

REFLECTION

The relationship between research and design

Because of the severe climate hazards, people are raising their concentration on sustainable water management, which also happens in China where cities under huge water challenges. However, as cities moving forward, original solely ecological or technical approach is not that satisfactory. Therefore, depending on the importance of cultural and social dimensions towards water management, this report put forwards a cultural-socio-technical approach for water management. By defining the criteria and indicators of this approach, the outcome of the research is design principles of cultural-socio-technical approach in terms of typology of spaces. So at one hand, the research supports the afterwards design. It determines both possibilities and limitations of different types of spaces when using cultural-socio-technical approach for water management.

Moreover, because this approach is integrative, which requires cross-level thinking, it is not always linear or logical. To put forward final design principles cannot success without the preliminary design. Design helps to mix up different theoretical knowledge. So on the other hand, design is a tool for integration. Finally, design shows how to apply the research results and in this case, demonstrates this added value of applying cultural-socio-technical approach on future water management.

The relationship between the theme of the graduation lab and the subject/case study chosen by the student within this framework (location/object)

The theme of the chosen studio is design of the urban fabric or public spaces. The main subject of this research is public space which fit the theme. Besides, water as an important element of public space, play a double-side role. On one hand, it adds extra value to public space as landscape; on the other hand, it destroys normal function of public space in case of water disturbances. Therefore, a cultural-socio-technical approach dealing with water contributes to better performance of public space or urban design.

The relationship between the methodical line of approach of the graduation lab and the method chosen by the student in this framework

The studio design of the urban fabric motivates student to study urban pattern in order to find solutions. And in this framework, urban pattern in Guangzhou is analyzed through scales and types. These methods help to figure out the spatial quality and heterogeneity of Guangzhou and

contribute to coming up final design principles and design proposals. In addition, the studio also encourages future-oriented study. And in this framework, scenario building is applied in design to deal with future uncertainties in terms of water hazards.

The relationship between the project and the wider social context

In China, many cities suffered from waterlogging or flood for many years, it remains as an un-solved problem in the whole country. And because of climate change, this problem will pose more challenge on urban planning and design in the future. So the society is asking urban planner and designer to look for more sustainable approaches to face water issues. So the approach developed in this project can also be applied in other cities with water problem. Besides, because this approach is cultural-socio-revised, it is also applicable for other European or American cities with relatively advanced water management experiences.

Fig. 1 Methodology Scheme
Source: Drawn by author

