

RESEARCH THE EXISTING

A typological interpretation of the architectural memory of the city

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Thesis "Research the existing"

I THE RESEARCH OF THE EXISTING

The Lecture Series of Research Methods gave me a deeper understanding of methods. The same method can be applied to multiple disciplines, and each discipline has different interpretations of the method. In terms of architectural discourse, through time, the methods can be changed following the role of architects, architectural theories and the spirit of the times. More essentially, research is closely related to design. They are both fundamental practices in architecture, and they cannot be isolated from each other. Among these, the most interesting notion to me is the multidisciplinary feature of one method. It is intriguing to see how one discipline adopts a method from another and develops the method differently.

The course made me aware of different ideologies behind the same method. The architects and researchers hold various positions when conducting the methods. I will integrate the notion into the process of my research. By understanding the social and cultural background of their projects, I can make a better choice which method I should take.

My studio is Urban Architecture, which studies medium-sized urban sites where we use architecture to fulfil the expectations of urban design. It means that we deal with issues related to both cities and buildings. The theme of our graduation studio is 'spolia', a term from archaeology. In architectural discourse, 'spolia' means the remnants of a building. It can be further referred to immaterial remains, such as motifs, styles, and even cultural expressions and lifestyles of inhabitants. The theme, 'spolia' indicates the general starting point of the approach of the research from an archaeological perspective. The general intention of the research in the studio was to explore what to keep for the design, which will be a launch in the next step.

The research was conducted by a group of five people. The site was in Anderlecht, Brussels. We chose to study one of the remnants on the site, the river Senne. The Senne existed since the emergence of the city. But it was primarily covered in 1867. The research was to investigate how the river influenced the development and history of the city or in other words, what was the valuable memory created by the river in architectural discourse. In response to the general position of the studio, the intention was to instruct how we can integrate the memory into the design.

The thesis aims to explore a typological approach to the remnants in the city from an architectural perspective but with an archaeological viewpoint mentioned. The research was centered around the relation between the river and the formation of the city in the past and current states. During the process, the research discussed what the essence of type was and what the type meant to architecture. The thesis will elaborate on the specific procedure and strategies during the research and compare the notions within theories and viewpoints in the development of typology. Finally, the thesis will reflect on the meaning of types and typology to the research and the position of the studio.

II TYPOLOGY AS THE METHOD AND METHODOLOGY

The research question was broken down into several sub-questions. The first one aimed to investigate the current state of the river. The context-led research started with an archaeological approach and case studies. The point we stood to conduct qualitative research was mostly from the view of the etc. We selected the cases according to the historical analysis of the river. At this point, we started classifying the remnants of the river and composed ideas of types. Afterwards, we visited Brussels and conducted fieldwork. During the process, we used photography to document our experiences and discoveries.

The following question aimed to investigate the relation between the river and the formation of the city. The objects were the elements in the city which were dictated by the river. Then we gradually moved from an archaeological point of view to an architectural point of view. The selection and classification of the cases were devised and enriched based on our study of literature concerning typology. During the process, several methods were involved, such as diagramming and mapping. After full preparations, we re-visited Brussels and conducted fieldwork. We observed and photographed the discoveries. After collecting the raw materials, we used the grid as a tool to help us to analyze the cases with the intention of abstracting types. The use of grids gradually evolved in our research (Fig. 1¹). Finally, in response to the general intention of the research, 'what to keep', we made prototypes of the types by model-making to address our conclusions (Fig. 2²). In the end, the

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research was concluded by an exhibition.

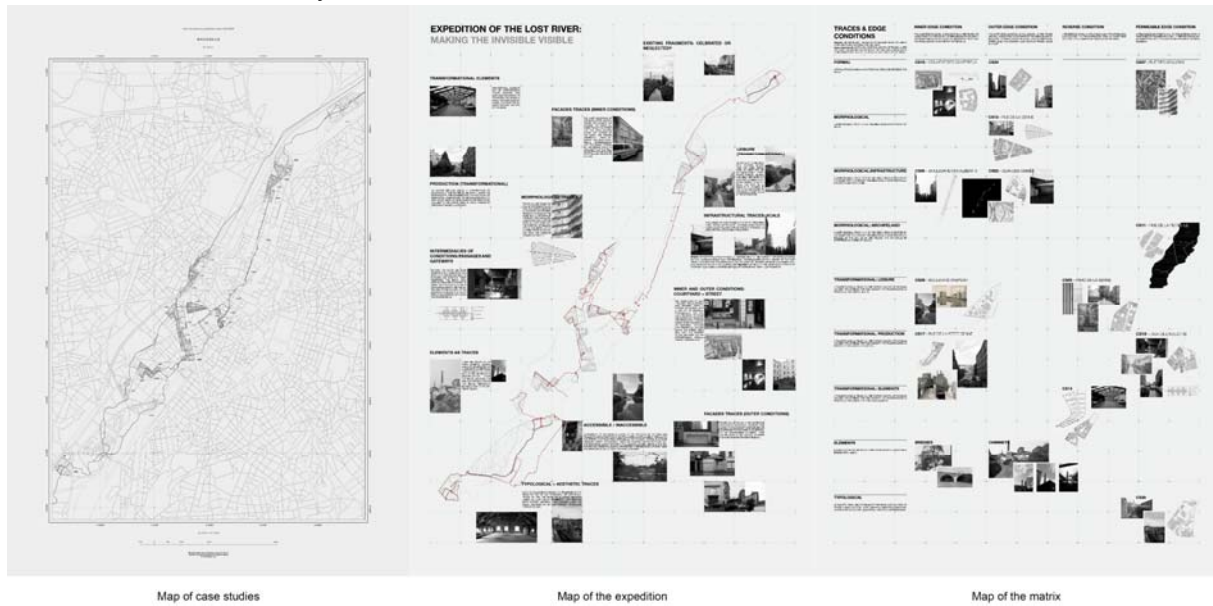


Figure 1 Map of case studies, map of the expedition, and map of the matrix



Figure 2 Photo of the model

I situate the whole approach of our research in the field of typology. Generally, typology is the study of types. In the archaeological area, typology is one of the most fundamental methods. Usually, archaeological research starts from classifying and comparing. Typology provides different systems of classification for archaeology to study the evolution of cultures and societies. The type in the archaeological context can be understood as a framework to describe things with similar characteristics.

Notwithstanding, typology in the architectural context is slightly different. Typology in the archaeological context focuses on whether the type can describe certain similar things while typology in the architectural context focuses more on the type itself and its influence on design. Alan Colquhoun mentions that whether the type is accepted by architects typology is a method to fill the gap between architecture and society.³ The notion claims that typology can help to relate the design and the existing by the research of understanding the existing. It is also the notion to start design according to the context. Moreover, Rafael Moneo states that to discuss typology in architecture is to talk about 'the nature of architecture'⁴. Typology in architectural discourse not only helps the perception of the existing but also reveals the architectural ideologies.

The reasons to choose typology as the method and methodology lie in two notions. Firstly, the starting point of our research was influenced by the archaeological perspective of the studio, which was to learn from the existing. Considering our research was conducted in the scope of the whole city, the existing situation required the understanding of enormous objects and information. At this time, typology offered a systematic framework to situate each problem. Secondly, the framework was only a description of the existing. Typology in architectural discourse could additionally abstract types reflecting on architectural principles, which suited the intention of our research to instruct design.

III THE HISTORY OF TYPOLOGY IN ARCHITECTURAL DISCOURSE

Typology is the study of types. The development of typology in architectural discourse was closely related to the debate about types. The history can be divided into three stages, the first typology during the Age of Enlightenment, the second during modernism and the third since postmodernism.

During the Age of Enlightenment, several French architects employed typology and listed several basic types of plans of classical buildings. But the concept of types was vague, and it was not until the 19th Century that Quatremère de Quincy gave a well-known description of types. Quincy clarified types from models. He addressed that the model was a concrete object while the type could not be mimicked or replicated. The type was the rule for the model, the principle within architecture⁵. The notion established the fundamental perception of types.

In the meanwhile, a French architect, Jean-Nicolas-Louis Durand published the first book concerning typology in architectural discourse. In the book, he juxtaposed the drawings of plans, sections and elevations related to architecture from different races and different periods. He concluded from principles of forms into reduced architectural elements: pilasters, walls and foundations⁶. Notably, Durand used grids not only to place the reduced elements derived from the existing buildings but also to deduce all possible compositions by filling in the blanks (Fig. 3⁷). In Durand's typology, he abstracted types from form and geometry of architecture and he promoted the practice of configuring types.

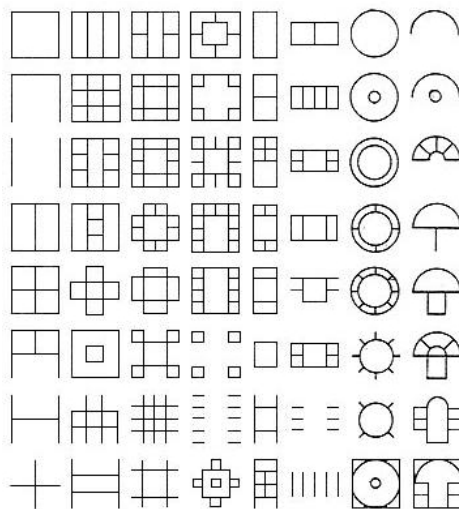


Figure 3 Chart by Durand

During the late 19th Century, the second typology emerged from modernism. After the Second Industrial Revolution, the whole society was immersed in the celebration of machines, which managed to fulfil the enormous needs of new dwellings after the war. During the time, one of the prevalent architectural ideology in modernism was standardization. The notion also influenced typology in architectural discourse. The architects proposed to design a standardized 'type' for mass production to solve the problem of the housing shortage⁸. Accordingly, types were replicated and productized. Considering the definition of models and types given by Quincy, the types in this era were the concrete objects to be copied rather than the intangible notions. They no longer served as the rule for models but exactly the models themselves.

During the 1960s, owing to the damage to the traditional cities by modernism, the third typology was presented by Neo-rationalism, one of the notions during postmodernism, aiming to revitalize traditional cities. The Neo-rationalists emphasized the continuity of history in the city. They argued against the detachment of architecture from traditional cities. Instead, they encouraged abstracting types by researching the relationship between architecture and the city and applying the types to new practices.

One of the representatives of Neo-rationalism was Aldo Rossi. His book, *The architecture of the City*, elaborated his ideologies of typology. He described the types as the irreducible core of architecture, which was essential and permanent⁹. In addition, Rossi considered the architecture as the constitutional elements of the city¹⁰. In this way, the type is no longer limited in the architecture per se but also revealed the relation between architecture and the city.

Rob Krier was another representative of Neo-rationalism. He was keen to study and revitalize traditional cities, and he considered streets and squares as the fundamental elements of traditional cities. In 1979, Krier published *Urban Typology*. In this book, he conducted a morphological analysis about the relation between streets and squares in traditional cities and concluded into multiple types. The types Krier proposed was regarded as the unchangeable rules for urban practices.¹¹

In Rafael Moneo's article in 1978, *On Typology*, he gave critical thinking about typology through a historical review. He doubted if typology was meaningful and argued that typology had meaning only if it allowed alteration and reflected on the current situation.¹² Moneo proposed the notion that the type should not be limited in the scope of history.

Steven Holl published two pamphlets with regards to typology. In 1980, he published *The Alphabetical City* which elucidated his typological and morphological research on the relation between architectural types and urban grids in the US. In 1982, Holl published *Rural and Urban House Types* which explicated the typological research concerning the repetitive elements in the houses and the relation between dwellings and the context. Holl's typology was influenced by Neo-rationalism. The two studies both revealed his concerns about the connection between architecture and urban space. But instead of researching the historical evolution of the city, Holl focused more on geometric relationship regarding urban grids. His typological research provided him with the fundamental perception of architecture and the city.¹³

In summary, the debate of typology throughout history mostly focused on the definition and content of types. Quincy first defined the type as the internal principle of architecture and clarified it from the model. Following Durand described it as a genre, something to be configured and the modernists used it as a model, something to be replicated. During the post-modernism, Rossi and Krier explained it as the permanent rules while Moneo and Holl inherited the notion that type revealed the principles of architecture and discarded the immortality of types. During the whole process, the discussion about types can be interpreted as the thoughts about the essence of architecture. Typology in architectural discourse can be considered as the way to perceive architecture but from a historical perspective. It is the method and methodology to research the essence of the existing buildings.

IV REFLECTION ON TYPES AND TYPOLOGY

The first position I take is the definition Rossi gives for types. His definition is influenced by Carl Jung's theory about archetypes. Jung explains archetypes as images deriving from the collective unconscious which can help to interpret the outside world¹⁴. Rossi develops the concept into the notion of the type in architecture. He believes there is the collective conscious within architecture which influences people's perception of the built environment. The collective unconscious is the product of the culture, history, memory and ways of life, and it is externally expressed by the form. He writes, "... a particular type was associated with a form and a way of life, although its specific shape varied widely from society to society."¹⁵

Rossi's theory helped to define what type could be in our research. Our research object, the river was the remnant of the city. The people in Brussels used to live and work along the river. Since the river was polluted, people covered the river and left only a tiny part of the river exposed. Currently, people no longer live by the river. In the beginning, the focus was on the waterscape of the existing parts of the river. But with the consideration of Rossi's notion, the core of the research object was not

the waterscape but the previous way of life against the river. The river was gone, as Rossi said, and was turned into memory¹⁶. Thus the type was no longer the functional classification of the exposed pieces but the principle revealing urban space which was dictated and created by the river. We regarded the space as the architectural memory of the city.

Although I agree with Rossi that the type reflects the culture, history and the way of life, I doubt the notion he proposes that the type is permanent.¹⁷ Rossi introduces his concept of an ideal city which is composed of the permanent types. He is accordingly criticized because his ideal city is not realistic and can only be placed in the idealistic context.¹⁸ The permanent feature of types is as unalterable as the feature of 'types' during the modernism, which reminds me of the common critique of typology. Moneo mentions the view against typology which describes types as 'frozen mechanism' that is unchangeable and repetitive. But he argues against the objectors that changes in cultures, techniques and activities can lead to changes in types. Additionally, the cliché in types could be altered and devised by architects when applied to practices, and new types should be created.¹⁹

Moneo's notion helped to define types in our research. Types, in this case, were considered as rules revealing relations, especially the relation between the river and the formation of certain form or function. In this way, the types were changeable and alterable.

At this time, typology is no longer limited in permanence but has to face the doubt of the necessity of the historical perspective. During the modernism, Walter Gropius precludes the history and claims that it is unnecessary to derive design from previous examples.²⁰ He raises the question about the meaning of typology. In contrast, Alan Colquhoun argues that applying types to design is a 'voluntary decision' but typology in research is a positive practice uncovering the existing issues. It is the architects' duty to confront the existing.²¹

The position of our studio is very similar to Colquhoun's notion. The theme 'spolia' reflects the concern about the current urban issues in traditional European cities. The gigantic industrial buildings and traditional housing are both the remnants of the development of the city. This is the existing situation. There should be more than one way to demolish all and build the new. In order to deal with the existing, it is necessary to get a good understanding and perception of what is there. In this case, typology is valued because of its elucidation of the existing.

In his *Edge of a city*, Steven Holl acted differently from *The Alphabetical City* and *Rural and Urban House Types*, and he focused less on typology. It might be because he realized the limitation of typology, which was the objective perspective.²² In our research, I also discovered a lack of sensitive experiencing. The approach we employed were mainly from the view of the etic. Therefore, in the final exhibition, the results including the maps, the matrix and the model all revealed a distance from the audiences (Fig. 4²³). Only the layers of photos partially reflected on the visual experience (Fig. 5²⁴). Consequently, in conclusion, typology provides a systematic analysis for the existing but it should be combined with approaches from the view of emic. Typology is suitable for the research closely related to the existing, and the choice of method and methodology should be based on the situation of the project.



Figure 4 Photo of the exhibition



Figure 5 Photo of the layers of the photos

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END NOTES:

- 1 Yanwen Zhu, Chenqi Zhang, Giacomo Schiesaro, Jack Bailey, and Pebbles Thijssen, *Map of case studies, map of the expedition, and map of the matrix*, (2019)
- 2 Yanwen Zhu, Chenqi Zhang, Giacomo Schiesaro, Jack Bailey, and Pebbles Thijssen, *Photo of the model*, (2019)
- 3 Alan Colquhoun, "Typology and Design Method," *Arena, Journal of the Architectural Association*, June (1967): 71-74
- 4 Rafael Moneo, "On Typology," *Oppositions*, no.13 (1978): 23
- 5 A. C. Quatremere de Quincy, *Dictionnaire Historique de l'Architecture* (Paris: 1832)
- 6 Jean-Nicolas-Louis Durand, *Recueil et parallèle des édifices de tout genre* (Paris: 1800)
- 7 Jean-Nicolas-Louis Durand, *Recueil et parallèle des édifices de tout genre* (Paris: 1800)
- 8 Yasemin Güney, "Type and Typology in Architectural Discourse," *BAÜ FBE Dergisi*, 9, 1 (2007): 10
- 9 Aldo Rossi, *The Architecture of the City* (Cambridge: MIT Press, 1982), 41
- 10 Aldo Rossi, *The Architecture of the City* (Cambridge: MIT Press, 1982), 29
- 11 Lijun Wang, "A Study on the Generalized Architectural Typology: A Typological Thinking and Analysis of Contemporary Western Architecture" (PhD diss, Tianjin University, 2002), 51-59
- 12 Rafael Moneo, "On Typology," *Oppositions*, no.13 (1978): 44
- 13 Yangtao Tang, "The Research of Architectural Thoughts and Works of Steven Holl since 21st Century" (Master thesis, South China University of Technology, 2015), 70-76
- 14 "Jungian archetypes," Wikipedia, accessed December 10, 2019, https://en.wikipedia.org/wiki/Jungian_archetypes
- 15 Aldo Rossi, *The Architecture of the City* (Cambridge: MIT Press, 1982), 40
- 16 Aldo Rossi, *The Architecture of the City* (Cambridge: MIT Press, 1982), 46-48
- 17 Aldo Rossi, *The Architecture of the City* (Cambridge: MIT Press, 1982), 40
- 18 Rafael Moneo, "On Typology," *Oppositions*, no.13 (1978): 37
- 19 Rafael Moneo, "On Typology," *Oppositions*, no.13 (1978): 23-24
- 20 Walter Gropius, *Scope of Total Architecture* (New York: Collier Books, 1955)
- 21 Alan Colquhoun, "Typology and Design Method," *Arena, Journal of the Architectural Association*, June (1967): 73-74
- 22 Yangtao Tang, "The Research of Architectural Thoughts and Works of Steven Holl since 21st Century" (Master thesis, South China University of Technology, 2015), 85
- 23 Yanwen Zhu, *Photo of the expedition*, (2019)
- 24 Yanwen Zhu, *Photo of the layers of the photos*, (2019)

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