

LANDSCAPE DEVELOPMENT IN THE BORDER CONDITION  
*the borderland as a cultural interface*

*reflection*

MSc Landscape Architecture  
TU Delft

*June 2017*

This document is a reflection on the graduation project's outcome and on the proposed research and design methods. Among the subjects analyzed in this reflection are lessons that the author learned and contributed to her personal development as a student of landscape architecture. Moreover, the project's relation to some academically used methods is discussed. The reflection ends with an elaboration on the project's importance as a tool for further research on border conditions and for future protection of the border landscape.

## 1. *Lessons learned*

During the one-year research and design process that led to this graduation project, the author had to tackle several theoretical and practical issues. A lot of precious lessons have been learned through this process. The most important ones are presented below:

### a

#### the border-scale relation

Even from the early stage of the analysis, it was made clear that the border as subject of research varies, depending on the scale to which the analysis is being done. More precisely, the analysis at the regional level concluded to the thought that the national border, even though it is usually influenced by important landscape structures, it is mostly a construct of the mind: it is people's mentality, pride and need for identity that organizes them into separate groups and enhances the role of such national barriers. If it weren't for the analysis at a more local level, the author would have not discovered that the "unreachable" borderland is not just due to reasons of mentality, but also due to practical difficulties. The small-scale analysis proved that there are various physical boundaries, restricting people's movement and, thus, creating a fragmented borderland. This realization implicitly forced the formulation of design principles, that would first deal with the physical boundaries and then address the national border.

The design proposal followed a similar route: it started by presenting at a larger scale the author's vision for the borderland, but then moved to a detailed elaboration of how to tackle the borders locally. The shifts in scale revealed each time different aspects that had to be considered, when designing the borderland. The multiplicity of scales related this graduation project to the rest of the landscape projects conducted by the author so far and proved that for landscape architecture, a multi-scalar approach will always be a key factor.

### b

#### the structural-punctual relation

The research conducted for this project resulted to the need for a more connected borderland. The nature of these connections has been divided in two groups: the ones created by continuous structures and those created by single elements that form imaginary routes. The design principles were, thus, divided to structural and punctual interventions, accordingly. Structures, expressed mostly as continuities in the natural landscape and in infrastructure, address the issue of connecting the borderland at a regional level. Punctual interventions, in the form of cultural pavilions, represent local qualities of the borderland that have contributed to its overall identity. From the early stages of the design proposal it has been assumed that only a combination of structures and single elements would guarantee a successful outcome of the project –one could not adequately address the issue without the help of the other one. The final design has confirmed the above theory. The structures create an interesting natural base for the borderland, respecting the landscape's current conditions while offering an appealing future. At the same time, the punctual interventions create a cultural network that protects and celebrates the borderland's identity. Together, structural and punctual interventions respond to all of the borderland's aspects: ecological, economical, cultural etc.

### c

#### nature-driven and man-driven forces

The landscape development in the border condition includes actions driven by both man and nature. The main principle has been to enhance what is already there, in respect to the landscape's current conditions. A set of actions driven by man would evoke a series of natural events. For instance, by digging the soil in a particular area, two separate water bodies would become one. Natural processes, with the help of some pioneer species added by man, would eventually turn this place to a wetland. Similarly, the idea of expanding the existing forested area from Germany towards the Dutch side of the border would probably require first adding some pioneer species and then letting nature free.

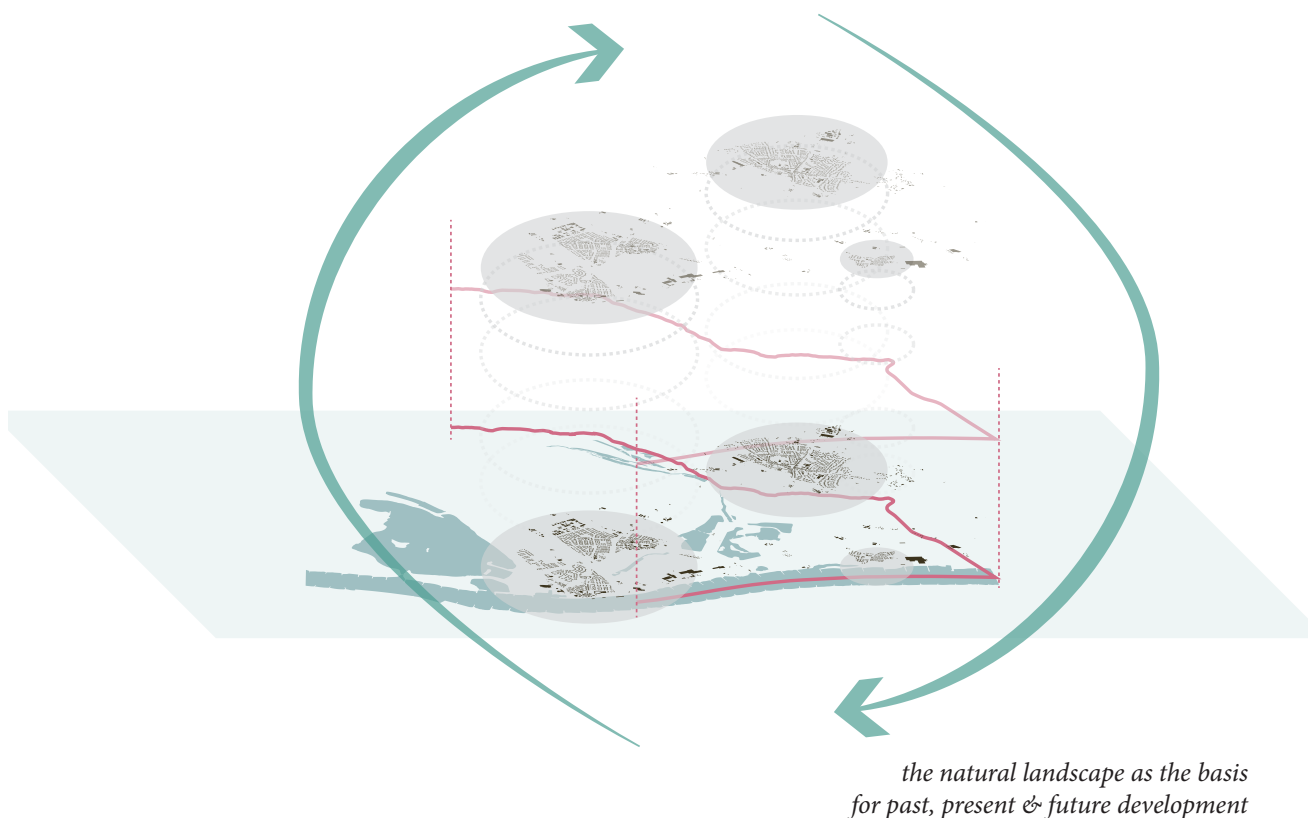
When developing the project, the author came to the conclusion that while man-driven actions can be realized within a short period of time, most of the natural processes require much more time. Consequently, the final image of the borderland, including all fully-developed forested and wetland areas, would be achieved only after many years. It is therefore a challenge for any designer to think of the crucial in-between stages, where man's actions will "guide" the landscape according to plan. In this particular project, actions like the urban extension of the Dutch and German settlements or the creation of the cultural pavilions could be carried out, even if the natural landscape would not have reached its final stage.

## 2. The design proposal as a response to the research objective

One major question to be answered in the final reflection phase of this project is whether the design proposal answered the initial research objective or, in other words, whether the landscape-based approach sufficiently responded to the border condition.

The natural landscape has proved to be a rather resilient structure. It has the ability to adapt to the human environment's changes. One could even argue that it is people who usually adapt to the natural landscape and not the other way round, despite their most current efforts to conquer nature. Besides, the L-scale analysis of this project has led to the conclusion that important landscape features –mostly related to water in this particular case- determined the course of the border line and, hence, people's actions in the past. Therefore, the author trusts that an approach with landscape features as a basis would properly address the border condition and preserve the characteristics of this land against external threats. It is believed that a more programmatic approach would not prove that resilient, as it would depend more on human activities. Eventually, the border qualities would disappear in favor of economical trends and this landscape would entirely lose its identity, just as it has been the case for many unique landscapes in today's world of globalization and homogenization. On the contrary, a proposal that focuses on boosting the border qualities by enhancing first its natural conditions –in terms of geomorphology, water, vegetation etc- could then be combined with the proper programme –eg. adjusted agricultural techniques, recreational activities in nature- that would turn the borderland to an important ecological, economical and cultural region, while also giving hope for its future.

Preserving and celebrating the borderland as a place of meaningful encounters by intensifying the connections within it has been the objective of this graduation project and, by focusing first on the landscape structures, this goal has been achieved.



### *3. Relationship between the theme of the graduation lab and the graduation project*

This project was conducted as part of “Flowscapes”, the one-year graduation studio of the MSc Landscape Architecture. The studio addresses landscape architecture design of green, water and transport infrastructures, considering them as armatures for urban development and for facilitating functional, social and ecological interactions<sup>1</sup>. This graduation project is undoubtedly strongly related to the theme of “Flowscapes”, as the notion of flow has been one of the main key points during both research and design.

The development of the borderland acknowledged the risk of abandonment that the border landscape faces nowadays. The national border, when seen as a dividing line rather than a threshold, acts as a mental barrier, reducing people’s interactions along it. At the same time, current trends in economy and society “drag” people towards the cores of countries, leaving the edges at a state of neglect. Borderlands eventually turn to no man’s lands, where people’s flow levels are extremely low. This graduation project envisioned an answer to the above issue, by developing a major flow structure in the borderland and, more precisely, a water continuity. The interaction between water –a soft material acting sometimes as connector and other times as boundary- and the national border –a non-physical, yet strong mental barrier- promises a more vivid urban environment for the borderland in the future.

### *4. Relationship between the methodical line of approach of the graduation lab and the method chosen in this graduation project*

The “Flowscapes” studio recommends an approach based on design research and research-by-design, when carrying out a graduation project. More precisely, each work should be the blend of both research leading to design decisions, and design try-outs asking for theoretical re-evaluations. The “Landscape development in the border condition” project has been the outcome of both methods.

Apart from the area’s analysis in multiple aspects, a thorough research led to interesting conclusions, even before the project’s design phase. The “Research methodology” course, carried out during the first semester of the graduation year, highly contributed to this research. The border’s strong relation to matters of culture and history asked for a detailed research on ways of dealing with historical findings and monuments. The structural and punctual approach as a strategy for development in the border landscape was partly formed through this research course.

The research-by-design method came into play, right before finalizing the master plan. More precisely, it was important at that point to verify the importance of the interaction between the structural and the punctual. To test that, the author experimented by first developing only the structures and then applying only punctual interventions. This set of experiments led to the conclusion that the most efficient way of addressing the border landscape was by combining both structural and punctual interventions. After this realization, the design principles were divided to structural and punctual accordingly, with great attention in creating an interesting dialogue between them. The project would probably have a different outcome, if this research-by-design method was not included.

### *5. Relationship between research and design*

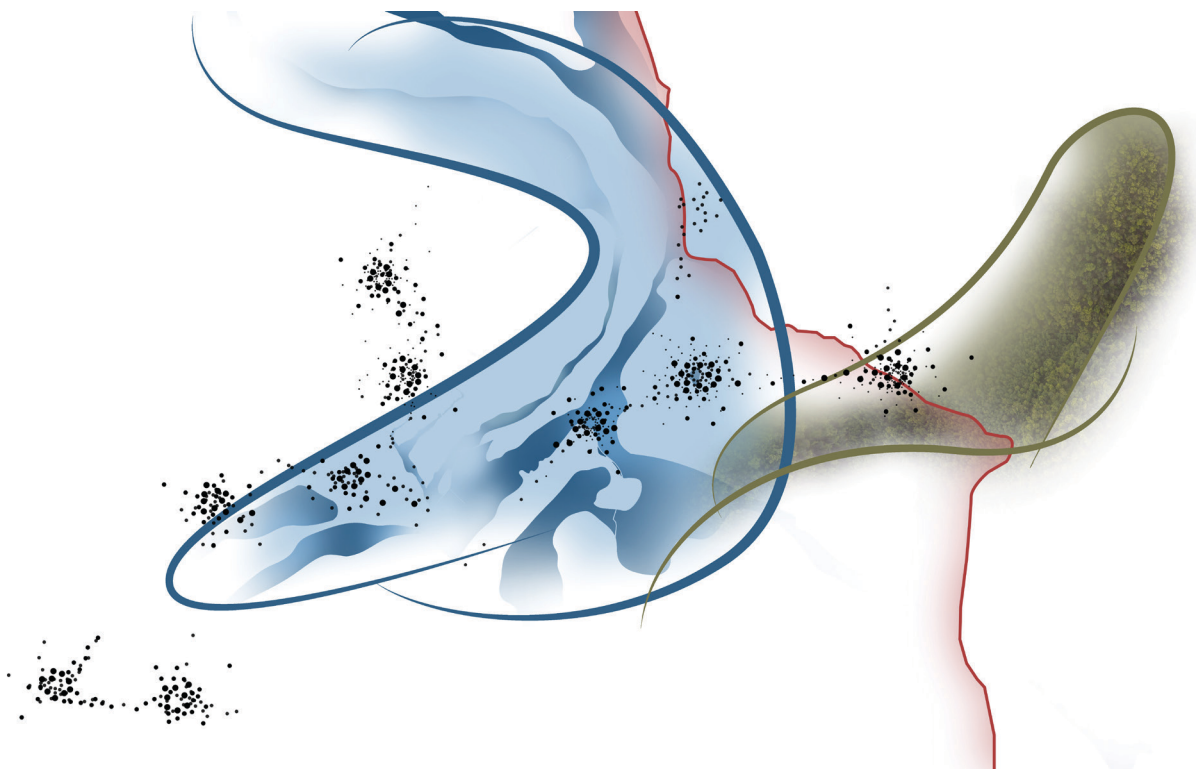
The previous paragraph already revealed that this project was built upon a continuous exchange of knowledge between research and design. Apart from the previously mentioned research-by-design method which proved to be a precious tool, another important aspect of research has been the study of precedents. It is true that there are considerably few examples of methods for developing border landscapes, but this fact never prevented the author from establishing her own method: the structural and punctual approach. However, particular aspects of this method –and especially practical matters- called for further research. For instance, the suggestion of digging out soil in order to connect separate water bodies and eventually form a wetland –one of the project’s main conceptual ideas- was based on the study of precedents. As the design phase moved on, more and more similar practical matters appeared, asking for verification. Researching about them sometimes meant re-evaluating the design. A similar process can be traced between the site’s analysis and the design: the initial analysis led to some major conclusions, but during the design phase further analysis needed to be carried out, especially at a local level. To conclude, in this project research and design seem to be part of an unbroken cycle, just as in most landscape projects of this scale.

1 information derived from the Digital Study Guide of the MSc Landscape Architecture TU Delft

## 6. Relationship between the project and the wider social context (the relevance of the graduation project)

A crucial question after the completion of this graduation project has been whether the structural and punctual approach could be the answer to other border conditions around the world. The flexibility of the structural and punctual approach lies on the fact that the structures and the elements are not predetermined, but instead, are based entirely on the project's specific conditions. In this particular project, water has been the most dominant structure and culture has been the basis for the punctual interventions. In other borderlands around the world there could be other structures and elements for potential connections. Maybe instead of water there could be fragmented pieces of woodland asking for connections. However, the project principles can always remain the same. And, undoubtedly, the success of every project will always lie on the dialogue between the structures and the elements. It is through this dialogue that the border's qualities will eventually be preserved.

The above implies that the structural and punctual approach could be generalized and, hence, this graduation project could give new insight on how to generally deal with border conditions, which is an important field of research and discussion among theorists and specialists of landscape architecture. Protecting unique landscapes that are facing nowadays the risk of losing their natural and/or cultural qualities has been a major issue of discussion in the latest years. This graduation project, even though it addresses only one type of landscapes, could hopefully contribute to this discussion.



*the development of the borderland - conceptual drawing*