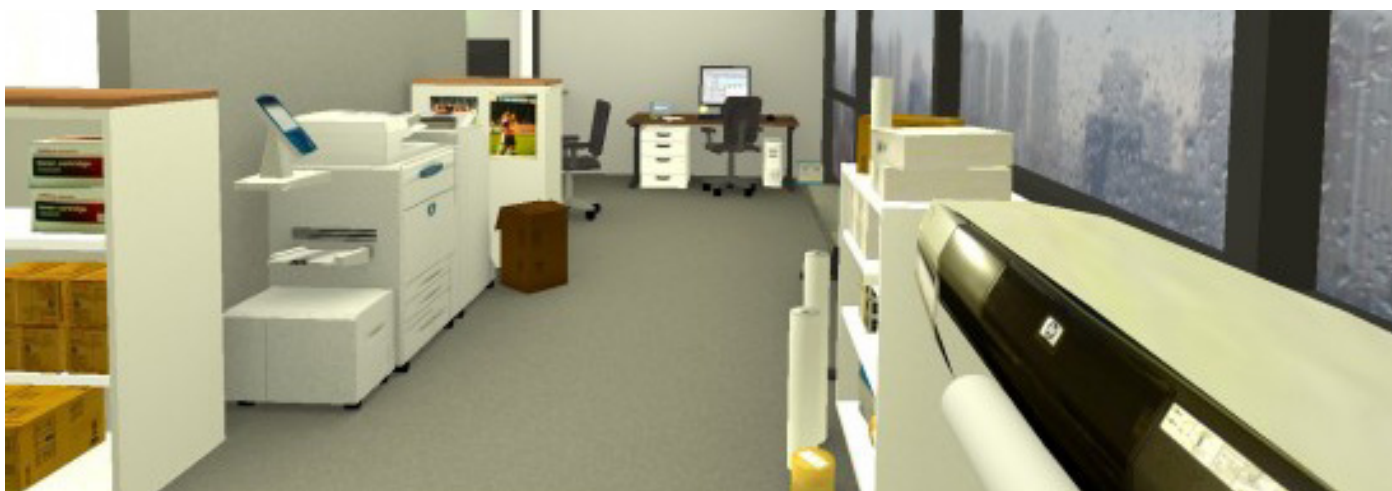Transition of the knife model

Image 4
Print shop in virtual reality with Océ printers

Another problem that can occur when users get involved in a design process, is that the roles of the designer and the user are unclear.

Can the user be seen as co-designer? Or more as a hobbyist who helps the professional designer? This also raises the question what the difference between a professional designer and a hobbyist actually is.

In theory it's about the money. A professional designer designs as a living; a hobbyist designs just for fun. In our times, however, a lot of working people have plenty of spare time. We live in a rich society, and we can spend much money on a hobby. Plus, computer technologies have brought design tools into the hands of many hobbyists. This means that the line between professionals and hobbyists has become very thin. This is a logical consequence when there is enough time, money, knowledge and tools.

This doesn't have to be a bad shift for the design world; designers just have to be aware that their role can be changing.

The project 'Seeker[HS²]' of designer, biologist and space researcher Angelo Vermeulen seems to provide an answer to this change. In his project, the community is put first. People from this community are invited to co-create, edit and hack a spaceship. There were no blue prints from the beginning. Vermeulen expected from the community, a variety of local artists and engineers, to shape the design of the spaceship together.

However, it is very clear what the role of Vermeulen is, and what the role of the community is. Vermeulen is the one that issues the invitation by sharing his idea to build a spaceship and selecting the right people for the community. In the end, he is the one that is bringing together art and science, but also people from different ages and cultures.

But the community is an unmissable element in his project.

In this case, the designer needs the community, and the community needs the designer.

Conclusion

Traditionally, users were unaware of the design process of a design and the designer tried to think of the best use of the product for the user. In participatory design, the user is directly telling the designer what use is the best for him. The user and the designer are together facing the difficulties of a design process, which makes them both responsible for the outcome.

This user-centered approach was first applied in a design process to improve the use of computer applications at the The Norwegian Iron and Metal Workers Union, in the 1970s.

This engagement of users into a design process is a logical result of two Industrial Revolutions. The first one focused on creating a control paradigm, the second one on managerial capitalism.

In order for the designer to develop a framework that encourages the user to put his knowledge and skills into the process, a couple of methods can be applied.

A design process has to be accessible for the user, but also appeal to his emotions by letting the user feel responsibility for the outcome.

It also has to be clear for the designer and the user what roles they have to play in the design process. In a participatory design process, the professional designer issues the invitation by designing a framework. Think about the cutlery models of Boulay, the virtual printhsop of Océ or Vermeulens idea to build a spaceship. This framework has to encourage the user, whether the user is a hobbyist who has all the knowledge and skills needed, a disabled child who tests example models, staff from a print shop or a community consisting of artists and engineers.

In the end, this process will enhance the function of the finished work. The participatory design process will only get better the more the user becomes part of the process and the more he gets seen as a source of value.

Sources

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Images:

Image 1
"Transitions By Mickael Boulay" (Design Academy Eindhoven, 2012)
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Image 2
"Mickael Boulay: Transitions" (Shijue, date unknown)
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"Transitions" (Boulay, M. 2012)
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Image 4
"REPAR Virtual Rool" (Océ, 2013)
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Evaluation participatory design process

During the writing process of this essay, I involved three potential readers. I applied the Exquisite Corpse method, a participatory writing method. First, I started with a couple of sentences about a specific topic within participatory design. After leaving the last sentence open ended, I folded the paper so only the last sentence could be seen. I asked the potential reader to finish my sentence. They didn't know the topic of my theme, so they had to write from their own perspective. After they finished the sentence, I started writing again to involve their writings with the topic participatory design. And so on.
I expected to create a participatory framework that was easy to understand for the potential readers and that gave every potential reader a chance to engage in a dialogue.

My first step was to select the right potential readers; people who had a relation to design or participatory approaches.
I selected Shanna, a student Lifestyle and Design at the Willem de Kooning Rotterdam. Soon she is going to be a graduated designer who has to deal with the changes in the design field. I was curious to her opinion about this. Martijn, an account manager of TOPdesk, is familiar with all kinds of software for companies. By improving their software, TOPdesk has to stay in touch with their users. I realized he could be an interesting potential reader. Their input was not extensive, sometimes I had to write a lot to keep the dialogue going. But in the end, they both pointed to statements that were surprising.

With the input of Shanna and Martijn and the information about participatory design I gathered, I started writing. Sometimes I literally copied the writings of the Shanna and Martijn, and sometimes I translated it in my own words. Their input showed me topics and thoughts that I didn't think of, but that were a good addition for my essay.

After I almost finished my essay, I realised that at this phase, I could use some more input from a potential reader.
I asked Jan, a former architect who is now designing bows and arrows for his enterprise Zelf Bogen Maken. He thought himself to edit wood in order to make bows. I was curious to his opinion about the difference between designers and hobbyists, but also to his definition of a traditional designer. After answering my questions with interesting notes, he also decided to make his last sentence open ended, so I had to finish his sentence. Sometimes he made it pretty difficult for me to come back to the theme I had in mind, but we had a really surprising and interesting dialogue on paper. I challenged him, but he also challenged me. I think that is the best framework for participatory design.

An example of Jans' writing:
'The role of the traditional designer is... *still alive. Maybe has even become more alive again. Because people are longing for a human approach and interaction. For instance in China...*'

The Exquisite Corpse method turned out to be an easy to understand framework that served very well for my experiment.
In my case, the potential readers were a part of the writing process, but I remained the writer who decided how the essay would look like in the end. It would be even more interesting if the potention readers also became 'end writers' of the essay. But in order to do this, the framework has to be taken to a next level.
Also, a discussion with all the potential readers together, after the Exquisite Corpse experiment, would have been interesting. We could have gone deeper into everyones' statements.

For the complete process with the potential readers, take a look at: opensource.wdka.nl/wiki/user:0862093

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