IMPLEMENTING LEISURE FUNCTIONS IN A DENSIFIED LOCATION Reflection on a research methodology for Complex Projects graduation studio

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I INTRODUCTION

Architecture can be seen as a form of art, as a discipline that is not self-reliant. The multiplicity of perspectives on architecture and its relations to other disciplines of science indicate the importance of research within the field of architecture.¹ Supported by lectures and readings, the course aims to increase the awareness of its students on the value of research within architecture. Although I believe I already experienced a variety of research methods, this course helped to further explore the possibilities of new methods. Besides, this led to the insight that I use a combination of research methods for the research of both the studio as the seminar, which is an extra research part of the graduation studio. This combination of methods comprises a methodology that helps to answer my research question. Additionally, this course taught me that architecture is subject to change. Therefore, there is not an exclusive methodology that is correct to a specific research topic, as opposed to many other scientific disciplines, where for a specific research topic only one method might be correct. For architectural research, this means that it is necessary to discuss the chosen methodology. On that ground, to select a research methodology, the positioning and argumentation of an architect have to be coherent. With this paper, I try to offer insights into this process for the research of the graduation studio.

For the graduation thesis, I research the topic of 'migration of sports as leisure activity'. Migration means that concepts and ideas transfer from one place to another over time.² For this thesis, it is thus key to investigate the built environment at several locations in the world, all with their characteristics. The main location of this year's studio is Rotterdam city center. After conducting research for the seminar and studio, it seems to be useful to have a closer look at leisure activities in densified city centers. With my research question, I want to investigate how exactly leisure activities can be implemented in densified city centers. Therefore, my research question for the studio is the following: "How can leisure sports be (re)introduced in densified city centers?" Looking at other cities and areas can provide ideas for this, which can lead to the migration of sports as a leisure activity.

To reflect on the used methodology for the studio's research, this paper will try to find an answer to the following methodological question: "Which research methods can be used to study the implementation of a leisure function in a specified dense location?" To contextualize this within the studio's general approach it is important to understand the structure of the Complex Projects graduation studio. I will follow this same structure with my research, which will be explained in more detail in chapter two.

II FOUR PHASES OF RESEARCH

Although the approach of the studio is defined as research-by-design, having read Lucas, the studio's approach can also be seen as a form of the methodology of experimentation. Just as for an experimental method, a variety of parameters is set, such as the activity and the location.³ However, since each student in Complex Projects works on its individual topic, the results cannot be compared. The provided structure is based on four phases, all continuing on the results from the previous phase. In this chapter, I explain these phases both theoretically and on behalf of the specific methods and tools I used.

The first phase, called 'hard', focusses on exploring and researching the site collectively to obtain a common knowledge about the assigned area. By mapping and collecting factual data on a variety of themes, the group creates a starting package for their future research. By doing research as a group, different themes can be investigated at once, such as social, historical, spatial, or physical themes. This allows each individual in the group to 'zoom-in' on certain topics. I took the responsibility to research the different functions in the area, making this part of quantitative research, based on factual data. The main goal of this phase is to get a better understanding of the location.

¹ Ray Lucas, Research Methods for Architecture (London: Laurence King Publishing, 2016), 7-8

² Roberto Scazzieri and Raffaella Simili, *The Migration of Ideas* (Sagamore Beach: Science History Publications, 2008), VII

³ Lucas, Research Methods for Architecture, 45

⁴ Lucas, Research Methods for Architecture, 36-37

The second phase, called 'soft', is about the development of an individual topic. Combining our fascination with further development on the related topics results in a defined thesis topic with a corresponding research question. In my case, the fascination for sports and the topic of migration resulted in the previously mentioned thesis topic of the migration of sports as a leisure activity. To gain a complete understanding of sports in Rotterdam, I used a broad approach at first to investigate this topic. By starting to examine on a bigger scale and then zooming in onto our site, the result is a comprehensive yet site-specific study. Mapping the distribution of sports facilities in the greater Rotterdam area (figure 1) was the most applicable method to start this second phase and immediately achieve a strong knowledge on the topic. Besides, this was a clear method to retrieve an understandable visual to explain the gained knowledge to others. Simultaneously, the method of data collection is used to support the created visuals with factual data. This gives the maps more meaning and makes them a better contribution to the narrative. For my research, the majority of information was available through the municipality of Rotterdam and the overall coordinating Dutch sports organization, NOC*NSF. This resulted in finding detailed data and graphs about the densification and loneliness in Rotterdam, the connection between the two, and the role of sports in the enhancement of a community. These findings together lead to the definition of my research question.

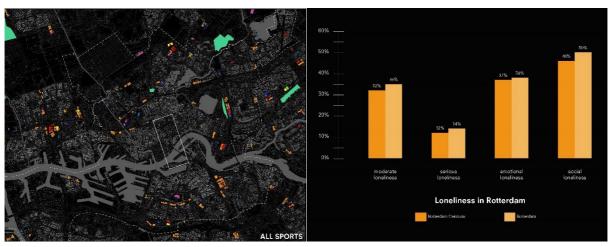


Figure 1: mapping and data collection for studio research, by author

The third and fourth phase, called 'space' and 'brief', focus on the spatial element of the city. Normally this phase three would be supported by a study trip to New York, but due to the COVID-19 pandemic, this fieldwork opportunity was canceled. Although our site is located in Rotterdam, the absence of fieldwork in New York limits the understanding of the studio's topic of migration. Not being able to conduct fieldwork in Rotterdam is a limitation resulting in a lack of understanding of the site. It would have given us the possibility to, for example, obtain knowledge by conducting interviews. Next to the group vision, the third and fourth phase is used to conduct a typological study on each individual topic. I study the typology of the 'Athletic Club', a multifunctional sports complex, and the health club. This study is used to define the required space and is used in the fourth phase as a start to the design brief, which forms - together with the narrative - the main goal of Complex Projects' MSc3 graduation studio. All the above-mentioned research methods are heuristics and are mainly context led. However, the overarching approach of the studio can almost be seen as methodology led.⁵

III A DEEPER UNDERSTANDING OF THE USED METHODOLOGY

For this study on methodology, three different research methods have been explained. This chapter will reflect on these three research methods and how they developed over time. By reflecting on the methods itself, and reflecting on the usage of the methods in this particular study, a better understanding of the methods is achieved.

⁵ Lucas, Research Methods for Architecture, 11-14

Data Collection. The gathering of data has made significant development over the past decades. With the evolution of technology and the rise of the computer and the internet, collecting data changed to a great extent. In the last few years, the development of Big Data contributed to even greater accessibility to information.⁶ Nowadays, everyone with an internet connection can have access to data. The major issue is how to use this data. A well-chosen and implemented method for data collection and analysis are essential for any type of research.⁷ In my case, I did not collect data, but I collected existing data analyses, such as health reports on Rotterdam.

Mapping. The traditional idea of mapping is that maps reflect territories, lands, and spirits. However, some people define it differently. They do not see mapping as merely representing what is situated in an area, they see mapping as a form of creating the ground they visualize.⁸ Thus, by some people mapping is used to represent factually what is situated. However, others use mapping for example to create a vision of which aspect of the area is important, which should be kept and which not, and how social phenomena respond to each other in the area.⁹ An example of someone who used maps less factually and more creatively is urban planner Kevin Lynch. In this case, his maps are called 'mental maps' or 'Lynch maps'.¹⁰ On the contrary, for my current research, the more factual approach of mapping is used. A common characteristic of mapping as a methodology is that it cannot be used on its own, but is a way of completing research next to the use of other methods.¹¹ Therefore, this is not the only used method.

Typology study. A well-known and extensive study about typological research and its development over time is On typology by Rafael Moneo. 12 His explanation of the evolvement of the idea of 'typology' or 'type' over the years starts at the end of the eighteenth century with the publication of Quatremère de Quincy's Dictionnaire Historique d'Architecture. 13 The idea of type was then being defined as something that is subject to change, that you have to interpret yourself, and which can never be just copied onto a new design. However, since the beginning of the nineteenth century, three counter-reactions evolved to the ideas of Quatremère de Quincy.¹⁴ At first, new manuals and handbooks offered models and examples based on a program or composition, which could be used as set up precedents, the opposite of Quatremère de Quincy's ideas of typology as being subject to change. Second, at the beginning of the twentieth century, the new Modern Movement rejected the idea of a typology, because to them it was a restriction on their ability to act with complete freedom on the object. The third argument was provided by Functionalism; architecture without appeal to precedents and thus the need for the history of types. Where the first and second argument focus on figurative space, the third argument concerns about the method. Over time, the theory of Quatremère de Quincy gained popularity, and was in its basics followed by a lot of architects, all giving it their own specific interpretation. Amongst them are Aldo Rossi with his Architecture of the City, 15 Alan Colquhoun's Typology and Design Method, 16 and, Anthony Vidler's Third Typology. 17 Nowadays, the discussion about what a typology is and how to use it, is still ongoing. These ideas on typological research are still being used, taught, and developed, and I used this approach myself as well during my current research. Because of these differences in approaches concerning typology, it is interesting to reflect on this and position myself on this in chapter four.

⁶ Neal W Topp and Bob Pawloski, "Online Data Collection," Journal of Science Education and Technology 11, no. 2 (June 2002): 173-178

⁷ Greet Peersman, "Overview: Data Collection and Analysis Methods in Impact Evaluation" Impact Evaluation, Methodological Briefs: Impact Evaluation 10, (2014): 1

⁸ Albena Yaneva, *Mapping Controversies in Architecture* (London: Routledge, 2016), 89

⁹ Yaneva, *Mapping Controversies in Architecture*, 90

¹⁰ Kevin Lynch, *The Image of the City* (London: The M.I.T. Press, 1960), 140-156

¹¹ Yaneva, Mapping Controversies in Architecture, 94

 $^{^{\}rm 12}$ Rafael Moneo, ${\it On\ Typology}$ (Cambridge, Massachusetts: The MIT Press, 1978), 23-41

¹³ Antoine Quatremère de Quincy, *Dictionnaire Historique D'Architecture* (Paris, 1832), 629-630

¹⁴ Moneo, On Typology, 23-41

 $^{^{\}rm 15}$ Aldo Rossi, The Architecture of the City (Cambridge, Mass: MIT Press, 2007), 35-45

Alan Colquhoun, "Typology and Design Method," Perspecta 12 (1969): 71-74

¹⁷ Anthony Vidler, *The Third Typology* (New York: Princeton Architectural Press, 1977)

IV POSITION ON USED RESEARCH METHODOLOGY

Considering this methodological reflection, to me, the most relevant research method was the typology study. As mentioned in chapter three, there is a variety of approaches on the definition of a type and how to use it in architecture. To position myself within these approaches, I reflect on the used method in my research. First, I defined which typologies to research; in my case the 'athletic club', multifunctional sports complex, and health club. Second, I analyzed these typologies on spatial aspects, such as size and the relation between different functions within a specified typology. The last step was to interpret this typology for my specific location and context. In my opinion, it is important to use the typological study to investigate questions and problems on the creation of form and shape. I think that using the basic typology as a foundation for the determination of form and shape in my architecture can elevate my project. However, in my opinion, it is important to use it as a reference and never just copy them. With this approach, I would position myself around Rossi, who clearly states that the process of reduction to a basic typological form is a necessity in the study of types. Thus, I cannot identify my approach with the Modern Movement and its denial of the type or Functionalism which provided rules for architecture without taking history of types into account.

Another aspect to reflect on, is the used methodology. As described in the first two chapters, the graduation studio of Complex Projects has a strict research methodology. At first, I experienced this as a great start for the research, since there is a lot of guidance. Afterward, I realize that this methodology can also be a limitation; there is less freedom within the research process. To elaborate more on this structure, it is important to understand Groat & Wang's conceptual framework in Architectural Research Methods.²⁰ They divide research into four levels of methodology, each zooming in more towards the research method itself. From the 'System of Inquiry', a worldview or broad assumption of nature or reality; to the 'School of Thought', a broad theoretical perspective; into the 'Strategy', the overall research plan or structure; and finishing with 'Tactics', the specific research methods. In the Complex Projects graduation studio, the 'strategies' are fixed. However, the 'tactics' or research methods can differ. Although there is guidance on these 'tactics', the student still has some freedom to choose how he or she conducts this research. If the 'strategies' were less strict, the outcome of the conducted research might have been different. In addition, the different views on the methodology of the Complex Projects graduation studio; research-by-design or experimentation have been explained in chapter two. In my opinion, it is a mix of both and cannot be categorized as one specific methodology.

A final reflection is needed to find an answer on the in the introduction stated methodological question. I wanted to gain a better understanding of the research methods I used to study the implementation of a leisure function in a specified dense location. By writing and reflecting on the research methodology, the process, and specifically on the used methods, I can now give a clear answer, supported by my own experience and the used literature. In my opinion, every architectural research will have some form of mapping or data collection, just to gain an understanding of the context. However, the use of a typology study is the main factor in finding an answer to the implementation of a leisure function in a specified dense location. By understanding the type and its corresponding form, a better spatial answer can be given to the location and its context. At least, that is how I experience it, someone else might see this differently. But that is why we reflect; to understand your own approach and take knowledge out of it to help in future studies.

¹⁸ Rossi, *The Architecture of the City*, 41

¹⁹ Moneo, *On Typology*, 32-35

²⁰ Linda N. Groat and David Wang, Architectural Research Methods (Hoboken: Wiley & Sons, 2013), 9-13

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