

NEW YORK MIDTOWN SITE RESEARCH REFLECTION

Student

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Thesis "Sustainable Consumerism"

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I INTRODUCTION

Research is essential to architectural design process because of the very complex nature of the discipline: architecture is an ever-updating body of knowledge about the way we use space, the way to shape the world that we dwell and occupy¹. Research, according to James Snyder's commonly accepted definition, is "systematic inquiry directed toward the creation of knowledge."² There are two key aspects about research: first, it needs to be conducted in a systematic way, that means the researcher should have an articulated intention and a specific way to categorize, analyze and present the results; second, the ultimate aim of conducting a research is never to be completely inclusive. Research is by nature a reduction of the information collected through a set of criteria³.

The systematic and reductionist characteristics of research demonstrate the importance of adopting or developing specific research methods. Methodology could be defined, according to Abraham Kaplan, as "the study of the process, rather than the product, of inquiry."⁴ A research method is the articulation of the process of inquiry being abstracted and summarized into a systematic tool that is applicable in different scenarios.

In the lecture series of research methods I was introduced with different architectural research, which are all supported with theoretical readings and specific case studies. Different methods provide different perspectives and approaches to architectural design, and each method has its own strength and also limitations. I am mostly fascinated by the content about praxeology, the study of human actions and conduct in space. For many of my previous design projects I tried to start with thinking about the actual users of the space, but I always ended up using more assumptions instead of any systematic measurements to approach the design. My thesis project locates in New York City, and during our fieldtrip there I made both structured interviews to the local residents, and unstructured observation on the site documented in the form of photos and videos. However, our trip was short and the site is not accessible anymore since we are back. Because of this limitation, I did not adopt praxeological approach as the main research method in the current stage of my thesis project. I may further my investigation in praxeological approach once I finalize the specific architectural program of the project.

The thesis project is conducted under the chair of Complex Project. The site locates in Midtown Manhattan, one of the most densified urban areas in the world. The explosion of human densities, the progressing new technologies and the strong economic forces that drive the whole city's development results in the complex nature of Manhattan, the place described by Rem Koolhaas as "the arena for the terminal stage of Western civilization."⁵ The ultimate goal of research is to build and expand our knowledge, both on the unfamiliar site itself and the current architectural discourse we engage. Research conducted in the first phase of the project is to identify and articulate urban issues, and later to propose architectural solutions.

After a comprehensive group research on the site's current conditions, I developed my personal fascination on the effects of consumerism culture, which is well-demonstrated on the city's image as a shopping paradise, especially along the prestigious shopping corridor 5th Avenue. My main research question is: how to make consumerism economically, socially and environmentally sustainable? Due to the current progress, methodological discussions below will mainly address on my (group-)research to find the issue and to build this question, with some ideas about how I search for the answer.

¹ Lucas, Ray. *Research Methods for Architecture*. London: Laurence King Publishing, 2016

² Snyder, James C. *Architectural research*. Van Nostrand Reinhold, 1984.

³ Groat, Linda N., and David Wang. *Architectural research methods*. John Wiley & Sons, 2013.

⁴ Kaplan, Abraham. *The conduct of inquiry: Methodology for behavioural science*. Routledge, 2017.

⁵ Koolhaas, Rem. *Delirious New York: a retroactive manifesto for Manhattan*. The Monacelli Press, LLC, 2014.

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II RESEARCH-METHODOLOGICAL DISCUSSION

The first phase of the research is conducted in the form of exploratory and comprehensive context-led research on Midtown Northeast Manhattan, with the aim of finding issues and problems specific to the site. Worked as a group, we investigate the site through collecting, analyzing and presenting information under 6 main topics: history, demography, real estate, mobility, public space and ecology. The expected product for the first phase of the research is a problem statement, which is the base for developing individual research question.

In this phase we adopt a combination of quantitative and qualitative research methods, while quantitative method is more dominant. Research findings are mainly in the form of hard data: population, density, land price etc. The number itself does not make sense until it is interpreted: to be analyzed and translated into words or visual language, from which meaningful conclusions could be drawn. As architecture students, we believe visualization is a key analytical process that translates the data to comprehensible information.

The two main analytical tools we adopted are mapping and modeling. Mapping presents the spatialization of data, which also gives a sense of scale and illustrates the border conditions⁶. Moreover, by overlapping different maps, correlations between different sets of data are revealed (for example, the map of residents' average age per block and the map of average rent per block), which give new information about the site. Modeling is useful as a realistic representation. By making a 1:1000 site model, we are able to observe the volumetric compositions of the built environment of our site from various point of view. This is also helpful considering the studied area is as big as the whole Midtown Manhattan, such a site model as well as scaled maps gives us a zoomed-out overview of the whole site, from which scale certain patterns start to emerge.



Figure 1. Map of vacant shopfront in Midtown Northeast, 2019

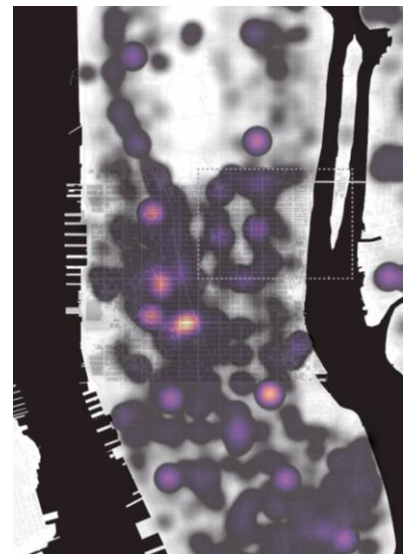


Figure 2. Crime Occurrence in Manhattan, 2018

Under the chair of Complex Studio students are encouraged to demonstrate strong logic and reasonings to support their design proposals. The design proposal should come from a convincing narrative, where subjectivity should be mostly avoided. This very rejection on subjectivity sets on the ontological belief that there is an objective reality exist, and the rationalist epistemological framework focusing on the objective reality and solid reasons. Therefore etic research, where researchers take the view of an objective observer, is the main approach. Under this framework, quantitative research is

⁶ Lucas, Ray. 2016. *Research Methods for Architecture*. London: Laurence King Publishing.

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the dominant method. Concrete conclusions drawn from reliable hard data collected through quantitative researches provide solid reasoning and strong support to the design argument.

Qualitative research from an emic perspective in the form of interviews and site tour was also conducted. Interviews to the local residents in our site informs daily experience within the site, fieldtrip enables us to develop a subjective perception on the site. As the fieldtrip was scheduled after the initial research on the site, qualitative research on site was taken to further test our conclusions drawn from the previous quantitative research.

The chair of complex project focuses on the complexity of reality, which concerns a range of different fields besides architecture. The chair addresses on the fact that architecture covers a variety of fields seems to be without boundaries, and that architects always practice in the framework of a societal context that is shaped by cultural, economical and political forces⁷. Therefore interdisciplinary is also a key feature of the current phase of research. The above mentioned 6 research topics cover a variety range of disciplines, from urbanism to marketing to ecology. My own research on my question also concerns retail business and sociology. Knowledge on those fields are gained and expanded through literature review, online lectures and also by consulting related professionals. Many of the problems we identified through research cannot be solved only through architectural means, for example retail vacancies, but requires a holistic solution that incorporates an alternative business model or even a new governmental policy. The interdisciplinary approach is crucial and necessary for understanding the complexity of the selected site. The result is a comprehensive set of knowledge, as a base for possible architectural solution that targets wicked problems.

III RESEARCH-METHODOLOGICAL REFLECTION

The overarching research philosophy under the chair of complex studio is mainly Positivist. Positivism is defined as the ontological position based on the assumption of an absolutely objective reality exists and could be described and measured. This philosophical theory was first introduced by French philosopher Auguste Comte in 1830s. The positivist research is base on the belief that science is derived from the explanation and the prediction of observable events⁸. In architectural research, Positivistic approaches are founded under the premise that the study of human behavior and the built environment should be conducted in the same method as in the natural Sciences⁹.

From 20th century positivism has received lots of critiques, mainly for being reductionist. Postpositivism takes stance of a more nuanced belief that the objective reality exists, but can only be known within some level of "probability". Postpositivism perceives objectivity as a legitimate goal that may only be partly realized.¹⁰ In most of the cases, architectural design is usually perceived more as an art than as a science. The soft and subjective nature of developing an architectural concept makes it very difficult to impose strict and scientific research methods. However, despite architectural decision-making is usually qualitative, being supported with quantitative methods demonstrates measurable qualities makes a concept more reasonable and convincing¹¹.

Bjarke Ingels Groups have many architectural projects generated from postpositivist research: they believe that the existing condition is full of forces that could inform design decisions, and data reflects

⁷ Kaan, Kees. "Time puts everything in place." *Domus* issue 983 (2014).

⁸ Kinghelo, J. "Teachers as researchers: Qualitative inquiry as a path to empowerment." London: Falmer, 1991.

⁹ Collis, Jill, and Roger Hussey. *Business research: A practical guide for undergraduate and postgraduate students*. Macmillan International Higher Education, 2013.

¹⁰ Groat, Linda N., and David Wang. *Architectural research methods*. John Wiley & Sons, 2013.

¹¹ Larses, Ola. "3.1. 3 Applying quantitative methods for architecture design of embedded automotive systems." In *INCOSE International Symposium*, vol. 15, no. 1, pp. 398-408. 2005.

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the reality are crucial input parameters for architecture¹². In many of their projects analytical tools of mapping, diagramming and modeling are used as methods for both researching and presenting. With the support of well visualized hard data that informs the issue, they create convincing narrative that is comprehensible to the client as well as the public.

The chair of complex studio encourages students to develop a comprehensive understanding of the complex urban mechanism as a pre-request for proposing a project. Unlike other design studios where students work with a pre-determined design brief with specific targeted issues and programmatic requirements, students from complex project are challenged with the task to first identify and articulate the issues from the complex urbanism, and eventually to build a strong narrative and define the design brief themselves. Therefore, in the first phases of the thesis project, researches are conducted with the goal to find urgent urban problems. Students are encouraged to leave out the architectural/formal thinking in the initial stage of the research. After the issue is articulated in the form of a problem statement which lead to a related research question, students will shift their research focus to finding the proper architectural programs as response to the issue. The whole process deals completely with the site and the program, typical architectural discourse concerning space and experience comes in the next phase. Therefore, I find the research so far is more like sociological research than typical architectural one. Much of the research result is structured to prove a hypothesis, or to reinforce an argument, which are eventually for building a strong design narrative. And in this specific project locates in the very financial-driven city of New York, students are even encouraged to sometime adopt the perspective of a developer, rather than an architect. As we enter the design process in the next phase, we will start to take different method: emic research for spatial investigation combined with design-as-research will become more dominant.

IV POSITIONING

The etic research approach of being an objective observer, as well as quantitative research which I adopted most in the initial problem finding stage, are under the premise that there is an objective reality, the ontological assumption of realism and the epistemological assumption of rationalism. This is also my personal architectural position. Architectural position is a set of belief systems that an architect uses to produce and express architecture¹³. Realism is the belief that objectivity exists in reality, that objects are ontologically independent of people's subjective perceptions¹⁴. Rationalism is also borrowed from the field of philosophy, which is an explicit epistemological belief that reason is the chief source and test of knowledge, and there exists a class of truths that can be grasped directly¹⁵. This is posed as the opposite to empiricism, the belief that all knowledge originates from individual experience¹⁶. In the field of architecture, empiricism is the position that is more open to unspecified influences and random intuitions than being guided by a set of pre-determined rules¹⁷.

Hungarian philosopher Imre Lakatos made a substantial contribution to the analysis of a position. He attributes the essence of a position to a hard core of inviolable statements which are not open to questioning or to revision by the author. He also addresses that position needs regulations, which he summarized as positive heuristic for guidance and direction, and negative heuristic for the purpose of

¹² Capps, Kriston. "Architecture That's Part Space Opera, Part Science", 2015. Retrieved from <https://www.citylab.com/design/2015/01/surveying-the-sci-fi-architecture-of-the-bjarke-ingels-group/384827/>

¹³ Landau, Royston. "Notes on the concept of an architectural position." AA Files 1 (1981): 111-114.

¹⁴ Britannica definition of realism, retrieved from <https://www.britannica.com/topic/realism-philosophy>

¹⁵ Britannica definition of rationalism, retrieved from <https://www.britannica.com/topic/rationalism>

¹⁶ Britannica definition of empiricism, retrieved from <https://www.britannica.com/topic/empiricism>

¹⁷ Landau, Royston. "Notes on the concept of an architectural position." AA Files 1 (1981): 111-114.

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rejection¹⁸. Architects use more positive heuristics as design instruments, be it formal rules, technological rules or economic rules.

In this thesis project, through comprehensive quantitative research we, as a group, sorted out certain problems and visions to our site, which the positive heuristics we set to ourselves and try to work with. The realities that is reflected through our research outcome is the inviolable hard core in our position. The hard data we collected and visualized, as well as the concrete conclusions we generated, provide a base for our design exploration in the later phase, also prevent us from subjectivity and randomness.

However, architecture is eventually not natural science, and absolute objectivity is impossible and not necessary. What is more, architecture is eventually occupied by people, and experience with architecture is eventually subject to personal interpretation. Therefore most of architectural practices are set within a combination Rationalism and Empiricism framework, using both positivist and phenomenological approaches, and architecture always appears to be a result of both rational deduction and subjective creation. Therefore I would define my architectural position as mostly rationalism, but also with room for subjectivity and intuitions.

This dualism also responds to the guiding pedagogy of complex project studio, that students should be able to work with real world issues and constraints to produce convincing design proposal, at the same time enjoy the maximum freedom to bravely define their own architectural programs as long as they are supported with solid reasons.

¹⁸ Landau, Royston. "Notes on the concept of an architectural position." AA Files 1 (1981): 111-114.

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