HISTORICAL RESEARCH AS GUIDANCE TO HERITAGE A context led research approached from a historical research method

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I INTRODUCTION

Architecture is a complex field of study. There are many valid and useful methods for architectural research, instead of a singular approach.¹ The difference between method and methodology is that a research method is a technique or way of doing something, it is a manner or mode of procedure, a research methodology is a set or system of methods.² Within these methods you can make use of heuristic techniques, which are problem-solving according to science philosopher Imre Lakatos.³ The adjective meaning of heuristic is "enabling a person to discover or learn something for themselves: a 'hands-on' or interactive heuristic approach to learning."⁴ Research-methodological awareness in relation to heuristic- techniques and design practices can provide insight in the use of tools along with the correct method. As an architect, you get more aware of what methods and techniques fit you, or your project. Practice is an activity, for example producing a drawing. It suggests the existence of a supporting framework; a methodology.⁵ Research methodological-awareness can help you understand how information is taken into account and to frame the scope of your research⁶. According to Ray Lucas, senior lecturer at Manchester school of Architecture, a transparency about how you conduct your research will strengthen your proposal.⁵ The architectural field exists out of different disciplines that need to work together. Being aware of your research method will improve the collaboration. A certain kind of strictness and codified way of operating is useful⁷, a method(ology) can bring discipline.

During the course I got insight in different kind of research methods and related heuristic techniques. What interested me during the lectures was that the use of spatial narratives was related to a form of empathy. Empathy of the architect, because you place yourself in someone else. It is a way to understand how people experience their environment. The lecture of praxeology struck me, because of the subject, the study of human action. By studying the practice of architecture one can develop a grip on the actual users, and not the imagined ones. For example, by mapping the movement of people.

The topics that struck me the most turned out to be helpful for my thesis research. Therefore, I could test if my realisations about these methodologies would work out for me personally.

This thesis research is related to the graduation studio Heritage and Architecture, Revitalising Heritage. This studio is about Hembrug peninsula, a former military terrain located in Zaandam. The Heritage and Architecture chair focuses on transformation of historical sites. The program, the design concept and the elaboration of the design result from the analyzes of the original building and its context from the architectural, cultural-historical and technological point of view⁸; a context led research. In this case, a specific ensemble of the Hembrug terrain, Campus South, will be given a new use. The issue that will be faced is how the architect should deal with cultural-historical values during the transformation. What is of quality and needs to be remained? An understanding of the current situation is needed. Therefore, the research question of this thesis is as follows: "How to analyze the former use of the Hembrug terrain, specifically Campus South, by the employees of the Artillery in order to understand the existing situation and to remain its historical qualities?"

II RESEARCH-METHODOLOGICAL APPROACH

Lucas made a distinction between context, methodology and theory led research.⁹ This thesis research starts with the existing context which takes the lead in my research process, and therefore can be situated under context led research. A heritage transformation project needs a research method to analyse the former use of the environment and historical context. By researching the history of a project some questions can stay unanswered. Therefore, some assumptions must be made. Consequently, there is chosen for a 'historical research' approach. This approach can be situated between the epistemic frameworks 'praxeology' and 'spatial narratives', discussed during the course.

Historical research approaches evidence of the past.¹⁰ Important aspects are interpretation, narrative and cultural and spatial (the consideration of space) turns.¹¹ Related analytic heuristic techniques/tools used to explore the research question are archival research, simulation to estimate what the interior of the buildings looked like, sketching, fieldwork, timeline- making, model-making and photo-/videography, because these design tools help better understand the existing situation.

The gathered information about the existing context will be assessed on values. The notion of value is a guiding idea in heritage conservation.¹² Value assessment can be divided into three parts: indentification, elaboration and ranking and prioritizing.¹³ A specific tool used to rank and prioritize values is the cultural value matrix, in which the values are subdivided into different heritage value typologies. I used this technique, because it is a compulsory part in the studio. Other techniques that you can use for value assessment and which I used to answer my research question are: mapping sections and floorplans where the levels of significance are indicated in color, analytic writing to explain your statement and chrono-mapping.

My approach is related to praxeology; the study of human action and conduct¹⁴, because my research is about the analysis of the former use of the terrain to understand the current situation. Related to historical research you study the human action of the past and not of the actual users of the future function of the buildings. Tools related to praxeology are diagramming and mapping movement. Hereby I made sketches and assumptions of the use of space from both etic and emic position. However, the activity I am researching took place in the past, which means that, in this case, emic cannot be fully applied, since direct involvement with people and their lives is not possible. Making my approach more inclined towards etic, the point of view as an observer.¹⁵

The framework narratives is related to historical research. Arthur Danto, American art critic and philosopher, states that the nature of historical accounts finds expression in narrative sentences.¹⁶ The descriptive power of the historian in framing his/her narrative is enormous as well as his/her interpretation, he/she ensures how the information comes across. A 'spatial narrative' is a story that describes the site/building/atmosphere that you investigate.¹⁷ Tools related to spatial narratives are interviews and stories about the site, to let the reader project himself into the situation. These tools are related to qualitative research as well. As described by Randall Mason, associate professor of architecture at the University of Pennsylvania, when comparing qualitative and quantitative research methods, ranging from narratives and analyses written by experts to interviews of ordinary citizens, elicit cultural values more effectively."¹⁸

III USE OF COMPARABLE RESEARCH METHODS

Other researchers have used the epistemic frameworks praxeology and spatial narratives before me. The term praxeology was first applied by Ludwig von Mises, an Austrian economist and philosopher. He successfully applied the methodology to the construction of economic theory.¹⁹ It holds that economics are related to human actions, where human choices are involved.²⁰ Praxeology originates from the ancient Greeks, however the knowledge now became autonomous.²¹

Tom Avermaete, professor of architecture at the TU Delft, maps how architectural viewpoints towards the public developed over time. According to Avermaete architecture has become a matter of the public, the modern era seems to have an increased awareness about their social and societal dimensions.²² The drive to define the relation between architecture and people got a new impulse after the Second World War.²² The viewpoints developed from, the architect as syndicalist; in which the relation between experts and everyday culture took a central space which is comparable to my research problematique; the relation between the architect and the historical culture, to the architect as populist, as activist and to the architect as facilitator.²³

Architects Gordon Cullen and Bruno Taut used the heuristic technique of mapping movement, related to praxeology. Cullen wrote the book "The Concise Townscape", which is described as "(...) the art of giving visual coherence and organisation to the jumble of buildings, streets and spaces that make up the urban environment".²⁴ Cullen explains that if you bring buildings together they can collectively give visual pleasure, which none can give individually.²⁵ By analysing and researching townscapes, in which the public plays a key role, he made use of the techniques of mapping movement, photography and sketching. In his book you find a lot of sketches of the atmosphere of the townscapes, drawn at eye level. He analysed three aspects; motion, position and content. They discovered that motion is in fact two things, the Existing and the Revealed view.²⁶

Bruno Taut questioned himself in the book 'Die Neue Wohnung' what a house in this changing society and the new movement of functionalism is. Taut saw a house in a specific point of view. In the book, Taut turns to the women who, according to him, are responsible for the design of the apartment.²⁷ He proposed interiors that are better to use, maintain and that are healthier, due to more light and space. To make a design as efficient as possible he used the technique of mapping

movement of the people in the houses.¹⁴ So, Cullen mapped the movement of people outside a building, in the townscape, and Taut mapped the movement of people inside a building.

Architect Renzo Piano and structural engineer Peter Rice go one step further and do not observe but allow people to be part of the process in their design for the Mobile Workshop. They include people into the design process, and let them be a participant. Their project was a practical elaboration on the viewpoint of the architect as facilitator, the idea that the architect holds a particular expertise and that the common man should have an engaged role in the design process.²⁸ Italian architect Giancarlo de Carlo was of the opinion that barriers between builders and users must be abolished.²⁸ He remarked in 1948: "The housing problem cannot be solved from above. It is a problem of the people, and it will not be solved, or even boldly faced, except by the concrete will and action of the people themselves."²⁹ The temporary structure of the Mobile Workshop was thought to facilitate the meeting between experts (among others architects) and inhabitants, who could participate in dialogues and collaborative activities on city renovation.²⁸

Klaske Havik, associate professor at the TU Delft, describes that the use of writing in architectural analysis can bring some momentary aspects to the surface, the aspects that are hard to describe in purely factual terms, like embodied perception, memory and use.³⁰ Spatial narratives can help communicate experiences that are hard to communicate in drawings, they can strengthen the architects functional and spatial imagination.³¹ To describe the buildings Havik is analysing in her research on the work of two architects, she chose for a poetic approach: "(...) bringing into play phenomenological aspects such as bodily perception and memory. This way of writing foregrounds sensory-perception bodily movement through space, and evokes some kind of melancholy".³² In one of her stories she takes the reader into the movement through spaces, by using the 'we'- form, thereby describing the atmosphere. Beside the poetic approach she uses the approach from the user perspective, which evokes according to Havik: "the spatial and material manifestation of practices of the "commons": where do people meet, which place, practice and activities do they share?"³³

Architect Rick Joy's project description for a resort hotel points out views, feelings and sensations that are revealed and articulated by architecture, he includes sounds, smells and temperature differences.³⁴

IV POSITIONING

One of the issues provided in the lectures is the issue of Bidonville, discussed during the talk about praxeology. This project was about the issue of shantytowns, or *bidonville*. The meaningful basis of the project was the relation between the traditional culture and modern patterns of living, which is comparable to my own research where it concerns the relation between historical culture and modern interventions. Just like my own research this project is a context led research. The architects had moved to Morocco, to realize their ambitions. They had to find out how people live there. As an observer you look at things differently, because of your background. Therefore, the team first had to look at the real problem, the actual situation. Their main interest was: what is the quality from the perspective of the inhabitants of the slums?¹⁴ To answer this question they used the techniques of interviewing and observation. Interviewing is structured, it can be prepared, observation is unstructured and can exist out of making pictures and drawings of the use by people.¹⁴ These are a few of the techniques I used for my research as well. And I also look at things differently than people who have known or used the Hembrug terrain for years. That is why I researched the former use of the terrain, to discover the existing qualities seen from the historical perspective.

I adopt the positions of Cullen and Taut. I am of the opinion that Taut's way of thinking of using mapping movement as a technique to make a design as efficient as possible is a smart way of doing research, and is one which worked out for me personally to identify qualities of space. The way of Cullen, mapping movements through a townscape, works well to map the qualities of the public spaces. The way of Piano and Rice is not suitable for my research approach, because our design is not going to be realized and because the community has yet to be created. The area was abandoned for a long time. This makes it more difficult to involve people in the design process. I did, however, interview people who work on the site temporarily.

I would, however, adopt the position of Havik and Joy of using narratives to communicate experiences. As it can give a new dimension to your research, that of bodily perception, memory, sound, smell and temperature. This is suitable for my research, to evoke atmospheres, places where people meet, and the practices and activities they share. Overall, I think it is important to position yourself in the users, and to design from this viewpoint and not just from your own perspective as an architect.

My research approach of a historical research method combined with praxeology and spatial narratives is related to the question how an architect should deal with cultural-historical values and the

discussion about preservation. Architecture is part of history. Like Dutch architect Rem Koolhaas said at the AIA convention in 2016: "You could say that we're the last profession that has a memory, or the last profession whose roots go back 3,000 years and still demonstrates the relevance of those long roads today. (...) what we offer the present is memory".³⁵ So, the architect has to think extra carefully what to preserve from, or add to this memory and what not. With preservation you begin with something that exists, and is already local. I like the statement of Koolhaas: "A preservation project is an homage to earlier cultures and mentalities to which you can add a new dimension, a new function, a new beauty or appeal".35

The general approach of my studio is a context led research. Architecture, building technology and cultural value are the aspects that need to be analysed. The focus of the analysis of the studio lays on formulating a research question and making a cultural value matrix. A pre-chosen method would help giving answer to your research question, since a method(ology) can frame in what scope a project is approached and in what way information is taken into account.⁶

During this course I became aware of which research methods to use for my graduation project, and of the relation to the architectural profession, heuristic techniques and design practices. Praxeology and spatial narratives can strengthen each other. In a spatial narrative you can express what you cannot express in a drawing and vice versa. The answer to my research question: "How to analyze the former use of the Hembrug terrain, specifically Campus South, by the employees of the Artillery in order to understand the existing situation and to remain its historical qualities?" is: by making use of a historical research method, combined with praxeology and spatial narratives as methodologies. Making use of the heuristic techniques of archival research, simulation, sketching, fieldwork, timeline- making, model- making, photo-/videography, mapping movement, cultural value matrix, mapping sections and floorplans, analytical writing, chrono-mapping, interviews and stories about the site.

END NOTES:

- Ray Lucas, Research Methods for Architecture. (London, UK: Laurence King Publishing Ltd, 2016), 21. 1 2 Jorge Mejía, Methods of architectural exploration, evaluation, and discovery. Powerpoint slides, 13 September, 2018, 22. https://brightspace.tudelft.nl/d2l/le/content/124944/viewContent/1209782/View.
- 3 Jorge Mejía, Methods of architectural exploration, evaluation, and discovery. Powerpoint slides, 13 September, 2018, 24.
- https://brightspace.tudelft.nl/d2l/le/content/124944/viewContent/1209782/View.
- 4 "Heuristic", Oxford English Dictionary, accessed May 1, 2019, https://en.oxforddictionaries.com/definition/heuristic.
- 5 Ray Lucas, Research Methods for Architecture. (London, UK: Laurence King Publishing Ltd, 2016), 8.
- "MSc 3-AR3A160 Methods and Analysis Lecture Series Research Methods", Chair of Methods and Analysis, accessed May 18, 2019, 6 from https://brightspace.tudelft.nl/d2l/le/content/124944/viewContent/1217295/View.
- 7 Ray Lucas, Research Methods for Architecture. (London, UK: Laurence King Publishing Ltd, 2016), 9.
- De Jonge, W. "Heritage & Design". Accessed May 1, 2019, from https://www.tudelft.nl/en/architecture-and-the-built-environment/about-8 the-faculty/departments/architectural-engineering-and-technology/organisation/chairs/heritage-design/.
- 9 Ray Lucas, Research Methods for Architecture. (London, UK: Laurence King Publishing Ltd, 2016), 11.
- 10 Linda Groat and David Wang. Architectural Research Methods. (Hoboken, New Jersey: John Wiley & Sons Inc., 2013), 207.
- Linda Groat and David Wang. Architectural Research Methods. (Hoboken, New Jersey: John Wiley & Sons Inc., 2013), 175, 179. 11
- Marta de la Torre. Values and Heritage Conservation: Research Report. (Los Angeles, CA: Getty Conservation Institute, 2002), 7. 12
- Marta de la Torre. Values and Heritage Conservation: Research Report. (Los Angeles, CA: Getty Conservation Institute, 2002), 7, 14. 13 14 Marieke Berkers. Praxeology. Powerpoint slides, 21 February, 2019.
- 15 Ray Lucas, Research Methods for Architecture. (London, UK: Laurence King Publishing Ltd, 2016), 10.
- 16 Linda Groat and David Wang. Architectural Research Methods. (Hoboken, New Jersey: John Wiley & Sons Inc., 2013), 180.
- 17 Klaske Havik. Investigating spatial narratives. Powerpoint slides, 14 March, 2019.
- 18 Marta de la Torre. Values and Heritage Conservation: Research Report. (Los Angeles, CA: Getty Conservation Institute, 2002), 15.
- 19 "Praxeology", Oxford English Dictionary, accessed May 10, 2019, https://en.oxforddictionaries.com/definition/praxeology.
- Ludwig von Mises, *Human Action: A Treatise on Economics* (Auburn, Alabama: Ludwig von Mises Institute, 1998), 1. Ludwig von Mises, *Human Action: A Treatise on Economics* (Auburn, Alabama: Ludwig von Mises Institute, 1998), 497. 20 21
- 22 Berlage Institute, "The Architect and the Public: Empowering People in Postwar Architecture Culture" in Hunch 14: Publicity: The Berlage Institute Report on Architecture, Urbanism and Landscape, ed. Tom Avermaete. (Rotterdam: Nai010 publishers, 2010), 49.
- 23 Berlage Institute, "The Architect and the Public: Empowering People in Postwar Architecture Culture" in Hunch 14: Publicity: The Berlage Institute Report on Architecture, Urbanism and Landscape, ed. Tom Avermaete. (Rotterdam: Nai010 publishers, 2010), 49, 52, 56, 59
- Gordon Cullen, The Concise Townscape, (Oxford, UK: Elsevier Ltd., 2006), blurb. 24 25
- Gordon Cullen, The Concise Townscape, (Oxford, UK: Elsevier Ltd., 2006), 7. 26
- Gordon Cullen, The Concise Townscape, (Oxford, UK: Elsevier Ltd., 2006), 12. 27
- Bruno Taut. *Die Neue Wohnung: Die Frau als Schöpferin.* (Berlin: Gebr. Mann Verlag, 2001). Berlage Institute, "The Architect and the Public: Empowering People in Postwar Architecture Culture" in *Hunch 14: Publicity: The* 28
- Berlage Institute Report on Architecture, Urbanism and Landscape, ed. Tom Avermaete. (Rotterdam: Nai010 publishers, 2010), 59.
 - David R. Walters. Designing Community: Charrettes, Masterplans and Form-Based Codes. (London: Architectural Press, 2007), 72.

29: 30 Klaske Havik. "Acts of Symbiosis: A Literary Analysis of the Work of Rogelio Salmona and Alvar Aalto," Montreal Architectural Review: Vol. 4, (2017), 1.

- 31 Klaske Havik. "Foreword. Domicile in Words The Scriptive Approach to Architecture." In Urban Literacy. Reading and Writing Architecture, ed. Juhani Palasmaa. (Rotterdam: Nai010 publishers, 2014), 12,13.
- Klaske Havik. "Acts of Symbiosis: A Literary Analysis of the Work of Rogelio Salmona and Alvar Aalto," Montreal Architectural Review. 32
- Vol. 4, (2017), 47. Klaske Havik. "Acts of Symbiosis: A Literary Analysis of the Work of Rogelio Salmona and Alvar Aalto," *Montreal Architectural Review*: Vol. 4, (2017), 50. 33

- 34 Klaske Havik. "Foreword. Domicile in Words The Scriptive Approach to Architecture." In *Urban Literacy. Reading and Writing Architecture*, ed. Juhani Palasmaa. (Rotterdam: Nai010 publishers, 2014), 13.
- 35 Diana Budds. "Rem Koolhaas: "Architecture has a serious problem today"". Last modified May 21, 2016, https://www.fastcompany.com/3060135/rem-koolhaas-architecture-has-a-serious-problem-today.

BIBLIOGRAPHY (CMS) / or REFERENCES (APA/MLA)

Berkers, M. (2019, 21 February). Praxeology. [Powerpoint slides].

- Berlage Institute. (2010). The Architect and the Public: Empowering People in Postwar Architecture Culture. In T. Avermaete (Ed.), Hunch 14: Publicity: The Berlage Institute Report on Architecture, Urbanism and Landscape (p. 48-63). Rotterdam: Nai010 publishers.
- Budds, D. (2016). *Rem Koolhaas: "Architecture has a serious problem today"*. Retrieved May 16, 2019, from https://www.fastcompany.com/3060135/rem-koolhaas-architecture-has-a-serious-problem-today.
- Chair of Methods and Analysis. (n.d.). MSc 3-AR3A160 Methods and Analysis Lecture Series Research Methods. Retrieved May 18, 2019, from https://brightspace.tudelft.nl/d2l/le/content/124944/viewContent/1217295/View.

Cullen, G. (2006). The Concise Townscape (15th ed.). Oxford, UK: Elsevier Ltd.

De Jonge, W. (n.d.). *Heritage & Design*. Retrieved May 1, 2019, from https://www.tudelft.nl/en/architecture-and-the-built-environment/about-the-faculty/departments/architectural-engineering-and-technology/organisation/chairs/heritage-design/.

De la Torre, M. (2002). Values and Heritage Conservation: Research Report. Los Angeles, CA: Getty Conservation Institute.

Groat, L., & Wang, D. (2013). Architectural Research Methods (2nd ed.). Hoboken, New Jersey: John Wiley & Sons Inc.

Havik, K. (2014). Foreword. Domicile in Words The Scriptive Approach to Architecture. In J. Palasmaa (Ed.), Urban Literacy. Reading and Writing Architecture (p. 6-14). Rotterdam: Nai010 publishers.

Havik, K. (2017). Acts of Symbiosis: A Literary Analysis of the Work of Rogelio Salmona and Alvar Aalto. Montreal Architectural Review. 4, 41-60.

- Havik, K. (2019, 14 March). Investigating spatial narratives. [Powerpoint slides].
- Lucas, R. (2016). Research Methods for Architecture. London, UK: Laurence King Publishing Ltd.
- Mejía, J. (2018). Methods of architectural exploration, evaluation, and discovery. [Powerpoint slides]. Retrieved May 1, 2019, from https://brightspace.tudelft.nl/d2l/le/content/124944/viewContent/1209782/View.

Oxford English Dictionary. (n.d.). Heuristic. Retrieved May 1, 2019, from https://en.oxforddictionaries.com/definition/heuristic.

Oxford English Dictionary. (n.d.) Praxeology. Retrieved May 10, 2019, from https://en.oxforddictionaries.com/definition/praxeology.

Taut, B. (2001). Die Neue Wohnung: Die Frau als Schöpferin. Berlin: Gebr. Mann Verlag.

Von Mises, L. (1998). Human Action: A Treatise on Economics (The Scholar's ed.). Auburn, Alabama: Ludwig von Mises Institute.

Walters, D. R. (2007). Designing Community: Charrettes, Masterplans and Form-Based Codes. London: Architectural Press.