P4 Reflection

Track: Landscape Architecture
Name: Maozhu Zhang
Student number: 5531829

This document is the reflection of the project: “Reviving the Bagmati River in the Kathmandu Valley”. This project will be reflected on from six aspects**.**

Reflecting through the relationship to Flowscapes studio

The project is part of Circular Water Stories Lab in Flowscapes studio. The main topic of Flowscapes studio is the flows and the Circular Water Stories Lab focuses on one of the most important flows in landscape-water. It began with the study and analysis of a traditional water system. These analytical studies help to understand the historical changes in the relationship between people and water within the design site, which is an indispensable beginning to the final design project, as it facilitates reflection on changes over time, thus forming the overall context of the graduation project. The graduation project focuses on a polluted sacred river-Bagmati River. The project starting with the historical relationship between people and the river. In the past, there was a strong spiritual connection between people and the river, people revered it. As the city expands, this relationship is weakening, people no longer revere the sacred river, it is polluted, and this further weakens the connection between people and the river. Eventually, Bagmati declined, the connection between people and the river was lost, and the quality of life of the people seriously deteriorated as a result. Interventions are then proposed from the perspective of landscape spatial design, responding to historical relationship to create a new human-river relationship based on current environmental challenges: With people working to restore and protect the Bagmati River, and the Bagmati River providing them with different spaces according to their needs, the river will once again become an important part of the lives of its inhabitants, and spiritual connections will be established at the same time. This relationship is sustainable and it helps to improve the ecological condition of the river and the quality of life of people, creating a better living environment.

Reflecting through the relationship between research and design

Research and design are the primary methods during each phase of the graduation project, and the weight and way in which they are used and the role they play will vary from phase to phase.
The first phase: Site analysis is mainly achieved through research methods, such as mapping, literature review etc. And design provides direction on what elements should be researched. The design of the project is related to river pollution and the relationship between people and river, so when conducting the research, the main focus is on the history and current status of the river and the relationship between people and it.
The second phase is to find the theoretical basis for design, using design as a starting point to select theories that may be suitable, further studying these theories through literature review and other research methods, and then judging the results of the research through design to clarify whether

these theories are instructive for design. In this phase, this process from design to research to design will be repeated, and finally find a theoretical framework that can guide design.
The first two phases are led by research, after entering the third phase: design, design is the main method of this phase, at this time research assists the progression of design. The first and second phase of research is carried out at a large scale, after entering the design phase, there is still a need for continuous research on some details, and the conclusions obtained through the research will promote the formation of the design. In this phase, a lot of reference projects research is also necessary, they can contribute to the formation of design ideas, and is also one of the important bases to prove the implementability of the design. Therefore, this phase is completed through the continuous feedback and revision from design to research to design.
Research and design are two methods that work together in different ways at different phases, but they are complementary throughout each phase of the project and together contribute to the completion of the project.

Reflecting through the outcome

The main proposal of the project is to restore the Bagmati River, re-establish its connection with its inhabitants and improve the quality of life of its inhabitants. Due to the complex environmental issues and large scale of the Bagmati River system, the framework of the project follows the Urban Catalyst theory to proposes design implementations at different scales. Within the scale of the intervention area, three main strategies are proposed and detailed design interventions are elaborated with the consideration of the social, cultural and natural elements within the site to solve the problems that lead to the decline of Bagmati River and achieve the design proposal. However, the revival of the entire Bagmati River system requires more efforts in the follow-up chain development phase through the application of these strategies and interventions on a larger scale. In this project, the application of these interventions in a larger area is conceptually presented. In the next step, for more specific designs at this scale, such as where to apply these interventions and how to apply them, should involve people from other disciplines, such as urban planners, since at a larger scale, most areas are urban areas. Their knowledge can help enable these interventions to work systematically at the urban scale.

Ethical dilemmas

The design involves the relocation of squatters which requires consideration of a number of ethical issues, including the needs of the people who live there, the intentions of the government, and also the problems that arise after the relocation, such as the acceptance of this squatter group by the surrounding indigenous people. The requirements of these three groups are often in conflict with each other. Instead of balancing these conflicts from the single perspective of any of these three groups, which often leads to inequity, the design looks for balance from the perspective of the environment. The revival of Bagmati requires a lot of labor to participate in waste management. By involving squatters into the process, squatters can have jobs and a place to live, the government has cheap labor to reduce the cost of waste management, and the quality of living environment of the indigenous people is improved, increasing their acceptance of squatters.

Limitations

The most difficult part of the project was the data collection. At the beginning of the project, due to the travel restrictions of Covid-19, it was not possible to conduct on-site research in Nepal, and since the last visit to Nepal was almost ten years ago, the photographic data was not current at that time, so the information collection had to rely on the internet.

Most of the information on the Internet is fragmented, so the only way to gather the required information is through extensive reading, especially since this project involves squatter settlements and few studies have been published about these areas, the relevant information is difficult to collect, and the images are vague.

Although the data collection process was time-consuming and much of the information ended up not being used, in the process, a deeper understanding of the design site itself was gained: its customs, history and culture. This information made the spatial design of the project more site-specific. Since a field trip to Nepal is now possible, the next step could be a field trip to help deepen the understanding of the site and revise the details of the design interventions, after gaining knowledge of the design site through the research and design process.

Relevance in the larger social, professional and scientific framework

The project reasonably considers the responsibilities of landscape architects in urban environmental improvement projects related to rivers. In a series of chain designs, the landscape architect is primarily responsible for the design of the urban catalyst that serves as the starting point, which is usually the restoration design of the most impacted section of the river, as it epitomizes the environmental issues. Some of these strategies and interventions will stimulate and guide subsequent, larger-scale urban design projects.

The design frameworks, principles and interventions can be informative when applied to other countries with similar problems. Many countries are facing similar challenges as Nepal, especially developing countries. Rapid urban development brings problems that end up destroying culture and nature, and the area suffers most are always the important rivers, which become muddy and full of garbage. For example, the Ganges River in India, the Majia River in Heilongjiang Province of China, the Pasig River in the Philippines, the Citarum River in Indonesia, the Mekong River in Myanmar, etc. The similar problems and causes, as well as the similar results, make the design framework, design principles and strategies used in this project highly informative when doing environmental improvement projects in these cities.