



HORTI DANUBII - REFLECTION REPORT

ROEL MUSELAERS - 4052668

MASTER TRACK LANDSCAPE ARCHITECTURE

STUDIO FLOWSCAPES

SEPTEMBER 2015

INTRODUCTION

Between Bulgaria and Romania the border runs over the Danube for most of its time. Despite high ecological values, quite some spots in the stretch between the cities Ruse and Silistra (about 110 km) are neglected and have become the back of the countries Bulgaria and Romania. The report is a search for an answer to the question "*How to interweave the river border area between Bulgaria and Romania with the existing recreational and ecological network?*". Horti Danubii (Latin for "park of the Danube") is an example of how to activate spots in the river border area between Romania and Bulgaria to create new connections with the existing recreational and ecological network.

METHODOLOGY

In the first place a personal method, based on observation is used. During the project at every turn the observation was taken as leading, supported by a theoretical background. The "direct" observational way of research is almost free from influences of others. In most other forms of research, information is framed by the reference frame of the author. The author is trying to show a certain aspect to convince the reader. In order to achieve this, the author hides -from his point of view- needless information and influences the reader in that way. Although an observer has a certain reference frame as well, in situation the environment is better judged according to reality, because it's harder not to balance certain aspects of fascination against background aspects. These background aspects are harder to hide in the real situation. During the field-trip there were as well moments of "guided-observation". Some local residents (for example an old lady from Ruse and a doctor of the hospital of Ruse) showed or focused on some specific

spots or routes in the frame of study. At the same time these residents shared ideas and doubts about the places and regions. Since the reference frames and ideas of the persons where in general quite different than personal ideas it triggered to compare these ideas.

After the P2 a different type of observation started: excursions to for example otter and beaver stays and parks were made. All observations were strengthened by desk research.

The second visit to Ruse in the final stage and surroundings created the opportunity to see the frame of study in two different seasons, which contributed to a thorough observation.

In the second place, to strengthen the personal method, the patch-corridor-matrix-method¹ is introduced. This method can be applied on different scales, starts from an ecological point of view, but involves human activities as well. This means that the method can be applied to urban areas as well, which seems to be an underexposed aspect of the first method.

The personal method, based on observation seems to be the best fitting to the circumstances of the project. Forman's patch-corridor-matrix-method¹ is a welcome replenishment on this. The method leads to interesting new insights for the graduation project. With a relatively very quick scan with this approach on different scales, differences become very clear. On the scale itself, but even more between scales. Accurate comparisons can be made and it facilitates thinking through scales -which is encouraged during the graduation project-. The use of the fixed scale makes it easy to compare the same frame of a certain site with another area of a same extent: the mosaic creates a clear comparable view of aspects that play a role. Moreover, the application of the fixed phenomenon ensures a targeted research: main elements that need further research become more clear and the investigator is able to focus on important elements and distinguish superfluous details. The book contains a lot of detailed scientific information to analyse these important elements.

Compared to the personal method, an earlier application of Forman's method¹ during the graduation project would probably not lead to the same "animated" design theme specific for this location. Forman's method is reasoned from an aerial view, what makes the tangible human scale harder to grasp. However, the added value is unmistakable, since the availability of international written information and maps about the area is limited. The application could have helped to get to the point earlier and compare data in a scientific way.

The application of Forman's method¹ is urgent in this project, to create missing (scientific) links and especially to involve human processes and the urban environment. Still, ecological aspects should be kept in mind as a starting point, and intuition should not be suppressed to get to an animated design.

Looking back on the project, observation and design were alternately leading. Observation guided the research and at several times models were made, in which the design took the lead (research-by-design). Sketches led to new fields of research as well at different stages.

During the process in terms of writing I learned by reading Thomas' book² that it's important not to generalise. Therefore I had to adjust the text and revise some analytical and concept diagrams.

Furthermore I learned it is important to create a certain sequence in your storyline in which you refer to your research question all the time.

FLOWSCAPES

The graduation studio "Flowscales" explores *"infrastructure as a type of landscape and landscape as a type of infrastructure"*³. Urban landscape infrastructures (flowscales) as a design concept -operating somewhere

between the concepts of landscape and infrastructure- can be used *"as a vehicle to re-establish the role of design as an integrating practice"*³. Urban landscapes can be understood as complex systems, consisting of networks and locations. *"The spatial dimension of networks and locations can be referred to as the space of flows and the space of places (Castells, 2000). The space of flows can be defined as the formal expression of structures for the (1) provision of food, energy, and fresh water; (2) support for transportation, production, nutrient cycling; (3) social services such as recreation, health, arts; and (4) regulation of climate, floods and waste water (figure 6). The space of places can be defined as the spatial expression of a locale whose form, function, and meaning are a result of social, ecological and economical processes."*³.

One can distinguish at least three fields of urban landscape infrastructure design: transport landscape infrastructures, green landscape infrastructures and water landscape infrastructures. Obviously the project involves mostly the second field (green landscape infrastructures) and for a little the third field (water landscape infrastructures) as well. Green landscape infrastructures *"maintain and develop natural ecosystem values and provide associated social, economic and aesthetic benefits to humans as a set of interconnected green space networks"*³. In the project a green infrastructure is created that tries to provide these values. Literally the method of patches, corridors and matrices is mentioned, which is used in the project. While water landscape infrastructures involve beach nourishment and development of flood forests as well, water landscape infrastructures are mentioned as well. In the project this is applicable. This shows the project is a clear example of a new flowscape (urban landscape infrastructure).

During the project with the course AR3LA020, "Research methodology in landscape architecture" was tried to find a methodology fitting to the project and steer in a certain direction. Because of this the methodical line of the studio's projects differed. The course AR3LA030, "Design with natural processes" again gave some direction.

WIDER SOCIAL CONTEXT

The neglect of area's with high ecological values happens at many places in the world and the creation of a green interconnected network can help to solve the resultant problems. As the project shows a green infrastructure can provide places to meet, for employment, for sports and leisure.

The investigation of the study area seems to be useful for other fields or specific disciplines, different from landscape architecture as well. For example parts of the research investigate zoo design or the visitor-animal relation. In fields of tourism, education, sports and leisure this could be helpful. Furthermore the research could be used in fields as nature protection and climate control.

Since it seems that I found an answer on the research question and the design solutions on all scales are satisfactory, I achieved the aims of my research project, namely how to interweave the river border landscape of the Danube between Bulgaria and Romania with the surrounding ecological and recreational network. Moreover, the enthusiasm of the local population in helping me to accomplish the project shows that - with some publicity- it has a chance to succeed.

¹ Forman, R.T.T., 1995. *Land mosaics: the ecology of landscapes and regions*. Cambridge: Cambridge university press.

² Thomas, G., 2011. *How to do your case study. A guide for students & researchers*. 1st ed. London: Sage.

³ Nijhuis, S., Jauslin, D.T. and Van der Hoeven, F.D., 2015. *Flowscales: Designing infrastructure as landscape*. Delft: TU Delft.