THE POWER OF FILM AS A HEURISTIC METHOD
Portraying reality as a tool for persuasion

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I   INTRODUCTION

The relation between architecture and research is very complex. My personal frame of what research means is very broad. I would call being attentive to the world around you research. Translating that 'being in the world' into a building is architecture. In that sense, architecture and research are inherently linked. Conducting research can be considered a core task of the architect, as it is a precondition for a good design. But the conflict I want to discuss in relation to the course Research Methods arises when we talk specifically about *scientific* research. I have always wondered if architecture can be a truly scientific profession. The research I have conducted in my studies has usually been qualitative, which is often considered subjective (Lucas, 2015, p. 37) and therefore uncertain and insufficiently accurate. Having such a broad definition of research, it could often be frustrating to be asked to prove things which I felt I knew intuitively according to scientific methods. It was a set of rules that restricted me. Because of this attitude towards scientific research, which I considered to be essentially different than 'everyday' research, I have always been very hesitant to see any value of this everyday research in writing scientific articles.

However, during the span of this course, I have become increasingly aware of the validity of various approaches. I have come to see the meaning of the term scientific not to be merely a set of restricting rules but rather as an attitude of integrity and honesty. This reinterpretation has allowed me to dare to submit this 'everyday' research as valid research. Of course, this demands to reconsider the methods I have used and to make sure they are verifiable and consistent. In any case, I was able take a step towards a more personal research method, because of which the persistent frustration with the scientific method is alleviated. We can call this approach a heuristic one.

Before I can discuss how I integrated these heuristic techniques into the thesis research I need to clarify the specific studio approach and my own topic. In our studio, we are expected to design a certain kind of city for a certain target group. If anything, this city needs to be *open*, corresponding to the open city as described by Richard Sennett in his book *Building and Dwelling: Ethics for the City*. In my case it will be a nature-inclusive city for solo dwellers. The most interesting but challenging part of the research lies in the parallels between the two. Nature is defined as: *'Something that is left to be altered by time rather than being controlled by means of human intervention*.' Therefore, a garden can be less natural than the first patches of moss on a cobblestone road. It is a matter of letting be instead of designing and controlling. It is that same open and tolerant attitude that allowed the solo dweller to flourish in cities in the past century. Both people and nature are subject to time. A building that acknowledges this can contribute to a city in which both people and nature can dwell. The research question of the thesis is: *what is the value of urban nature for solo dwellers?*

Besides a thorough discourse analysis, I am trying to use several heuristic techniques as research methods. The overarching tools are photography and film, which I have used to document several field trips and walks, one of which with an expert on urban ecology (Remco Daalder). In this paper, the use of photography and film as heuristic tools will be discussed. Firstly, my own approach will be described. Secondly, we will investigate examples of researchers that have used photography and film in a similar way and discuss their specific arguments for this approach. Consequently, we can evaluate this approach and assess if it can be used as a form of inductive research. The research question of this position paper is: *in what way does the heuristic use of film help to establish an argument for the importance of urban nature?*

II   RECORDING PHENOMENA

A key aspect of the studio research is that I want to address the value of spontaneous nature. The idea is that a more tolerant attitude towards what is commonly seen as degradation of materials can in fact contribute to a richer and more complex urban biotope (Melosi, 2010, pp. 11-13). I am trying to prove that tolerance towards urban nature is a prerequisite for an open city. Therefore, I am photographing occurrences of spontaneous nature in several cities based on the belief that images are a more appropriate way of documenting nature than a verbal description. Moreover, I have filmed in what way people behave in spaces that can be considered 'natural' – spaces that aren't clearly controlled, cleaned and organised – in which there are no clear rules of behaviour. In the field of ecology these spaces are called *urban wastelands* (Francis, 2011, p. 51). The aim of this part of the

research is firstly to be able to prove that, when given time, nature will reclaim its habitat. Secondly, to identify on which type of surfaces and materials vegetation grows most commonly in order to make informed choices for creating a nature-inclusive design. Thirdly, to investigate the social value of urban wastelands and nature in general; testing whether a city can be open if every part of it is clean and organised.

       The research can be classified as theory-led (Lucas, 2015). It borrows theory from ecology and geography and applies social research methods to it. As architects are concerned with the effects of the built environment on the life of its inhabitants, we need to know the effects of urban nature on human psyche. Although ecologists and botanists can conduct proper quantitative research on urban nature (e.g. counting the amount of plant species, weighing biomass), my research approach is highly qualitative. It is about documenting qualities of urban nature and its potential to transform repetitive

1: Examples of documentation of spontaneous nature in respectively Delft, Berlin and Essen. Images produced by author.

surfaces into more engaging and detailed ones and about describing behaviour. It is not aimed at producing a quantifiable data set or precise measurements, but rather at the aesthetics of urban nature and discovering the possibilities it provides. This helps to prove or refute the hypothesis that urban wastelands can serve as building blocks of an open, inclusive and free city. Consequently, the research can provide a solid argument for designing a nature-inclusive city: a city that allows spaces to be altered over time without human control.

       The research is etic rather than emic. I deliberately take a point of view that is outside of culture in order to allow behaviour that would occur naturally within urban wastelands – as if I were not there. This results in a more objective documentation of behaviour than an emic viewpoint, because I would perhaps interrupt or instigate certain activities.

       The approach relates to phenomenology in the sense that it is concerned with the appearance of surfaces, the tactility of materials influenced by vegetation, temporality and erosion due to wind, rain and sun. Ideally, an abundance of urban nature could induce an experience that changes the way humans relate to the world around them – the realisation that nature is ubiquitous (or rather the realisation of a natural order of things). However, it also distances itself from a conventional phenomenological approach as it is not directly related to the architecture of space and light. Instead, it takes an 'as found' space as ground for research. These spaces are usually free from any social control (Gandy, 2017), thus the person interacting with such a space is free to experiment. The movement of the body is then captured by video. The difficulty is that this form of research does not include an analysis of consciousness besides my own ideas based on a certain type of behaviour, but nonetheless forced upon someone. Therefore, the approach is better defined as situated between phenomenology and praxeology. Urban wastelands are places of respite from the city. People usually behave less goal-oriented in such a space, but nonetheless intentional. They are discovering the opportunities the wasteland is offering. An example is a young man who pushed a medium-sized log

which caused it to roll over, seemingly randomly. A few moments later he pushed this log in another direction, towards a wall, in order to use the log as step and climb the wall. He was intentionally discovering the opportunities the wasteland had to offer. By recording several of these phenomena, both of urban nature itself and the behaviour it evokes, a broader theory can be constructed.

III   ALTERNATIVE APPROACHES

This chapter will discuss three examples of the use of film in (scientific) research. The first example uses film as an alternative for the research paper and can be classified as film as a result of scientific research. The second example uses film as a tool for scientific research itself. The third example is classified as film as tool in the architectural design process and explores the capacity of film as a way of reinterpreting reality rather than documenting it.

In his recent documentary *Natura Urbana: the Brachen of Berlin*, Matthew Gandy explores the agency of film in scientific research. According to him *"film can express the versatility of nature in a way that a text cannot achieve"* (Gandy, 2017). His goal was to make the vast amount of research on urban ecology more accessible and appealing for a broader audience. Indeed, the aesthetically pleasing scenes that are accompanied by the sound of wind in the trees, chirping birds and buzzing insects tell a much more engaging story that any scientific article can do. Additionally, interviews with passionate botanists and ecologists include an emotional value, and modern electronic music accentuates the fast-paced adaptability and diversity of urban nature. In this sense, scientific research becomes a tool to make a plea and results in a more subjective outcome. No hard data was presented, but rather the qualitative aspects of this data.

Jan Gehl uses film as a documentation tool, analysing the city and the way its spaces are used by its inhabitants. Gehl's research is more quantitative than Gandy's documentary. The aim is to objectively count, map and track how many people are doing which activities in a certain location (Gehl, 2013). Film is used as an alternative to a human observer, for the reason film can be watched multiple times in order to document every aspect of the way in which a space is used. However, the films have a value besides their ability to objectively document reality. Similar to Gandy, Gehl realises the potential power of film in persuading the audience of the reality of a certain viewpoint. Gehl's books are usually richly illustrated (Gehl, 1987) and he has produced a documentary of his own called '*The Human Scale'*.

A different method of using film or photography as research tool can be found in the work of Michael Najjar. In his series 'Netropolis' he stacks several images of the city and manipulates them in a way that all are visible, creating a "*soft, almost ephemeral, yet aggressive and chaotic image of a city*" (Kimberlin, 2014). The language of the city is repeated and therefore exaggerated, displaying the speed and magnitude at which cities could grow. *"Najjar demonstrates the potential of the photographic image, capable of making visible what is normally invisible to the human eye. His work visualizes what very often is beyond the limits of our perception…"* (Anti-Utopias, 2013) This artistic approach gives photography the capability to be a beginning rather than an end-result. The photograph, being an altered version of reality, can provide us with a vocabulary specific to a place that can germinate spatial or formal ideas (Kimberlin, 2014). It is used as a tool for discovery in the architectural design process.

Gehl is consistent and descriptive, but his method is difficult to apply to urban nature, as it might lose value for the architectural field. However, his way of analysing human behaviour in spaces is useful for my own research. It is a potent translation from video to drawing and an objective method of presenting human behaviour. Gandy's approach is an alternative method of scientific research that addresses the power of film over text in issues that relate to aesthetics, growth, movement and sound. It is more relatable than a scientific text and makes me consider whether it is a more appropriate method for the architectural field. As my own research is more qualitative and is not aimed at producing precise data, the approach of Najjar seems to be useful. It is a method common in architecture student projects: using photography as form of inspiration and a way of persuading others

of a certain view on a city. However, it lacks any scientific basis and relies too heavily upon artistic connotations.

The speculative nature of my own research on behaviour will be made more objective by adopting the method of Jan Gehl, which simply documents movement and patterns rather than immediately implying a certain reasoning for those patterns. There needs to be an intermediate step between the film itself and the conclusion. Secondly, the capacity of film to 'describe' the world around us in one image, as Gandy and Najjar do, will be used. It is sometimes difficult to build up an argument of the importance of tolerance towards nature – something that seems self-evident to me – which according to its definition will result in the 'deterioration' of materials. Film helps to show urban nature *as it is* and allows people to judge it for themselves without me as intermediary explaining it to them. In that sense, film can be a tool for persuasion, similar to the way in which all three examples have used it.

IV   THE ARCHITECT AS FACILITATOR – PROVIDING A HOME FOR NATURE
The thesis topic has a relation to the talk on material culture, as the thesis proposes an alternative way of dealing with materials: allowing them to deteriorate and become surface area for spontaneous vegetation. Moreover, the thesis topic relates to the talk on spatial narrative. The documentation of human behaviour in urban wastelands demands me to consider who the people in these spaces are and why they behave in the way they do. This research will be translated into short stories incorporated in the thesis. However, the most interesting relation is that between the thesis and the talk on spatial and social practice and its respective literature.

Turner (1986) states that: *"the man who would be free must build his own life."* Avermaete (2014) summarises Turner's view on the relation between the architect and the inhabitant as follows: *"the public is composed of self-reliant inhabitants who are full-fledged authors in the design and management of their own dwelling environment and whom architects have to facilitate."* It is exactly this notion of tolerance towards life within the built environment that I embrace and expand to a tolerance towards nature. In urban wastelands, especially, humans and nature can coexist and are free to develop and experiment. The social freedom that these spaces can provide is the type of freedom that allows the solo dweller to flourish within cities. As architecture students, we are trained to be designers, but perhaps as important is to know when to apply *non-design*. This means to create spaces that are not clearly defined; in which there is no predisposed set of rules for its use. In such spaces, inhabitants are free to adapt and appropriate them on their terms. This resonates with the idea of the architect as facilitator and implies an intricate relation between wat Habraken calls *support* and *infill* (Avermaete, 2014) or what Sennett calls *ville* and *cité* (Sennett, 2018).

However, my view on the architect as facilitator deviates from the way in which Avermaete frames it. According to him, the public acts as a participant in the design process. In my view, the public is free to alter any part of a finished design as they see fit. In this way, the natural development of a city is accelerated, and the benefits of standardisation can be retained. Additionally, a building needs to be, as much as possible, free to be altered by time (meaning: external conditions like wind, sun, rain (weather); wildlife, microorganisms, plants (flora & fauna); geological processes (the earth); and spontaneous human activities). Of course, the design of a building needs to account for the fact that it can and will be altered. The architect as such facilitates space and building mass that can be adapted by the public rather than facilitating the public with the option alter the original design. In this way, both parties stay true to their respective tasks (designing and dwelling).

Moreover, my architectural position resembles that of the professional generalist as described by Hyde (2012, pp. 193-204). This position is based on treating the city as an interconnected ecological system. *"But to support the needs of an entire ecosystem of plants and animals requires the expertise and knowledge of a diverse array of specialists and stakeholders"* (Hyde, 2012, p. 194). It is not my task as architect to be an expert on ecosystems. My photos are not meant to determine species, nor to count plants. It is about conveying the fact that nature is all around us and that it has certain value, and to show its beauty. I am not an expert on biology or ecology, but knowing about these disciplines helps to create a better design. In reality, the architect should incorporate knowledge from all kinds of disciplines while staying true to his core task: designing buildings. It helps to know

how a building is constructed; it helps to know the value of a sketch; it helps to know about ventilation systems. A wide scope of knowledge will lead to a more integrated approach. My research is structured in this way. It is inductive – aimed at discovering several occurrences and composing a broader theory out of that which can prove useful for the design phase. Hyde advocates the need for an architect to have the ability to identify value in niche knowledge as relevant to the task. Hyde claims that *"this is the new role we need for today, especially as we seek to roll back the damage wrought by centuries of exploitation of our natural systems"* (2012, p. 195). The research takes an alternative approach on solving the question of sustainability. Rather than focussing on climate and carbon-dioxide emissions, it centralises the complexity and spontaneity of nature, and assesses its effects on (people in) the urban environment. In my view, the architect needs to acknowledge the fact that time will inevitably alter any design. It is silly to try to fight that. By accepting and allowing this notion, a design can transform from an artificial intervention towards a natural phenomenon. It is a way to let mankind and nature operate in the same realm.

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