

**AR3A160**  
Lecture Research Methods

Course instructors:  
Marieke Berker  
Robert Alexander Gorny



**LINES IN THE SAND**  
An exploratory research study on the borders in the North Sea



Key words: experimental research strategy, constructivist, pragmatism, phenomenology, qualitative research strategy

Fiona Thompson | 4748735

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## LSRM FINAL ASSIGNMENT

### Self-Assessment on Research Methods

## LINES IN THE SAND

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### I INTRODUCTION

Architecture has the capability to explore a broad range of topics, notions and values. Every era will produce its own vocabulary relevant to its time. Research-methodology is a study of methods, it helps to specify the fascination to be explored, and implement different steps to produce an outcome (design). These steps are not rigid or fixed to the type of approach taken but would (should) adapt with time in order to establish the facts and stay relevant in its result. However, these steps will be applied differently in the context of the architecture profession. The practicing architect cannot - financially – afford to allocate the same research time on a single project as a student during their studies. From my experience when working in practice, there seemed to be a typical framework implemented and each step in the research and design needed to be signed off by the client, the senior architect and planning officer. Furthermore, by having a greater system of knowledge, they (the architect) are able to formulate a more decisive research question quicker than a student - also their brief is typically outlined by the client. Thus, in my view, we need to position ourselves quicker within the project. We should be critically aware of the steps, both qualified architect and student, otherwise both are at risk of not fully considering, evaluating and translating a successful design for the desired user of today and tomorrow.

During the 'Lecture Series Research Methods' course, it became apparent to me that you should not take for granted the status quo, but should always question; what is it? Why is it considered this? Is this the state-of-the-art definition or does it need to be redefined? Most importantly, what is my position and belief? And why? Upon reflection, I found my selected research group – "Investigating Typologies" – a little premature for the research stage that I am currently at. Though I do believe this lecture and accompany reading material will become very relevant during the design process (semester two). However, I did find "Investigating Territorial Scales" lecture to be more comparable to my graduation studio "Transitional Territories". It addressed the idea of what nature is? How do we perceive nature? As well as presenting the notion of giving back land to nature through the three urban morphology disciplines; plant, people, prosperity (figure 1). Adapting it to work with nature rather than against it. The Lecture Research Methods Series has revealed to me that there are different approaches at different parts of the design process, but most importantly at the scale of intervention you wish to address. This statement helps to frame the reasoning for different approaches to be undertaken in the graduation studio.

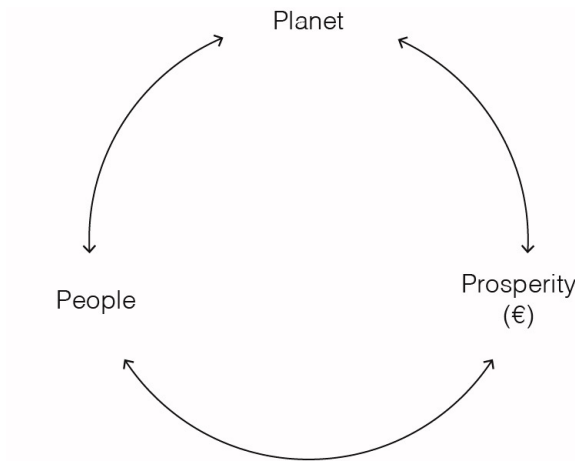


Figure 1 Lecture Research Methods Series talk 4 diagram

In *Transitional Territories*, we first approach the brief at the macro scale (within groups) at the context of the North Sea, then we define an individual research fascination, body of theory, site and develop a design. The studio adopts a *research by design* approach, this entails the possibility of exploring several design outcomes from the research. This is a known research strategy of Jorgen Hauberg, an architect and vice dean of Danish Academy of Fine Arts. Each student draws from the macro scale research a fascination; to help define their problem statement and position oneself. The concept is tested through a scenario planning application (figure 2), a method to analyse the concept and test its response in different conditions. There are four outputs within one axis diagram; crowd, steam, rest and warm. Each have the potential to be developed further into a design project.

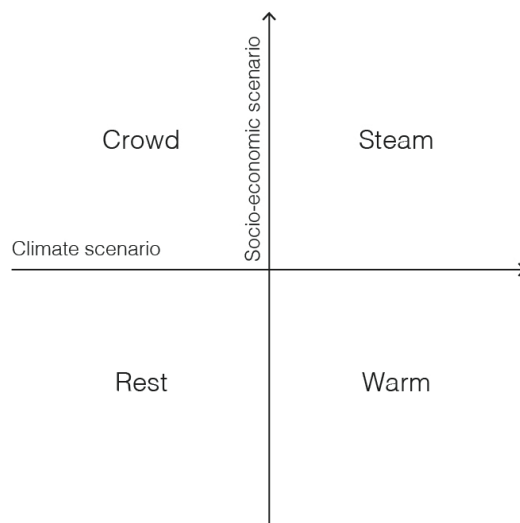


Figure 2 Scenario planning application axis diagram

My fascination is focused on the survival of the North Sea commons. Now one of the most extracted, exploited and utilised resources in the world, globalization ideals has led man to nationalism practices, we are on the path towards the tragedy of the commons. The project addresses the impact different types of borders have had on the North Sea, and whether an intervention of a grey area (state of exception) is needed to prevent this from happening. Introducing a space of neutrality at the main intersection of the Exclusive Economic Zone (EEZ), gives it the ability to negotiate the transition from individualistic preconception and self-interest of man to embrace the North Sea's globality in a new way. This is achieved by excluding one's national identity, putting the needs of

nature above the desires of man, once entering the grey area. Finally, the research question introduces the role of the grey area and how can it could prevent the tragedy of the North Sea commons by guarding the morals of man and future economic flows of operation?

## II RESEARCH-METHODOLOGICAL DISCUSSION

In Transitional Territories we address three different scales in the brief; macro (North Sea territory), meso (architectural scale/area of interest) and micro (tectonic scale). My project is shaped by two approaches; experimental and qualitative. Each complements the other scale; this is to ensure the project is developed fully and there are no gaps.

The individual project commences at the macro scale; it builds upon the knowledge cultivated in the studio's group research exercises at the start of semester one. Here we mapped the conditions of the North Sea using quantitative methods; GIS and governmental data to map the current and projected outcomes. It gave each of us a small introduction into different aspects of it - politics, economics, ecology and spatial. Collectively we could cultivate a greater amount of context knowledge before pursuing our own fascination. This model adopts a more quantitative research approach because it depends on the manipulation of a phenomena that can be measured by numbers<sup>1</sup>.

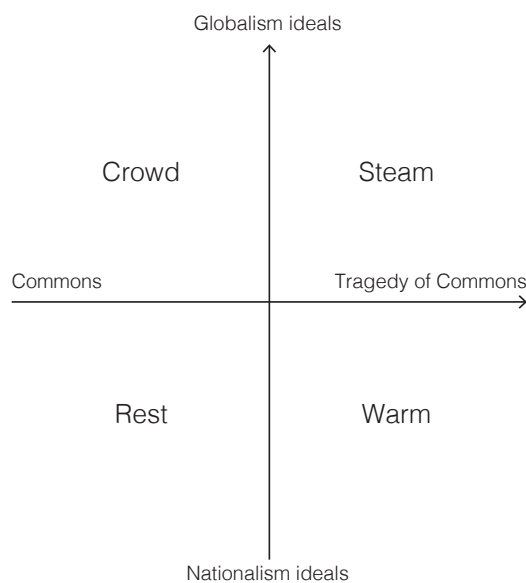


Figure 3 Grey area scenario planning application axis diagram

From my fascination I developed my problem statement, applying a constructivist paradigm approach (school of thought). Here, it is assumed there is no single reality, but individuals in groups create the reality<sup>2</sup>. Overall, the project is considered a type of experimental research, based on a reality that needs to be interpreted (epistemology). The constructivist approach is achieved via the re-introduction of the scenario planning axis diagram (figure 3), the axis reflects two variables needed to be tested (method). Each quarter will depict an extreme scenario, portrayed in an image

<sup>1</sup> Linda Groat and David Wang, *Architectural research methods*, 2<sup>nd</sup> edn (New Jersey: Wiley, 2013), 69.

<sup>2</sup> Salma Patel, "The research paradigm – methodology, epistemology and ontology – explained in simple language", Research Methods (blog), 15 July 2015, Accessed 18 December 2018, <http://salmapatel.co.uk/academia/the-research-paradigm-methodology-epistemology-and-ontology-explained-in-simple-language/>

and mapped on the North Sea territorial scale (methodology). This is a playful exercise to help me investigate potential realities, not biased by any one outcome. Upon reflection, it enabled me to question, what is my position regarding my fascination? Where should the site be? What is the programme/user? This is a subjective approach, “whereby multiple realities are understood as being socially constructed”<sup>3</sup>, the axis diagram interprets the actors who will experience the environment and thus then constructs a new “reality”.

Once my fascination has been thoroughly tested, I then started to pursue one of the quadrants to develop at the meso scale, applying a pragmatism paradigm (school of thought). Here I readdress the spatial relationship between the selected site and the research question, introducing a qualitative research approach to address the aspects which the experimental research framework does not fully explore. This approach was chosen because it acknowledges a reality that “constantly renegotiates, debates and interprets in light of its new unpredictable solutions”<sup>4</sup>. Ontologically, it assumes a shared understanding of reality is possible, and takes into consideration the social and historical context of the North Sea through developing the *research by design* method. Socially it registers, what are the commons? Who are the main actors in deciding the operation of the commons? Finally, how to prevent the tragedy of the North Sea commons? Historically, it recognises the different types of borders from 1150 (when the North Sea was last seen to be “free”) to borderlines that have been established today. It is an intersubjectivist approach adopting a phenomenological and explanatory theory tactics. A mixture of tactics is applied to understand the beliefs as well as the essence of its context. The studio symposium cemented the research through depicting the project in three different types of medias (methodology). A 400-word letter expressing our concern and design proposal, three images to visualise the project at three scales and finally, a gypsum model to contextualize it. Each was a different step to express and interpret the research in preparation for the next stage, the design.

The micro scale will explore the design stage, this will again embrace the experimental research approach, but would instead adopt a phenomenology school of thought. This research methodology will be explored further in the design stage. It will investigate how to cultivate a “space of exception” - a space of neutrality – within the North Sea. Changing what is perceived or understood in the human consciousness and denounce man’s political agendas once entered the space – the design proposal will be an embassy for the North Sea.

The literature review has helped me explore my fascination and knowledge and the theoretical notions being applied to the North Sea context. At the macro scale, border theory; Border as Method, Sandro Mezzadra and the cosmopolitan commons; the grey area, Håkon Andersson. At the meso scale theorists such as Carl Schmitt (Nomos of the Earth) and Bruno Latour (From Realpolitik to Dingpolitik or How to Make Things Public) have written of the state of exception and the utopic vision. Like the research-methodological approach, the literature review has given me a greater theoretical understanding of my project and provides a meaningful guide in its development. During the project, it has been applied in a problem-solving framework, the theories support my problem statement and have become the foundations to the design proposal.

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<sup>3</sup> Linda Groat and David Wang, *Architectural research methods*, 2<sup>nd</sup> edn (New Jersey: Wiley, 2013), 79.

<sup>4</sup> Salma Patel, “*The research paradigm – methodology, epistemology and ontology – explained in simple language*”, Research Methods (blog), 15 July 2015, Accessed 18 December 2018, <http://salmapatel.co.uk/academia/the-research-paradigm-methodology-epistemology-and-ontology-explained-in-simple-language/>

### III RESEARCH-METHODOLOGICAL REFLECTION

The graduation project is cultivated by a mixture of these methods, it follows a constructivist (macro scale) and phenomenological (micro scale) school of thought in an experimental research strategy and a pragmatism school of thought (meso scale) in a qualitative research strategy.

The history of the constructivist school of thought is a reaction to didactic approaches, (behaviourism and programmed instruction) and sees learning to be active by constructing knowledge rather than acquiring it<sup>5</sup>. The founder of constructivism is Jean Piaget (1896-1980) who focused his research on how humans make meaning in relation to the interaction between their experiences and their ideas<sup>6</sup>. A newer constructivist approach is from Egon Guba (1924-2008) and Yvonna Lincoln (1944-), who emphasises the “methodological procedure for studying phenomena in their natural setting”<sup>7</sup>, they believe the research will then be trustworthy. The constructivist research approach forms the backbone of the graduation project’s narrative, it questions how human ideals (morals) have been altering the structure of the North Sea commons with their globalism or (trending) nationalism practices. Here the project incorporates explanatory theory tactics, to describe such behaviour of the seven North Sea countries surrounding it and those who directly interact with it (e.g. fishermen). These actor’s behaviour and motives of interaction with the North Sea have changed since 1150 and will going to do so. Therefore, a constructivist approach is selected as it is flexible, to build an adaptable image around these actors.

The history of the pragmatism school of thought is drawn from philosophical roots, initially expressed in the late nineteenth and early twentieth centuries by theorist such as Charles Sanders (1839-1914) and John Dewey (1859-1952)<sup>8</sup>, their work was applied to the concept of truth. The theory of pragmatism was to clarify the “contents of hypothesis by tracing their practical consequence”<sup>9</sup>, this tends to share an epistemological outlook. Whereby, it saw the clash of human temperaments, on the one hand the claim of science and on the other those of religion and morals. Pragmatism saw to overcome these three dilemmas by perceiving them not to be in competition. These beliefs declined during a majority of the twentieth century, before its revival in the 1970s which saw the development of new ideas. The pragmatist researcher was more concerned with value and efficacy results for the larger community. One of these new voices was Richard Rorty (1931-2007), he notes; “we should be free to propose new ‘vocabularies’, systems of classification and description [...] seeing how they enable us to achieve our goals”<sup>10</sup>. Pragmatism gives me the opportunity test what a grey area reality may look like and because this “state of exception” does not follow the current “vocabulary” but suggests something new and alternative could be possible. It addresses the underlining values which enable individuals to be bonded with their similarities. As long as the actors involved in the design project maintain an “experimental habit of mind [...] rather than seeking for the ultimate solution”<sup>11</sup>, the pragmatist approach will serve the experimental project well.

The history of the phenomenology school of thought stems from the works of Edmund Husserl (1859-1938) who addressed a person’s lived experience. As well as Martin Heidegger (1889-1976) who

<sup>5</sup> Learning Theories, “Constructivism” <https://www.learning-theories.com/constructivism.html#contributors> (Accessed 12/12/2018).

<sup>6</sup> Piaget, J., *Psychology and Epistemology: Towards a Theory of Knowledge* (New York: Grossman, 1971).

<sup>7</sup> Egon Guba and Yvonna Lincoln, “Competing Paradigms in Qualitative Research,” in Norman Denzin and Yvonna Lincoln (eds.), *The Landscape of Qualitative Research* (Thousand Oaks, CA: Sage, 1998), 213.

<sup>8</sup> Linda Groat and David Wang, *Architectural research methods*, 2<sup>nd</sup> edn (New Jersey: Wiley, 2013), 89.

<sup>9</sup> Hookway, Christopher, “Pragmatism”, *The Stanford Encyclopedia of Philosophy* (Summer 2016 Edition), Edward N. Zalta (ed.), URL = <<https://plato.stanford.edu/archives/sum2016/entries/pragmatism/>>.

<sup>10</sup> Rorty, R., ‘*Feminism and Pragmatism*’, in Goodman (ed.) 1995: 125–48.

<sup>11</sup> Linda Groat and David Wang, *Architectural research methods*, 2<sup>nd</sup> edn (New Jersey: Wiley, 2013), 92.

contributed to the idea of *Being*. More recently, Christian Norberg-Schulz (1926-2000) was recognised as a key figure in architecture phenomenology, who states it to be “a method and not solely a philosophy by which we can understand the world”<sup>12</sup>. Phenomenology has significantly influenced the conduct of research in architecture by highlighting a person’s experience<sup>14</sup>, giving a deeper understanding and assessing its cultural meaning. The researcher is able to separate its prejudgements to purely rely on intuition and imagination, notes Husserl. Therefore, as the project develops and the space of exception is established, a space of neutrality is created. The challenge will be to apply the actor’s subjectivity to illuminate the “essence” of a neutral experience. Taking inspiration from Maire O’Neill’s study of a Montana family ranch, whose experience of the same place changes within two generations. We can learn that the underlying principles of haptic sensibilities of the body<sup>13</sup> are relevant when designing a space with sensitivity in how insiders really experience a place. The tactics are to analyse this “essence” through a series of drawings, contemplating how altering one’s senses can alter one’s frame of mind.

#### IV POSITIONING

As previously noted, the research correlates to the talk by Hooimeijer and her paper “Drawing the subsurface: an integrative design approach”. Here she notes the value of an integrated approach, and how the layers represent a different domain. They resemble concepts, to help guide the process and interpretations of the Landscape Urbanism proposed<sup>14</sup>. In the paper, scenarios are used to make the choices more concrete, but also to open up ideas for new approaches and technologies. Showcasing possibilities of how urban interventions can be implemented and what their impact may be in the long term. This can be considered as an experimental approach (similar to my graduation project) because it theoretically tests options using architectural drawings (plans, sections, 3D), diagrams, photography and sketches to offer the greatest possibility of observing and reflecting on the outcome (a research by design method). These means of representation can be combined to offer new possibilities.

My self-chosen methodological-literature supports this innovative line of thought or “thinking outside of the box”, using scenario-based design. This is a recommended approach in the studio. There are many different ways to portray this; from Bruna Canepa and Ciro Miguel (figure 4) “Miniatura”, a series of experimental drawings depicting examples of unreal architecture to reveal complexity, wonder and irony through their drawings and illustrations.

In comparison, a landscape project “The Soul of Nørrebro”, by Danish architects SLA (figure 5). They have deigned an urban landscape using nature-based solutions to be climate adaptive. It is cultural, social and technically innovative by adapting to different landscape site scenarios; from flooded to dry. All three present different ways of scenario planning design, shouldn’t more designs consider projected climate change or other environmental conditions?

<sup>12</sup> Christian Norberg-Schulz, *Genius Loci: Towards a Phenomenology of Architecture*, (New York: Harper & Rowe, 1962)

<sup>13</sup> Haptic sensibilities of the body are the perceptions gained by movement, touch etc.

<sup>14</sup> F.L. Hooimeijer et al, “*Drawing the Subsurface*” in *Procedia Engineering* 209 (2017), 61-74

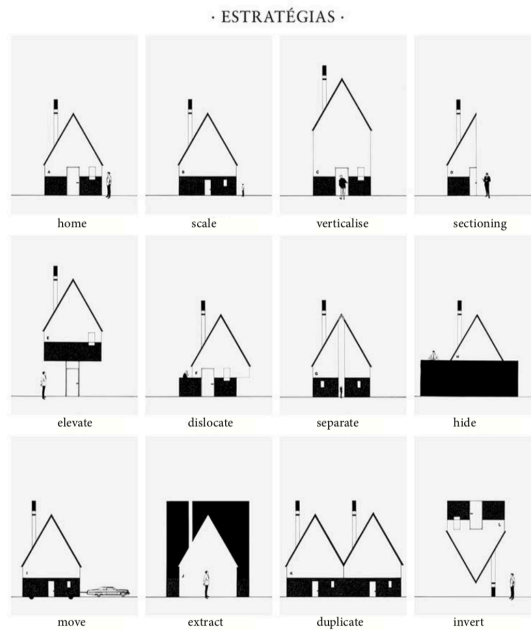


Figure 4 “Miniatura” by Bruno Canepa and Ciro Miguel



Figure 5 “The Soul of Nørrebro”, by Danish architects SLA

During our architecture education we are always told not to “reinvent the wheel”, so don’t design what has been done before, question the site and design for what its needs. By proposing an experimental project is a risk, as Groat notes, the project will not consider all the “real-life setting or the sociocultural phenomena are far too complex to be reduced to a small set of treatment and outcome variables”<sup>15</sup>. Upon reflection, one of the problems with the research approaches selected is categorising each into a scale, though in reality it is a symbiosis of the design project. One of the strengths of using the experimental research strategy is combining it with other methods to help avoid its weaknesses while utilising its outcome. Groat notes “combining the strength of research with the power of other forms of persuasion is probably a useful approach for creating change”<sup>16</sup>. This is a popular method amongst other researchers when addressing a complex project. Within the field of architecture, you will commonly find an interdisciplinary approach not just in extensive

<sup>15</sup> Linda Groat and David Wang, *Architectural research methods*, 2<sup>nd</sup> edn (New Jersey: Wiley, 2013), 345.

<sup>16</sup> Linda Groat and David Wang, *Architectural research methods*, 2<sup>nd</sup> edn (New Jersey: Wiley, 2013), 347.



experimental research but also in practice. Before starting my master's education, I worked a year in architecture and a year in the urbanism department. It introduced me to the different roles and the collaboration with other industries in making a design.

Transitional Territories is an interdisciplinary studio, for urbanism, architecture and water management students. Like my time in practice we are able to learn from each other about the built environment and the complex issues will have to consider in our design approach. Architectural design needs to acknowledge a greater system of knowledge, to cope and adapt to changes in the environment.

To conclude, the experimental research and qualitative research strategy chosen, are in my opinion the most appropriate for my project. It enables innovative thinking as well as including projected environmental data and climatic statistics. An inductive explorative research study, it will enable me to better understand these new and unpredictable conditions and design a lasting spatial relationship between the grey area and the future North Sea.

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## DRAWING LIST

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