

Architectural Research

Power of Water Spirits, Myth or Science?

I INTRODUCTION

Architectural knowledge has always been complex and often tough to grasp in terms of its practice and academia. Historically, design processes were based on the professional knowledge of an architect, being found as the expert of structure, materials and aesthetical designs. Nowadays, the profession is more complex and seen as a multidisciplinary team play allowing for a competent response to the challenges following the creation of a more user-friendly, ecologically oriented new physical environments.¹ Furthermore, development in the internet has led to an easy access and transfer of knowledge, causing excesses in the overload of information and often causes confusion. This is why a significant part of European architects' environment started confirming the existence of science in architecture. The profession has stopped being an art and is a subject to require scientific rigor, research and design methodologies. Moreover, the consciousness of heuristic research is able to help inspirational methods of design in a period of time when an architect is at risk of being reduced to a stylist that relies merely on utensils provided by other professionals and globalization.

During the Lecture Series of the Research Methods, my knowledge and awareness on the multiplicity of research methods which can be used as a device for design, were widely expanded. The mandatory readings, attached to the content of the lectures were the one of the most inspiring for me because they provided the missing link between the pure theory of research methods and their application into today's architectural designs. Moreover, the course taught me that the attention to specific terminologies and their use in academic and professional design career becomes essential to properly verbalize a research question and convey any statement. The lecture on typology, by the debates about the connotation of model and type, especially defined the experience in this professional process. Above all, the process of writing this essay, as a summary of all the lectures and additional readings about the theory and practice, opened my eyes the most. It underlined the significance of an early complete reflection on personal research methods to structure the theory of my design and personalize a methodology alongside the project of interest.

Defining the research method came at a crucial point, it coincided with my thesis subject, in complexity of time and matter. Within the Transitional Territories studio, my research takes place in the area of the North Sea, found as a phenomenological and geopolitical centre of Western Europe. My thesis revolves around the subject of the power of nature, which unstopably shows us its hidden supremacy. More specifically it explores how the water body of the North Sea had been tried to be domesticated by humans in the past and now. Starting from the times when the sea was a physical and mental border, difficult to pass because of its hidden demons and mythological creatures. Through to the times of Vikings, the only ones brave enough to travel through the seas, at a time when people feared it. To the current times, forecasted sea level rise is not only an ecological crisis but also a fear about our future, a big unknown, a secret of the seas which is about to come shortly. Following this, the process in technological development has brought us back to the point of being at the philosophical edge; it brushed us aside from understanding the hidden power of nature, so well understood and embraced by our ancestors of the North Sea.

In accordance with the studio's characteristics qualitative approach, the research question along with the outcome seeks to deal with spatial and temporal transitions in lowlands territories and the ever-changing interrelations between natural processes. Exhaustive theoretical research in the mythology of the sea, current technological solutions of water sea level rise and forecasts for the future resulted in

the following question: Through incorporating the historical awareness of Vikings and their reigning mythological power of water, can it be translated into the current scientific approach when considering the changing water conditions water in the North Sea and its forecasted sea level rise?

II RESEARCH-METHODOLOGICAL DISCUSSION

The density of the subject, due to its extensiveness in time and complexity, requires a detailed strategy. In this way, the research would not only acquire a specific focus but also would provide a translation in the research findings into an architectural object. This is the reason why I decided to choose a combined strategy called, by the authors of the book *Architectural Research Methods*, Mixed – Methodology Design. This strategy represents the most complete level of integration among two (or more) research designs.² Moreover, in this model, I - as the researcher – can conduct both strategies in roughly comparable sequences with approximately equal degrees of emphasis. This is crucial in the context of my topic when the research about the past and the present situation need to be conducted.

Following a good example of a mixed-methodology design by Lara's study of popular modernism³, the combination of historical and qualitative research strategies is "virtually seamless". Within the historical design, I am including an extensive archive research on the portrayal of mythology in marinescape, detailed stylistic analysis of all the practices of Vikings and their habits, and an artifactual inventory of the archeological findings – including Vikings ships. Focusing on historical research, I identify with poststructuralist school of thought, which sees material products of culture and history as parts of a larger immanent discourse¹, especially socio-cultural. By trying to understand the historical phenomenon of translating the power of nature into demons and the personification of gods, we could consider this historical period as a web of discourses which product is our modern, transcultural reality. Moreover, by using determinative evidence tactic, especially by data and pictures collected on the field trip to the Shetland Islands, I situate the object of research in a particular time and a particular place.

Secondly, through simultaneously interweaving qualitative research design within my thesis, it gives me an overview of the current situation and relation of the human with the power of nature within this area of the North Sea. During the studio assignments, I carried out the extensive qualitative research, based on the grounded theory strategy – reading, collecting GIS data and mapping. In this method, data collection, analysis and eventual theory stay in close relationship with each other, because the researcher begins with an area of study and allows the theory to emerge from data. Nevertheless, because of the broad range of data, collected within the studio, the shift from grounded theory strategy provided by the group work into the individual phenomenological inquiry was needed. This step helped me to use the firsthand experience of the broad phenomenon of the North Sea as the geopolitical center and start analyzing its specific characteristics and qualities. Phenomenological studies seek to focus on existential studies, to make up of essences of the experience that transcends individual subjectivity, this brings my research from a pure data analysis about the current conditions within this area to a deeper examination of socio-cultural aspect in the vision of water level rise and its connection to the historical aspect of the sea as the edge of the world. The socio-cultural approach is a common connector between these two research strategies – historical and qualitative.

To address my research question to the methodology, my aim is to base my examination on a synthesis of different sources. I intend to find the foundations for the methodology selection and awareness in

¹ Poststructuralism understands discourse as something like the cultural manifestations of the trafficking of thought, distributed into various topical foci. These, in turn, are maintained by tacitly agreed-upon ways of seeing, reified into expressions of institutional power, such as political or economic structures, a moral code, the news media, the ecclesiastical class, and so on. (Linda Groat, David Wang, *Architectural research methods – second edition* (New Jersey: Wiley, 2013).

Linda Groat and David Wang's *Architectural research methods*⁴, as well as their explanations of graphic and practice-based methods. As references for Mixed-Methodology Design, I aim to use Fernando Lara's *Popular Modernism: An Analysis of the Acceptance of Modern Architecture*⁵, by paying special attention to the complementary use of two research strategies and his position about the phenomenological school of thought in qualitative research. Regarding historical poststructuralist approach, I aim to review Edward Soja's *Los Angeles, 1965–1992*⁶ to further analyze Soja's statement about poststructuralism and geographies related to shifts. Finally, to address my methodological approach and its combination with the theme, I want to investigate Julia Robinson's *Architectural Research: Incorporating Myth and Science*⁷, to become the base of my mythological interest in its relationship to current scientific solutions.

III RESEARCH-METHODOLOGICAL REFLECTION

Poststructuralist school of thought in historical research and phenomenological studies in the qualitative strategy used within the profession of architecture have specific antiquities and backgrounds. By following their development throughout history, I could get to know the outline of each of these methods, the process of the research and apply it to my academic work.

The poststructuralist way of thinking developed along with deconstruction and postmodernism. All of them emerged as a reaction, replacement to structuralism which stated that "human culture and its elements are understood as parts of a larger systems that connect them"⁸. In the 1960s, French thinkers and philosophers challenged the theories of structuralism. Michel Foucault and Jacques Derrida⁹ state that in order to understand the given phenomenon – both the object and its systems of knowledge that generated it has to be analyzed. A historical trajectory of poststructuralist thinking which I am studying throughout my research, has been deeply analyzed by Soja's school of thought published in 1992. It "reinforces the poststructuralist idea that meaning, and knowledge are products of cultural time and space"¹⁰. Poststructuralism gives back in grasping the immanent knowledge in any particular cultural-temporal space more deeply¹¹. What does it mean for my personal research? The historical research, following poststructuralist school of thought, should look for links between historical events, their time and place to come up with the main historical outline describing the issue of the sea as the mental border. Moreover, by developing certain aspects of a post-structural of the story, the others might be fully ignored.

Phenomenological research has its philosophical foundation at the beginning of the previous century, which is especially evident in the works of Husserl and Heidegger. Nevertheless, this phenomenon appeared in architectural theory together with Bachelard's *Poetics of space* and *Genius Loci* by Norberg Schulz in 1978. For Schultz, phenomenology is "a method and not solely a philosophy by which we can understand the world"¹² what is perfectly applicable in my research where understanding water level rise as the phenomenon of the powerful nature is needed to mentally 'defuse the fear' about our future and possible everyday existence. These publications, together with works by Steven Holl and Kenneth Frampton, specially focus on the theoretical background of the phenomenological studies. Nevertheless, the work of Kevin Lynch, presented in his book *Image of the City*¹³ in 1960s and Gordon Cullen's *Townscape* employs the visual aspect of the research. By presenting the process of mental mapping and creating diagrams, both of the authors aim to visualize the personal experience in the phenomenological aspect. Cullen examines the dynamic space in perspective drawings which move through time to capture the altering perceptions and experiences in contracting to the changing environment. The last two authors heavily base on visual representation, is developed in my methodology of observing the aspect of fear and power in water through drawings based on its timeline.

Moreover, the tactic to summarize analyzes by the series of perspective drawings changing throughout of time would bound my two methodologies; past and present; historical research with phenomenological studies about the current relation of human to powerful water.

IV POSITIONING

My initial research question touches upon a broad field of studies and seems to be exceedingly complex. Moreover, qualitative research, the same as the historical one, is a flexible method that has the potential to be re-adjusted to the needs of the researcher. Nevertheless, this flexibility should be considered as a challenge of these methods, because it is achieving a certain level of subjectivity. The issue of subjectivity was underlined during the lecture about praxeology by Marieke Berkers. By conducting historical research, based on the poststructuralist way of thinking, I had to choose historical facts and archives which are the most compatible to the historical narrative about the sea, as the notion of power and fear. Following this, in the qualitative research, I focus on the current socio-cultural and my phenomenological experience, I am analyzing the current relation of the human with water and forecasted, fearful sea level rise. My research, focuses on the facts, I find this the most appropriate approach for this line of thinking. It has been conducted mostly on my subjective experience and intuition. Nevertheless, by using this research method, passing over some important aspects, which have a significant meaning for my research, can be possible.

Secondly, the aforementioned issue about the complexity of the research question is widely known in Transitional Territories studio. The central question of the studio is how biophysical, socioeconomic, cultural and political changes (and related risks) in maritime, riverine, and delta landscapes around the North Sea can be addressed with innovative designs¹⁴. The scale can vary from buildings, constructions and public works to urban areas, landscapes and regions what leads to the big complexity of each research. The majority of the current ecological, political and social issues has their roots in the past and also looks forward to the future. This is why my initial research question has been stated at such a wide spectrum. Moreover, to effectively research the past and the present, I have been forced to choose two methods of research which do not perfectly complement each other. Besides the fact that Mixed-Methodology Design represents the most complete level of integration among two research designs¹⁵, it still has its vulnerabilities. Linda Groat in her book states that the researcher, while conducting two research methods at the same time, may also find a higher level of sophistication in this research methodology than would be expected if he or she were to use a more conventional approach¹⁶. The issue, which I especially experienced, is that even if the researcher is knowledgeable about multiple research strategies, there still remains the challenge of how to combine strategies in an effective and coherent way. The broad historical research of the North Sea, its mythology and the concept of the sea as the “edge of the world”, is extremely difficult to combine with the research about the current world, its technology and scientifically forecasted sea level rise.

Nevertheless, after going through the aforementioned literature and methods, driven by the masters of science in architecture, I strongly believe that I understood and presented a research methods through enough to conclude the scientific approach of my research through design. Even though the research question is complex and presented methods do not fully complement each other, there are still more strengths than the weaknesses of this methodological approach. By using theories and visual representation, the two worlds – past full of Vikings and dragons of the sea with presence filled with technological apparatus and scientific forecast about departing powerful sea level rise – can meet and draw on and learn from each other, to be finally combined into a physical and architectural object, which will strongly represent this research.

ENDNOTES

¹ M.Sitek, *Use of qualitative research in architectural design and evaluation of the built environment*. (Gliwice: Silesian University of Technology - Faculty of Architecture, 2015), 2.

² David Wang, Linda Groat, *Architectural research methods* (Hoboken: Wiley, 2013), 446.

³ Fernando Lara, *Popular Modernism: An Analysis of the Acceptance of Modern Architecture in 1950s Brazil. PhD dissertation* (University of Michigan: Ann Arbor, 2001), 1-2.

⁴ David Wang, Linda Groat, *Architectural research methods* (Hoboken: Wiley, 2013).

⁵ Fernando Lara, *Popular Modernism: An Analysis of the Acceptance of Modern Architecture in 1950s Brazil. PhD dissertation* (Michigan: University of Michigan, Ann Arbor, 2001).

⁶ Edward Soja, *Los Angeles, 1965–1992*, in Allen J. Scott and Edward Soja (eds.), *The City: Los Angeles and Urban Theory at the End of the Twentieth Century* (Berkeley: University of California Press, 1996), 426-462.

⁷ Julia Williams Robinson, *Architectural Research: Incorporating Myth and Science* (Journal of Architectural Education Vol. 44, No. 1, 1990), 20-32.

⁸ Andrea Kahn Representations and Misrepresentations, *On Architectural Theory* (Journal of Architectural Education, 1984-).

⁹ Andrea Kahn Representations and Misrepresentations, *On Architectural Theory* (Journal of Architectural Education, 1984-).

¹⁰ Edward Soja, *Los Angeles, 1965–1992*, in Allen J. Scott and Edward Soja (eds.), *The City: Los Angeles and Urban Theory at the End of the Twentieth Century* (Berkeley: University of California Press, 1996), 429.

¹¹ James Williams, *Understanding Poststructuralism* (Abingdon, Oxon: Routledge, 2014), 70.

¹² Christian Norberg-Schulz, *Genius Loci: Towards a Phenomenology of Architecture* (New York: Rizzoli, 1991).

¹³ Kevin Lynch, *What Time Is This Place?* (Cambridge and London: The MIT Press, 1972).

¹⁴ <https://deltaurbanismtudelft.org/2015/04/23/ttstudio/> (Accessed Dec. 6, 2017)

¹⁵ David Wang, Linda Groat, *Architectural research methods* (Hoboken: Wiley, 2013), 446.

¹⁶ David Wang, Linda Groat, *Architectural research methods* (Hoboken: Wiley, 2013), 447.