

Towards Human-centred Design Strategies:

The use of qualitative research methods in the graduation studio of the Veldacademie

For the past decades there has been an ongoing discussion about the relationship between research and design. The positions architectural academicians take on the subject varies widely. Some view design as a new “paradigm” for research in the creative and professional domains, while others see it as two separate entities that - to a certain degree - are integrated throughout the creative process. Groat and Wang argue *that design and research constitute neither polar opposites nor equivalent domains of activity*.¹ No matter which position is taken on this subject, almost all designers will at some point engage in some form of research within their process. Within this context the purpose of research should not be seen as the mere generation of knowledge, but should be viewed as a heuristic activity that influences both the approaches and the outcome. A critical awareness of the existing range of methods is a necessity for each and every designer.² According to Hanington, however, *the key challenge lies in making an appropriate, purposive connection to goals in the selection of methods used at any given time in the design and research process*.³ Developing a personal approach is in and on itself a part of the design. The understanding to choose consciously and place one’s self amongst them is in this case indispensable⁴.

The term praxeology, something Marieke Berkers introduces in her lecture during the course, was of interest in particular. No matter its size or function, architecture will inevitably have an impact on society and its people. While this statement seems quite obvious to most, the end-users seldom play an active role within the research and design process. They stay faceless and one-dimensional; fictional characters made up by the designers. Berkers states that *by studying the praxis of architecture one can develop an eye for the actual users of the building, and not imagined ones*.⁵ This concept conforms well with the ideas of the Veldacademie. They believe every person impacted by changes within the built environment should have a voice throughout both the research and design stages. Everyone has a unique perspective on the issues at hand and could provide knowledge or ideas for creating a better city for all.⁶

The ideas written above correspond very well with the concept of human-centred design. This way of designing involves both the end-users and other potential stakeholders at an early stage. As Walters explains *Human-centred design is a creative exploration of human needs, knowledge and experience which aims to extend human capabilities and improve quality of life*.⁷ While various research strategies could be of interest, in this case qualitative research – and in particular ethnography and the participatory approach – will be explored. The characteristics of qualitative research are very similar to or complement aspects of both the human-centred design approach and the principles of the Veldacademie. Furthermore, it sets apart the Veldacademie from the other graduation studios, whom rarely lay focus on this type of research strategy. Therefore the research question is as follows: *How can ethnography and the participatory approach aid in designing more human-centred architecture within the graduation studio of the Veldacademie?* (551)

1 Groat & Wang, 2013, 21.

2 Chair of Methods and Analysis, 2018, 4-5.

3 Hanington, 2003, 12.

4 Chair of Methods and Analysis, 2018, 5.

5 Berkers, 2018.

6 Veldacademie, “Maakt kennis met de stad”

7 Walters, 2005, 9.

Research-Methodological Discussion

While statistics, maps and other more quantitative data can say a lot about a neighbourhood or a building, it often doesn't provide the story behind the numbers. For example from the statistic it could be concluded that a certain area scores very high on safety, even though the residents perceive this differently. There is a difference between being safe and feeling safe. The way our environment is designed can have a large impact on how we perceive and experience the built environment.⁸ This is why ethnography and participant observations can contribute to a more holistic image. For my research on affordable, sustainable housing for those people who fall outside of the current housing stock it is important to know who they are, what they need and why they haven't found it yet. Therefore the first step towards a more human-centred design is to know for whom you are designing. While literature could form a great basis, interviews, observations and focus groups could provide more location and individual specific knowledge.

The Veldacademie does not only use ethnographic observations, but actively involves users and other stakeholder in the design process. Generally certain stakeholders will never directly interact with each other during the research and design stages of a project. This could cause issues along the way. In some cases there is a sense of mistrust between two or multiple parties. In Rotterdam, and especially in the south, many residents have lost faith in the municipality. They feel unheard and are sceptic when it comes to new ideas. The Veldacademie brings these people with different backgrounds and perspective together. By participating in an exercise together they get the change to speak up in an environment where everyone is on equal footing. The results of the exercise will show the differences, but also the similarities; a possible starting point for future collaborations or design ideas.^{9, 10}

Therefore the second step towards a more human-centred design is the use of participatory design methods. The users become, even if it's for a limited amount of time, an equal partner and cooperatively designs with the designers. Creative activities often makes it more attractive to people to participate and gives them different means to express their perspective on certain subjects. This could result in uncovering needs and desires that otherwise might have never surfaced. It is not only about the final outcome, but also about that what can be observed during the process. Body language, short conversations and other behavioural cues can help the researcher read between the lines. At times actions speak louder than words. Examples of participatory design methods includes design workshops, cognitive mapping, visual diaries and camera studies.^{11, 12} Within my own research I would like to implement this by for example letting future users, but also other stakeholder, draw the perfect floorplan according to their personal preferences. The outcomes might not always be realistic, but it could show what people find really important about their house; a large kitchen, privacy, a flexible lay-out or outdoor space. This could come to new and creative insights on both the stakeholders and the design. (556)

Research-Methodological Reflection

While the term might have been different, certain aspects of human-centred design have always been a matter of interest to designers. The meaning within its context has, however, changed over time. Before the 1950's function was the main focus. Louis Sullivan said it all; *form ever follows function*.¹³ If something was labelled well-functioning, human needs were considered to be met. Between the 1950's and the 1980's designers appeared to be consumer-focused. In this period of industrialization and commercialization the main design tendencies were styling, users worth, aesthetics, and semantics. Products had to be usable as well as desirable to the end-users. It is also the period in which some pioneers start to introduce approaches in which people are more involved in de research and design

8 Gehl, 2010, 97.

9 Veldacademie, "informatie: onderzoeksaanpak."

10 Otto Trienekens; founder Veldacademie, personal communication, November 20, 2018

11 Hanington, 2003, 15-16.

12 Walters, 2005, 28-31.

13 Sullivan, "The Tall Office Building Artistically Considered," 409.

process. From the 1990's and onwards it becomes more common to pay attention to us human-beings.¹⁴ Most designer don't just see faceless consumers or users anymore, but people with individual needs and desires. Our society is changing fast and the demands in regard to ecology, flexible usage and for individual and complex shapes calls for more intricate solutions from the design world.¹⁵

Architect Jan Gehl has had a great influence on developing and advancing the movement of human-centred architecture. He addressed the issues surrounding the "modern" city and emphasized that the city should be given back to its people. Good architecture is not only about its form, but also about its interaction with the society surrounding it. Gehl involved sociologists in the design of a housing project in Denmark, something that was unheard of during the 60's and 70's.¹⁶ Ethnographic observations became a frequently used method by Jan Gehl. He used for example participant observations, interviews, photography and visual diaries to collect his qualitative data.¹⁷ He has learned from his own experiences over the years and has by now created multiple guidelines on how to do this type of research. He wants to communicate his ideas and methods with the world so also others can implement it in their daily practice.¹⁸

The participatory design method was developed in Scandinavia in the 60's and 70's as well. It was in response to new labour laws who would give workers more control over the design of their own work space. This type of research method was mostly implemented to increase the democracy within the design process. Later on participatory design became a way to engage (future) users in the process and by this gain innovative ideas and additional knowledge. The Veldacademie makes use of this method to engage the population of Rotterdam South in the making of their own city. Their function as an organisation shifts when the situation asks for it. Society and the way architecture is designed is changing and so is the role of the architect. When involved in for example but not limited to participatory design the architect or designer takes on the role of mediator, translator and educator.¹⁹ They have become jugglers; the stakeholders with their needs and desires the cones they need to keep up in the air.

There are also some disadvantages to consider when employing these research methods. There are relatively few step-by-step guidelines in literature on how to carry out ethnographic and participatory research.²⁰ The selection is, nevertheless, slowly growing with its popularity. Jan Gehl's guidelines on how to observe and interact with public live could help me structure my own research. The experience in practice that the Veldacademie has could be beneficial as well. They have learned over the years what works and what doesn't. Besides a lack of guidance, bias can pose a danger as well. Like Berkers said in her lecture *there is no such thing as a neutral observer*.²¹ Being aware of this fact is of importance. While it might not eliminate the possibility of bias, a critical approach can help recognize and adress these prejudices in time. This will be further discussed in the in the positioning

Criticism towards the participatory approach mostly emphasises the fact that users are not designers. They might be able to provide unique and valuable information during the design process, but they are not necessarily equipped to generate a solution for the problems at hand.²² It is time-consuming, the results might be disappointing, and most of the information could have been gathered through ethnographic observations. On the other hand it could result in out of the box ideas that could bring the design to the next level.

14 Zhang & Dong, 2008, 4-5.

15 Bullinger, Bauer, Wenzel & Blach, 2010, 372.

16 Matan & Newman, 2016, 2-9 & 14

17 Gehl & Svarre, 2013, 22-24

18 Matan & Newman, 2016, 3-4.

19 Lee, 2007, 31-32 & 48

20 Groat & Wang, 2013, 257.

21 Berkers, 2018.

22 Walters, 2005, 31

Positioning

*Studying public life using ethnographic and spatial tools, we develop a better understanding of how public space and public life contribute to broader issues of well-being, prosperity, culture, resiliency and equality.*²³ – Gehl Institute.

Jan Gehl's way of working and his views on our built environment have always been inspiring to me. The quoted mentioned above shows that his human-centred design approach suits my current graduation project well and it conforms with the ideas of the Veldacademie as an organisation. Designing affordable and sustainable dwellings for those who cannot find suitable housing in the current market is a complex and multi-layered inquiry. Ethnography and the participatory approach could result in a better understanding of the human dimensions at play and provides the holistic overview needed to solve these questions. It could also help built the trust and improve the communication between the different involved parties. These people have often lost faith in the municipality and other governmental organisations. The city they love and care for has let them down. Like Gehl explains this approach can not only lead to a successful architectural design, but at the same time strengthen existing social network and contribute to broader issues.

Something I do not completely agree with is the current criticism on the participatory approach. Granted, users are not designers, but I do not believe this renders the approach irrelevant. Firstly, I argue that the end results of participatory methods are not the only objective. That what can be observed and communicated during the proceedings are of value as well. The participants can consciously or unconsciously provide the designers with unique and valuable information. It could also potentially improve the communication and the relationship between the different stakeholders partaking in the activities. It is not just about generating results, but about forging new or strengthen existing social structures. Secondly, I argue that even though users are not necessarily equipped to generate and visualise solutions, the results could reveal a wide range of additional knowledge. In some cases their ideas for a solution might not be realistic, but it could show where their priorities or preferences lay. Another strategy is to create an exercise that provides certain ready-made design elements and/or has a more strict outline. This limits the freedom the participants have and thus possibly the creativity, but guides them towards a certain objective or result. In this type of research the architect takes on an additional role, that of the translator and mediator. It's up to them to interpret and translate the results of the results gained from these types of exercises.

This last sentence immediately brings us to the last point of attention; the subjective characteristic of qualitative research and its proneness to bias and possible untrustworthiness. Marieke Berkers also brought it up for discussion. Each and everyone perceives and interpreters the world differently and thus there is no such thing as an "objective" observer. These perceptions are influenced by past experiences, cultural background, upbringing and many other variables. While the risk cannot be eliminated completely, there are ways to minimize it. Being aware of the subjective nature and risks associated with qualitative research is the first step. Secondly, I will try to combine and examine as many sources on the same subject as possible. This may provide multiple perspectives and validate your own perceptions. Thirdly, it is important to be as meticulous and detailed when writing down observations or conversations. This way you might look at it from different angles and it will help others understand what you saw. Fourthly, clarify the bias and be self-reflective, creating an open and honest narrative. Lastly it is important to spend a prolonged time in the field and revisit your previously done research.²⁴ This would be more difficult to do for me personally, since I have a limited amount of time to do my research. I will partly solve this issue by consulting previously done research by others on the subject. This will help me put my findings in a historical context.

This brings us back to the main question: *How can ethnography and the participatory approach aid in designing more human-centred architecture within the graduation studio of the Veldacademie?*

Through ethnography and the participatory approach it becomes possible to both get to know and involve the future users in the research and design process. It provides an opportunity to get to know

23 Gehl Institute, "About Gehl Institute."

24 Bryman, 2008, 190-194.

the stories behind the numbers. The often valuable and unique knowledge gained is more location and project specific, which could help you make design decisions in later stages. It enables people to partake in the construction of their own built environment and improve their quality of life. Therefore forming not only a stronger connection to the place they live, but also with the people they share it with.

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