

ARCHITECTURE FOR THE PEOPLE

Towards a human centered design approach

Student

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Chair of Dwelling, "Designing for care"

Thesis "Towards a dementia proof society"

I RESEARCH AS A FUNDAMENT

Constructing a building of any kind, one always starts with a fundament. Even though the true fundament is a solid research, in practice architects do not spend much time on it. However, it is important that the current and future architects are aware and acknowledge the importance of research. The lecture series Research Methods made me realise that the way we conduct our research has its influence on the designs and decisions we make. This paper focusses on the kind of research methods I intend to use for my graduation project. The graduation studio I have chosen is: 'Designing for care – towards an inclusive living environment' from the chair of Dwelling. This studio focusses mainly on elderly people who are in need of care. Resulting from the organisational structure of the healthcare system in the Netherlands, elderly are expected to live longer at home, even when they need care. With the ageing population (CBS, 2018) and growing number of elderly in need of care in the near future *and* the existing nursery homes in their current form unable to accompany this new reality, new ideas and concepts have to be developed on how to deal with the new reality. How we want to live when we get old is one of the primary questions in this studio.

To get acquainted with the way elderly live now, the studio arranged for us to stay a week in a nursery home. By fully participating in the lives of elderly people, we had the opportunity to gain insights in the way elderly people live, their aspirations and the things that they need or want. The primary goal of this praxeological approach (more on this later) is to gain further insight in the subjects you are researching. After a week of fieldwork and analysing my findings I formulated the following research question: '*To what extent can the concept of an open society help creating an architectural setting in which people with dementia no longer have to move to an enclosed care facility?*'. This paper is structured in the following manner. In section II, I will define my research approach and specific research methods and discuss why I chose this approach. Section III will provide a brief background on the historical and theoretical development of my approach and relate it to other studies. In the final section of this paper, section IV, I will position my research in relation to issues presented in the lectures, reflect on these issues and generalise my findings into recommendations for other architects.

II HUMAN CENTERED RESEARCH

In the graduation studio 'Designing for Care – towards an inclusive living environment', focus on the user is leading. The studio is using 'human-centered' research as a basis for the design. This anthropological way of conducting research is opposing what the MSc program at TU Delft has taught us so far. To get acquainted with our target group, we had to fully dive into the lives of the elderly. By living in a nursing home for a week, we became familiar with the daily routines and lives of the elderly people living there. During our fieldwork week, I put into practice different kinds of research methods to fully understand the everyday lives of the elderly; I observed the elderly, conducted interviews with both the elderly and caretakers, made sketches of the elderly, photographed them *and* their living environment and used narrative mapping to record their lives as good as possible. After a full week of exploring, observing, talking and gathering information, it was time to structure all the information and start analysing it.

The qualitative research methodology of living with people and participating in their daily lives is called ethnography. According to Lucas (2016, p.38-39), ethnography is a research approach where the key activity is to live in a specific context for an extended amount of time, while fully engaging in the life of those studied. Ethnographic research is often conducted by using mixed research methods. Though, making precise fieldwork notes is the most common method to record information for the ethnographer. Using ethnography as a research method was not a free choice in the studio, but was embedded in the mandatory structure. Before choosing the studio, it was made clear to the students that a prominent position was reserved for this human-centered research method throughout the

studio. Besides designing for the vulnerable, this was one of the main reasons I chose this studio. Focusing on humans instead of the stones around them sounded refreshing to me.

During the research methods course, several epistemic frameworks were discussed in the lectures. One of the epistemic frameworks discussed was praxeology. Praxeology is the study of human action and behaviour. By studying the praxis (originating from the old greek *πρᾶξις*, which literally translates into 'action' or 'activity') of architecture one can develop an eye for the actual users of the building, instead of the imagined ones (Berkers, 2019). The praxeological approach was in line with the research conducted in the studio. Using this epistemic framework helps to understand their everyday lives. It not only provides an insight in the lives of the elderly, but it also explores in what way they interact with their part of the built environment, the spaces they use and *how* they use them.

Throughout my research, my approach exceeded beyond using a mere praxeological-epistemic framework to formulate an answer to my research question. In addition to the everyday practice of the elderly, I also looked into the way the elderly *perceived and experienced* their spaces. This way of obtaining knowledge is called phenomenology. The phenomenological approach is about the way in which things appear to us and the role of the body experiencing space (Havik, 2019). Combining a phenomenological and praxeological approach will help in providing a better insight in the needs of the target group. However, one should not focus solely on doing an ethnographic type of research. What people say and do can differ, making it sometimes difficult to decide what actually resembles their preferences.

III ETHNOGRAPHY AND ARCHITECTURE

To place the ethnographic approach that I used into perspective, I will further elaborate on its historical and theoretical evolution. Lucas (2016, p.37) describes ethnography as the practice of writing about another group of people. Ethnography literally means 'a portrait of people' whereas ethnography can be defined as a written description of a particular culture – the beliefs, customs, and behaviour – based on the information collected through fieldwork (Harris and Johnson, 2000).

Ethnography arises from the combined fields of anthropology and sociology (Genzuck, 2003, p. 1). Using anthropological research in relation to architecture has not always been self-evident. For centuries the two disciplines worked independently instead of collaborating. A pity, according to Jasper (2017, p. 1) because in his opinion architecture and anthropology have so much to say to each other. In his book *Anthropology and Architecture: A Misplaced Conversation*, he argues: "*Shelter is, after all, a universal human need. But for the most part, architecture has been satisfied with drawing on anthropology for an origin myth or two (usually something involving a primeval hut), and anthropology displays astonishingly little interest in architecture at all, even though the design and disposition of dwellings is one of the key material expressions of daily life.*" (2017, p.1). With this argument he highlights the importance of what the two disciplines have in common and how they complement each other. During the 19th century, first attempts were made to incorporate anthropological theory in to architecture. One example of these attempts is the work from architect Gottfried Semper's 'Four Elements of Architecture'. In this work Semper highlights the anthropological aspects of architecture (Turan, 1996, p. 355) and was searching for a different way of defining architecture, rather than by its material expression (Jasper, p.111).

However, due to the process of industrialisation, the attitude towards architecture changed. Architecture was no longer driven by human needs but rather by the production supply. This led to a severance between the two disciplines of architecture and anthropology. It is a third discipline; archeology, in the postwar period, that brought a renewed anthropological interest to understanding the material culture, and in particular, architectural forms (Buchli, 2013, p.54). According to Jasper

(2017, p. 111), architecture helped in the anthropological discipline of archeology not only by methods of drawing but also led to methods or reconstruction. One might even conclude that if architecture offers an embodiment of the techniques used by a culture in dwelling, it should be a major source of evidence within contemporary anthropology. Vice versa, if anthropology documents human behaviour, it should also be a meaningful tool for architects (Jasper 2017, p. 112).

The relevance of understanding human behaviour is endorsed by Hill (2016, p. 364). He stresses that it is of the utmost importance for the architect to understand the type of user and the way they occupy space since space can often affect the use of it, though one barely determines the other. The famous architect Herman Hertzberger also stresses the value of understanding the user: *“The architect must use his imagination to the full to be able to identify himself with the users and thus to understand how his design will come across to them and what they will expect from it.”* (Hertzberger, 1998, p. 164).

IV RESEARCH FOR THE PEOPLE

Without an ethnographic approach, fully understanding the (daily lives of) the elderly would be near impossible. As a consequence, using a praxeological framework for conducting research on elderly people in a care facility is a proper approach to this quest. Furthermore, it should be noted that an ethnographic study is a longitudinal study. Lucas (2016, p. 37-38) describes that an ethnographic study is impossible to conduct in less than a few months. The longer the study lasts, the more annual and seasonal events or changes can be experienced and taken into account. Our fieldwork trip only lasted for 5-7 days, a timeframe too brief for conducting a full ethnographic study. Although I adopt the position of Lucas, I believe that the first days are of greatest importance (i.e. staying a few days still gains significantly better insights in comparison to no first hand observations nor experiences). As I will argue below, the combination of a solid theoretical background is of greater importance than additional time as the ‘return’ of an ethnographic study is diminishing with additional time spend¹.

Expanding beyond what the untrained eye can observe, there is a deeper layer of behaviour that can be explained by deteriorating physical or mental health yet only with the knowledge to do so. In order for the ethnographic approach to be complete, one should be able to grasp and explain the origin of seemingly ‘strange’ or ‘unexplainable’ behaviour². Regarding elderly people, this can only be accomplished when combining ethnographic research with a solid theoretical background of the ageing process and (mental) disease development. For the absence of more suitable terminology I will label this a ‘qualitative’ ethnographical approach (contrasting the aforementioned mere ‘quantitative’ ethnographical approach as discussed by Lucas). It is both observing combined with a solid theoretical background on what is observed that makes the ethnographical approach a solid research approach.

Furthermore, when studying a group of people, the influence of the environment itself can also be a restriction, yet it is very difficult to take this element out of the equation. Both in the course and the literature, fairly little emphasis was put on this notion. However, its importance is significant. I oppose the position presented in both literature and the course that a purely ethnographic approach provides a ‘true’ outcome. Rather, I argue that only a controlled ethnographic approach helps to analyse the actual behaviour of people, irrespective of their current (external) limitations. Even though filtering for ‘external’ factors presents the risk of introducing subjectivity into the equation, when not

¹ Even though one might argue that some ideas will only present themselves after a longer period of time, most behaviour of those observed within this target audience will be similar to others of the group and of a repetitive nature. Presenting the notion of diminishing ‘returns’ of a strictly ‘quantitative’ ethnographic approach (only focussing on a greater sample size and longer observations).

² For patients suffering from diseases affecting the brain or cognitive functions, solely observing the person provides an incomplete picture of the ‘true’ or ‘intentional’ behaviour. In order to fully understand the observable and more importantly the unobservable one should have a understanding of the implications of the disease on both the body and mind.

doing so, the behaviour of those observed is most certainly stronger affected by current limitations. As it are these current limitations we aim to minimise in our design, we should try to observe how the status quo would change in absence of these limitations.

In the lecture series '*Research Methods*', an overview of different types of architectural research methodologies and their epistemic frameworks was given. It was made clear that both the research methodology that we as designers choose and the way we conduct our research, influences our designs. From all the research methodologies presented, the ethnographic research and its praxeological framework appealed to me the most. Looking at people and their behaviour as a basis for the research and the design, makes more sense compared to solely looking at materials or typologies. I strongly believe that people should always be at the core of the design. As already mentioned above; what is a building without the person who uses it. To understand people's behaviour, one must study their day-to-day lives and analysing the patterns observed. It is my opinion that an ethnographic research should play some role in *every* design process.

However, solely doing an ethnographic research will not be enough to be able to formulate an extensive answer to my initial research question: '*To what extend can the concept of an open society help creating an architectural setting in which people with dementia no longer have to move to an enclosed care facility?*'. Regarding people with dementia, their behaviour is not a reflection of their deepest desires and needs. For example, the notion of language (both speech and the ability to process what is being said) is one of the first factors affected, however this does not mean those suffering from dementia are not willing to communicate anymore. Although they cannot speak, communication still is of great importance (Stichting Reigershoeve, 2014). Consequentially, only one research approach will be insufficient in answering this question, as will it be to answering nearly all research questions. Rather, it is a qualitative ethnographic approach, an approach that provides first hand insights on those observed, combined with people's (un)observable actions and phenomenological desires that presents us with a mere suggestion of an 'ideal' reality. As those we design for are less able to get across their needs and wants, the emphasis of the combined research approaches shifts as does the responsibility. It is in this balance where the true fundament of the living environment is laid.

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