

REFLECTION ON PRAXEOLOGY AND TYPOLOGY RESEARCH METHODS
Praxeological and typological research of public interior

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Thesis "City Hall"

I INTRODUCTION

In *Planning for Diversity and Choice*, Anderson Stanford claimed: "The architect's problem is not how to found his knowledge positively but how to make his knowledge grow."¹ As theoretical tools for the research process, methodologies play an essential role in our graduation project. After the course of the research method, I have learned a lot of research approaches to help the process of my graduation project. The main intention of this paper is to demonstrate what methodologies I chose to guide the research and design process of my graduation project. From the lecture, I was intrigued by the interdisciplinary application of methodologies and the collaboration within different analytical tools, which provided more possibilities for the design process. Besides, the combination of methods to invest the city in various aspects let me open my eyes to the research process. The methodology can guide not only the research process but also the design process because design and research are reciprocating processes.

The Interior Building Cities studio focuses on the complex political background of Brussels. The existing administrative centre does not meet the demands of 1700 employees anymore; a new city hall is going to be built on a vast site which was an enormous parking building in the city centre. One of the core issues of our studio is how to involve 1700 staff and citizens into this new building? To answer this question, it is essential to understand the existing social patterns of Brussels and to study the characters of the political space itself. To have an in-depth knowledge of social structure, the researches of political events that happened in the city is necessary, which could be seen as a reflection of praxeology. For the exploration process of political space itself, we analyzed the civic spaces in different periods and different social backgrounds and combined model making as a tool with typology research methods.

The ICMA *Declaration of Ideals* calls for citizen involvement (ICMA, 1999). "The goal is for citizens to have an active role in the process and not just be passive consumers of government services."² The public engagement is a fundamental part of political affairs. Based on the concern and my interest, my research question is about how different social organizations affect the decision-making process of the authority agencies, and how citizens could be involved in an administrative building democratically in the coming decades. The general method of Interior Building Cities studio is model making, which is helpful in terms of the research of political space on different scales.

II RESEARCH-METHODOLOGICAL DISCUSSION

In *The Production of Space*, Henri Lefebvre argues that "space is a social product or a complex social construction (based on values, and the social production of meanings) which affects spatial practices and perceptions."¹ The expression of space is closely related to the current social and political situation. The spatial configuration of a city represents the social reality of this city over the years; social structure and urban space are growing interdependence. The research of social fabric and the urban area should complement each other, so the investigations about these two aspects should also combine to come to a conclusion. Thus, to answer my research question, my research is mainly divided into two points: political structure and spatial study. In the research process, I intend to combine praxeology and typology methodologies, and use tools like analytical drawing, model making and case study, etc. As Lucas (2016, p. 14) writes: "Theoretically led studies are most often cross-disciplinary, borrowing their theory from fields such as philosophy, social sciences or politics." I am willing to have a theory-led research process. With the supplement of social science and political knowledge, I could have a more comprehensive understanding of political space.

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First of all, we want to interpret the social pattern of Brussels. As the staple-basic elements of political structure, the collective behaviours of each citizen may exert an effect on Brussels' social image. Therefore as a methodology concern about human actions, the praxeological research will help us think about the social relationship within different social groups. During our field trip, by using the methods of praxeology, we observed the human behaviours in some essential public spaces and neighbourhoods around the site by using analytic tools such as drawing and photographing. This process can be seen as an etic view of observation. While in *Research Methods for Architecture*, Lucas writes: "Fuller immersion in a culture avoids detachment from the fact on the ground and a more immediate engagement with people and their lives."³ To experience how do political events organize and happen in urban space, we took part in the Climate Strike in Den Haag in September which could be considered as an emic view as well as a powerful local engagement tool. To have a better understanding of the mechanism of political participation, we interviewed 11 organizers of activism groups in Brussels. After the interview, we made axonometric drawings for each activism event to reproduce the scenes. The illustrations we made with different behaviours could be view as the qualitative research within the epistemic framework of praxeology since I considered this process is subjective. They are the tools to study the relationship between the bottom-up political actions and urban environment. Qualitative research has a role to play, particularly within the humanities-based study in architecture.⁴ During this research, praxeology methodology provides a robust theoretical basis for clarifying the social relationship between public, city participants and politicians, which provides an instructional principle for the design stage.

Secondly, we should study the space where political events take place. In *The Pnyx and The Agora*, Richard Sennett mentioned that two types of political decision-making places, Pnyx and agora are proposed by traditional urban planning. Pnyx is a civic amphitheatre where the public can debate equally and make significant decisions. Agora is a square composed of a series of constructions in which formal and informal political activities take place simultaneously. Subsequent political venues can be seen as the development of these two original prototypes. In the research process, we classified the different scales of political precedents chronologically, from the early forms of initial political discussion to the municipal plazas in Medieval Italy, to the civic buildings in the 20th century. Then we research the space itself in terms of atmosphere and the interaction between user and space. I regarded model making as well as the typology methodology with the study of the prototype as essential instruments. Besides, the study of material also contributes to the spatial atmosphere. As Eireen Schreurs introduced in the lecture, material literacy represent in multiple aspects such as technic, aesthetic and sensory quality.⁵

III RESEARCH-METHODOLOGICAL REFLECTION*

Louis Bourdeau, a French author of a classification of the sciences, invented the term "Praxeology" in his *Théorie des sciences: Plan de Science intégrale* in 1882. He suggested that since in many pieces of research, the human is always the essence of the research object, these researches involve multidisciplinary fields such as psychology, history, and politics, etc. These parts that related to humanity in every area should be combined to create a new discipline so that Praxeology was named. Therefore, praxeology and other subjects are inseparable. Louis Bourdeau revealed that human being is the main object of the praxeological study. Since architecture is design for the human being, praxeology is indispensable for the architectural research process. Basically, the praxeology research method focus on the fact that behaviour occurs rather than why an action occurs. In turn, praxeology methodology could be applied to the field of economics, psychology, and architecture. In the architectural profession, the praxeology methodology could help us research the relationship between human actions and space.

Japanese architects Yoshiharu Tsukamoto and Momoyo Kaijima, the partners of Atelier Bow-Wow, have great achievements in the research of praxeology and spatial experience. They regarded humans, nature, and construction as the most important three elements of their research process.

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They think human behaviour directly affects the physical distance between people. Observation, interviewing, and questionnaire methods were the main tools in their research process. They observe the interaction between people and how diverse groups of people share public space by visiting the open space of different cities. Their main methods are to meet, observe and communicate with people directly, and collect general ideas through municipal investigation. In some cases, they organized workshops to invite people to participate in collecting information. For example, in the design of Kitamoto station, through the field study of the early stage, they observed that young people always gather here. And from the results of the questionnaire, local people have strong willings to hold events such as performances or market here. They call these observations "seeds of behaviour", and they provide space for these seeds to germinate in the design process. In this way, the research of human behaviours provides materials for their following design and makes them rethink how to make people use public space actively. The directly contacts to research objects is a powerful way to collect the information in terms of public opinion. It could provide material for designing a democratic building.

The relationship between typology and architecture can be dated back to the first century BC when Vitruvius made the analogy between components of architecture and personality types of humans. He analyzed three types of temples which were derived from imitating the personality of humans: Doric temple, Ionic temple, and Corinthian temple. Based on these three types of temples, he set up the architectural typology. At the end of the eighteenth century, Quatremère de Quincy claimed that: "The word 'type' presents less the image of a thing to copy or imitate completely than the idea of an element which thought itself to serve as a rule for the model."⁶ In *The Architecture of the City*, Rossi said: "Typology is an element that plays its own role in constituting form; it is a constant. The problem is to discern the modalities within which it operates and its effective value."⁷ One of the most meaningful purposes of typology methodology is to discover universal principles of architecture. The architecture reflects the original context of the city, that is, architecture is a "new" product used to express the characteristics of particular times, but it follows the principle of "old" that developed by typology study.

Two important architects of Neo-rationalism from Luxembourg, Leon Krier and Robert Krier, their research focused on how to introduce the traditional urban forms into modern cities. They want to define the concept of urban space without aesthetic decoration and only discuss the spatial composition. Therefore, the primary type of urban space is divided into two elements which are streets and squares. The square is divided into triangles, circles, squares, etc. And their diverse combinations with streets will produce different urban forms. The interior space of buildings can also be classified with the same principle. For example, forms of plan can be divided into square, triangle, circle, other compound forms, and amorphous forms. The combination modes of spaces include penetration, bucking, breaking, and so on. Based on the typological research, Leon Krier and Robert Krier generalized dozens of types of urban space, which can be used as permanent bases of subsequent urban design. (Fig.1) The 'type' mentioned by de Quincy provides plenty of variations for architects to design. In my research process, it is essential to study the types of political architectures and the historical development of prototypes.

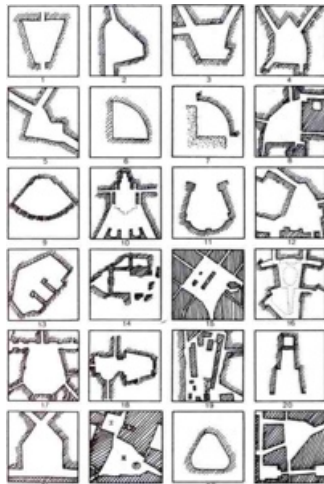


Fig 1: "squares" and "streets" by Robert Krier

Retrieved December 8, 2019 from <http://architectureandurbanism.blogspot.com/2013/01/rob-krier-urban-space-1979.html>.

IV POSITIONING

Based on the discussion above, the issue I want to explore further is under the background of the complex regime in Brussels, how to let the public activities spontaneously extend to the city hall, and how to design a space for all kind of voice. According to previous research, I'm going to design a city hall, where people could have political discourses. In this building, citizens could have a conversation with politicians, and formal and informal events may happen simultaneously. The research of praxeology can interpret the social pattern and human behaviour into political space. And typology research can help with the inspiration of the prototype study, which arouses new possibilities for the design process. My position is that designing a city hall for the public is not purely a spatial practice. It is also about the political engagement of people and the spatial atmosphere of civic space. To achieve my research goal, I selected and combined the methodologies critically rather than completely follow the way of methodological theories.

For the anthropic aspect, in order to develop a democratic city hall, the conscious and unconscious wills of people who use this building are the core elements. In the lecture, M. Berkers mentioned "unstructured participant observation", which is the method I want to adopt in my research. Besides, street observation is a helpful research method.

In the case of "Under the Banner of Street Observation" organized by Japan architect Terunobu Fujimori, the observer documented every detail of the static objects on the street such as manhole covers, fire hydrants, and building fragments. (Fig.2) And they used sketches, photographs, and writing as tools. While in my opinion, their research focuses exclusively on objects rather than the relationship of their user. In my research, I will also adopt the street observation method but focus more on the interactive behaviours between people and urban space. During the field trip in Brussels, we documented the essential public space of the neighbourhood around the site, using the tools of photographing, mapping, and writing to observe how citizens use the open space spontaneously. After that, we use the typology methodology to classify the urban space and conclude what kind of public space citizens are more willing to participate in, and what behaviours constitute the "public image" of Brussels. From my point of view, the spontaneous behaviour of citizens is unusual, unstructured participation. These behaviours result entirely from the existing urban space and public wishes. As the praxeology method of Atelier Bow-Wow mentioned above, these behaviours in urban space are seeds that provide the potential for the design phase.



Fig 2: Details drawing of street observation
 Retrieved December 8, 2019 from <http://forty-five.com/papers/154>.

For the spatial aspect, we researched political space itself. We employed the methodology of typology and combined the tool of case-studies to research the civic place from ancient Greece to the 20th century. For example, from the Agora of ancient Greek, there are many prototypical spaces such as Stoa and Tholo. For Quatremère de Quincy, 'type' takes charge of the rule for the subsequent development. To explore the interior atmosphere of political space, I chose foyer as a prototypical space as my statement of political space, considering that the foyer is the place able to trigger the communication between the different realm. Taking the foyer as a prototype, I made three different models to test the impact of different materials, proportions, and scales. Besides, I did not merely use typology methods but also combine the previous praxeological research, since political buildings could be regarded as containers of human actions and perceptions.

To sum up, the follow-up design process can not separate from the research process, and for our graduation project, these two phases always reciprocate to each other. Thus, it is necessary to combine different methodologies and tools; these guiding tools and methods provide a more rational basis for my design. Based on the conclusions of the research on praxeology and typology, I will like to discuss further how to involve citizens in the administration building and create a democratic and transparent space for political debate.

END NOTES:

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