

THE OBJECT VERSUS ITS OBJECTIVITY

Assessment of homogeneity of building stock in NYC Midtown.

Student

Yde Engelsma (4810902)

Chair

Complex Projects, led by Kees Kaan

Title

Diversity in Midtown

1 INTRODUCING THE RESEARCH AND ITS METHODOLOGY

Introducing the research topic and the general definition of the research methodology.

1.1 MOTIVATION

The reason why I chose the Complex Projects studio for my graduation, was mainly because of its research location; Midtown Manhattan. I've visited New York City before and felt overwhelmed by the seemingly endless variations of block developments. If there was a place where anything was possible, it would be here, as long as there was a will to do it.

There are many interesting stories to find about the forces which allowed for the increasing congestion of the city. As an example, the documentary *Gateways to New York* (2019), is themed around the increasing need for bridges to Manhattan in the first part of the 20th century. The enormous funds and resources used for these structures typified the will to congest. Furthermore, it exposed the uncertainties about how Manhattan would develop itself.

Rem Koolhaas introduced the term 'Manhattanism' in his book *Delirious New York* (1994). For me, Manhattanism confirms a lot of my conceptions about new York:

"Manhattanism is the one urbanistic ideology that has fed, from its conception, on the splendors and miseries of the metropolitan condition—hyper-density—without once losing faith in it as the basis for a desirable modern culture. Manhattan's architecture is a paradigm for the exploitation of congestion."

1.3 FACINATION & RESEARCH QUESTION

Midtown has been divided into four distinct research sites, distributed to groups with eight to ten students. The site of my group is located in the south-east partition. It's bordered by the New York Public Library to the Flat iron Building along the 5th avenue, moving all the way to the East River. We have presented our site as "Empire Village". The name is derived from the metropolitan qualities of the area, whilst the greater part has a strong residential character.

My fascination for the immense variety of block developments and their typologies lead me to do research for my personal- and group work. After reading *The life and death of great American cities*, by Jane Jacobs, awareness grew that diversity of the built environment is often the source or consequence of other forms diversity (e.g. cultural or economical). The read also emphasized the importance of diversity for livability in metropolitan areas. This had led me to the following research question: *"How can homogeneous areas in the site be activated by interventions in the built environment, respecting the quality of typological diversity of blocks and future plans of development?"*

1.2 RESEARCH METHOD

In this paper, the methodology for the conducted research will be distinguished as clinical research, where a hybrid form of quantitative and qualitative approaches are used. Elaborating on this methodology will be the main topic. Furthermore, the methodology will be related to the approach of the Complex Studio Chair. This approach is "product based design development", described in the syllabus as:

"Product based design development is a design method being used in Complex Projects. By having strictly defined deliverables, with the dense schedule, students are encouraged to constantly produce but develop design in parallel. In this way, the design progress and the final products are much more integrated, but even more important, deliverables are used as a mean to develop, explore and test design."

2 TRAJECTORY AND ITS CHARACTERISTICS

Defining the research trajectory, the products and discussing the generated results.

2.1 RESEARCH BUILD UP

the “Complex way-of-working”, demanded a product based approach, meaning research would be presentable to a wide audience and requiring the integration of rough data and conclusions. After the P1 presentations, there was a personal need to see how to continue with the presented presumptions of the site. Figure 1 shows a layered scheme, made to visualize the prevalent research goals in order to converge raw data into, ultimately, a design brief in P2. Layers discussed this paper are highlighted; layer 1. Delimitations and layer 2. Presumptions about Empire Village - since the presumptions could be verified by layer 3. a site visit. The latter confirmed the viability of the used research method.

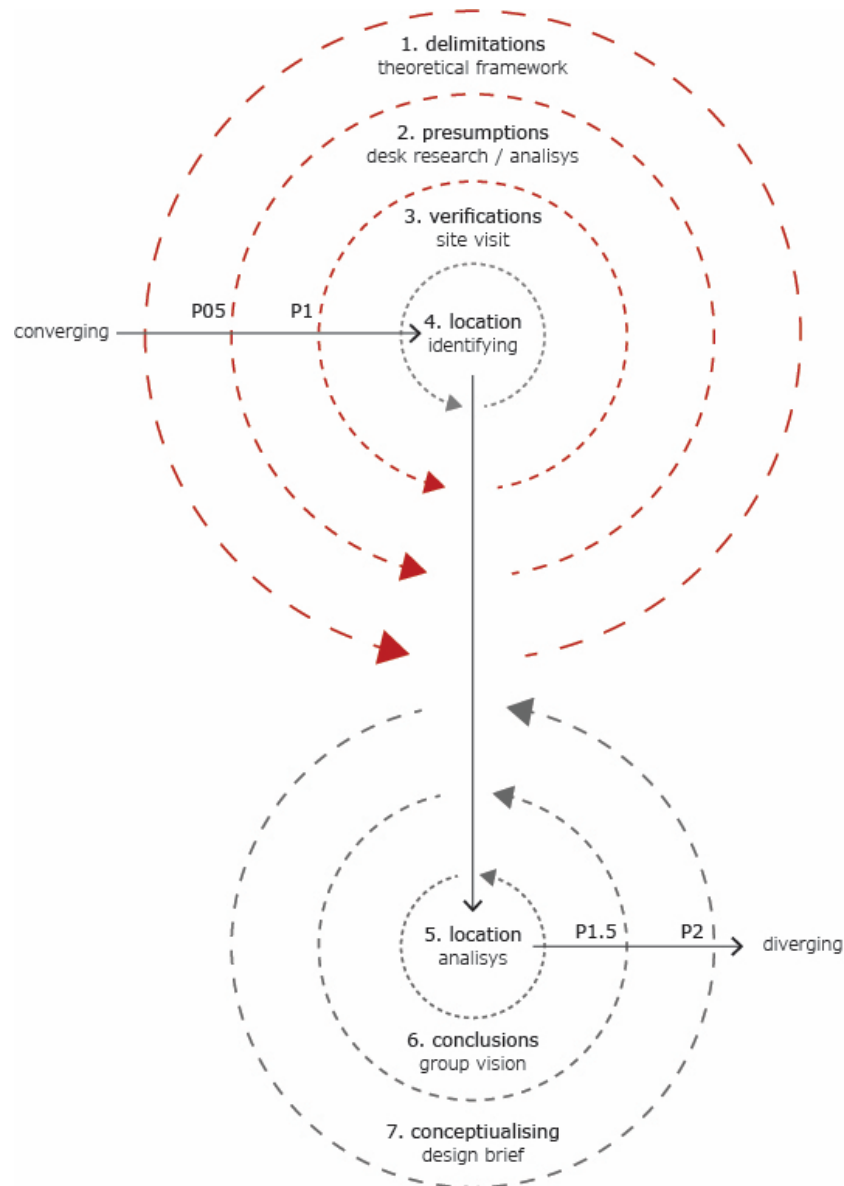


Figure 1: Layered diagram of the expected research trajectory in MSc3.

2.2 PRODUCTS OF THE RESEARCH METHOD

The commencement of the research trajectory started by our group making a 1:1000 site model of Empire Village. This was followed up by me trying to figure out the typological character of the neighborhoods. This resulted in making drawings of “average blocks” per neighborhood. After understanding historical and functional developments of the grid - researched from national to district level – and seeing a clear gap in movement flows, I was able to zoom in on a potential homogeneous area. This area was analyzed by a bottom up approach, where the theories of Jane Jacobs were used to guide the findings into presumptions. In figure 2 the trajectory of the created products is more defined.

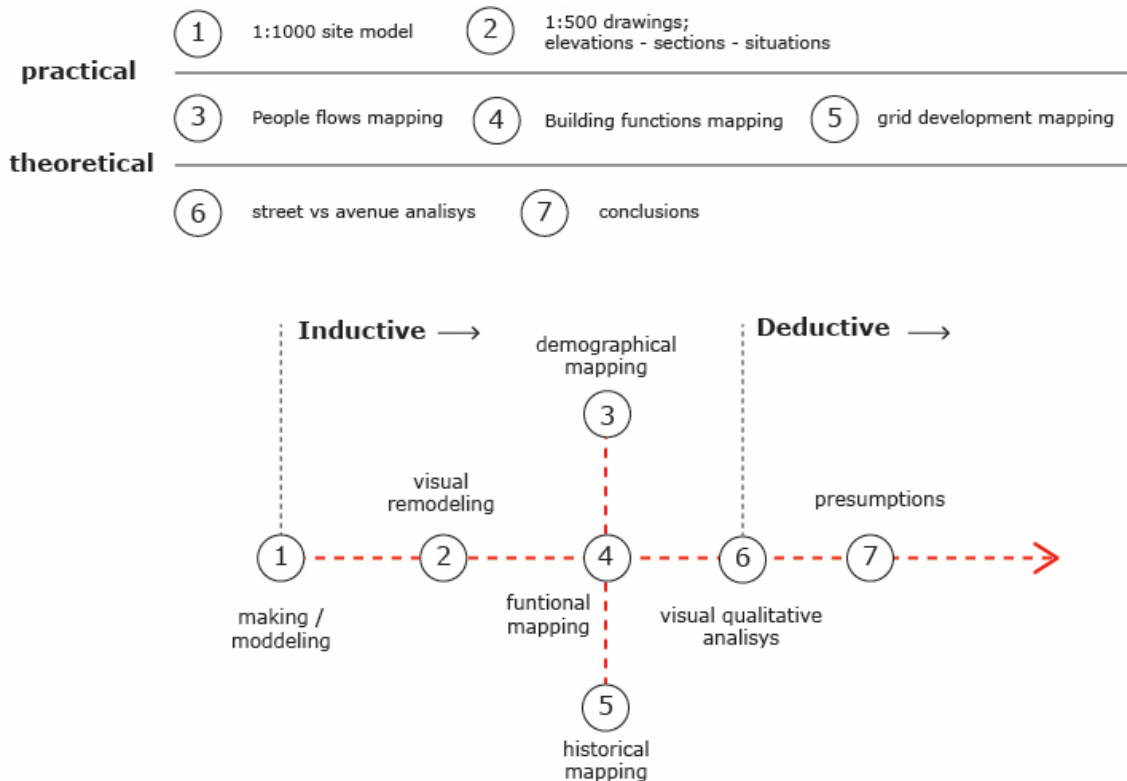


Figure 2: Overview of products made for the P1 presentations.

2.3 DISCUSSING THE HEURISTICAL APPROACH

In order to start a discussion about my research trajectory, its heuristics have to be defined.

The heuristics of my product based approach can be signified by comparing it with the theory of Archaeological heuristics by Michel Foucault. Heuristics are studies to discover or learn something involving a practical manner of working. In Foucault's book, *Archaeology of Knowledge*, heuristics were taxonomized in research approaches to:

1. Attribute where innovations lie;
2. Analyze contradictions;
3. Make comparative descriptions;
4. Map transformations.

(Landau, R. 1981)

THE OBJECT VERSUS ITS OBJECTIVITY

All of the above aspects are about issues of difference, and the goal to introduce order. This conception runs parallel with my personal fascination of how block developments work and the attempt to characterize the diversity of the built environment in the Empire Village site.

Whereas the systematical approach seemed to have merit in order to understand the built environment, the method is proven to have certain shortcomings. In Landau's article; *An architectural Position*, the heuristics of Foucault are criticized; Landau states that the systematical research methods treat the whole field of evidence as a distorted whole to which order must be introduced. While the individual is creating a well-rounded story, he/she ignores or neglects evidence. The method doesn't accept that history will always be full of inconsistencies and disruptions.

The above conceptions about systematics in research methodologies versus my research trajectory shows interesting dichotomies to discuss. To be more precise, the example of the visual remodeling of the average blocks shows this. The reflection of the product gave the insight that it's very difficult to argue that there is an "the average block". Firstly, timewise it was impossible to draw all blocks (250+), which could verify if neighboring blocks are comparable, thus proving its effectiveness. Also, the method didn't hold in account developments which deviated from the formal grid structure. Moreover, I noticed the immense quantity of influential aspects I wasn't knowledgeable about yet. This made filtering information very challenging.

Yet, the systematic approach did provide me valuable insights on the technical content of the building typologies. The facades showed reduced architectural variety when moving from the westside of Empire Village towards the East river. Furthermore, it seemed that the typological character of the site can be experienced differently in the streets (x-axis) in contrast to the avenues (y-axis). This meant that the quality of streets and avenues had to be defined in a different manner. Following these conclusions, it allowed me to pinpoint a more exact area to conduct a more thorough analysis on. This area was assumed and confirmed to be homogeneous in typological aspects, compared to other areas of Empire Village.

3 SYSTEMATIC AND DYNAMIC RESEARCH DEVELOPMENT

Development of the methodological apparatus and reflection on the research question.

3.1 EVOLUTION OF DESIGN RESEARCH IN THE 20TH CENTURY

Within the clinical research methodology, it is believed that in today's complex environment, a designer is charged with rapidly progressing aspects, from identifying problems to realizing solutions, usually in multi-disciplinary teams. Design practice is therefore closely linked to research training even though "no single individual can master this comprehensive background stock of knowledge". Moreover, in this category, both quantitative and qualitative research methods may be appropriate.

Modernists like Le Corbusier, part of the Modern Movement designers, established the ground work for design research discourse. For the Modern Movement, it was believed that design methodology could prescribe an orderly, systematic procedure for arriving at a design solution through "diagnosis followed by prescription".

(Frankel, L., & Racine, M. 2010)

In 1981, B. Archer published *Systematic Method for Designers*, which provided guidelines for generating objective knowledge. Archer describes the science of design research as:

- Systematic because it is pursued according to some plan;
- An enquiry because it seeks to find answers to questions;
- Goal-directed because the objects of the enquiry are posed by the task description;

THE OBJECT VERSUS ITS OBJECTIVITY

- Knowledge-directed because the findings of the enquiry must go beyond providing mere information;
- Communicable because the findings must be intelligible to, and located within some framework of understanding for an appropriate audience.

(Frankel, L., & Racine, M. 2010)

In contrast, during this era, architects and planners began to reject the design science approach. Rittel and Webber posed the most severe challenge with their concept of wicked problems. Wicked problems point out how inadequate sequential structured methodology was for understanding complex design problems. "Wicked problems are ill defined and are impossible to fully formulate as an exact problem, due to the complexity of evolving variables." There are at least 10 distinguishing properties of wicked problems:

- There is no definitive formulation of a wicked problem;
- Wicked problems have no stopping rule;
- Solutions to wicked problems are not true-or false, but good or bad;
- There is no immediate and no ultimate test of a solution;
- Every solution is a "one-shot operation"; because there is no opportunity to learn by trial-and error;
- Wicked problems do not have an enumerable set of potential solutions;
- Every wicked problem is essentially unique;
- Every wicked problem can be considered to be a symptom of another problem;
- The choice of the explanation determines the nature of the resolution;
- The planner has no right to be wrong

(Frankel, L., & Racine, M. 2010)

3.2 REFLECTION

When reflecting upon the discourse of design research, whilst acknowledging that the debate about the validity of the presented theories is nowhere near to a (re)solution, it doesn't seem that one rules out the other in my research process. It seems a hybrid methodology of the two could characterize the process of collecting and creating data for quantitative purposes, but then using it in a more qualitative way. In this case, the quantitative approach had very much an inductive character, while the qualitative approach was more deductive. In this epistemological discourse, the notion that "time" distorts the way information is perceived, is vital. Also the increase of scale and new research topics seem to drive challenging architects' design trajectories.

Kees Kaan, chair-leader of Complex Projects, elaborates in his lectures on *Zeitgeist*. Kaan highlights Mies van der Rohe's statement about architecture: "*Architecture is the will of an epoch translated into space. Living, Changing, New. Not yesterday, not tomorrow, only today can be given form. Only such architecture is creative.*" Kaan states that it is impossible to fully comprehend and appreciate architecture since, for example ornamentals, can only be fully understood during its specific epoch.

The increasingly globalizing society makes the process of finding clear systems in society very difficult. As Jane Jacobs, a famous urban theorist and former resident of NYC, points out in her book "*The Life and death of great American cities*"; Diversity in the built environment is closely related to other types of diversity. For that, the diversity in the built environment of Empire Village is the source- but also the consequence of cultural and social aspects of life in NYC. Thus, the vast amount of variables make creating assumptions – in my case, researching homogeneity in the built environment – partly a wicked problem. Every day new buildings arise and the mingling of building histories continues to grow. Object variety in this sense is not typological in architectural terms alone, but also typological in the vast variety of aspects which influence the established built environment.

4 THE OBSERVER AND THE OBJECT

Highlighting the personal research in relation with the findings and the talks.

4.1 POSITIONING

We are never neutral observers when trying to comprehend our social lives, and our built environment is a direct reflection of our social life. (Berkers, M. 2019) This makes trying to make sense of the built environment and its typologies not something purely technical. It's actually quite ironic, that the American grid was designed to be acting as a neutral background of social relations. But after researching it thoroughly, it can be concluded that - in fact - the facades and plans tell so much about New York history and the New York way of living throughout the last centuries. For that, using highly systematic approaches are not sufficient to characterize where "homogeneity in the built environment" can be found.

I found it challenging to apply a product based design approach. Big data sets like the built environment of Midtown are difficult to condense into products, because different scales provide different ways to describe diversity. That is, from foam-cutting building masses, to drawing building plinths and window frames per block, and to compare buildings strokes rather than blocks. By trial- and error I converged to conducting research in the most workable scale, maintaining the information of other scales to refer to. Making presentable products takes up time, which could be used to explore more levels of scale. However, creating integrated products asks for a lot of conscious filtering and decision-making.

M. Berkers discussed in her talk about Praxeology that "the task of the critical observer involves a critical recognition of the history of perception." I think this is a very important statement when valuing building stock and it's a continuation on the earlier mentioned statement of Kaan. To specify this to my own research trajectory; The outside stairs of townhouses and walk-up apartments in NYC are seen as an architectural bridge between public and private. However, in the 19th century it was just a way to step away from the horse manure on the streets. The post-war housing projects are in today's spirit of time highly criticized, because of their lack of providing social control in a neighborhood. However, at the time these were built, they replaced structures which were big health hazards. To summarize, while homogeneity in the building stock was successfully assessed, merely the physicality of it was not sufficient to correctly value it.

In order to substantiate this in a more general architecture discourse, it is interesting to take examples from the Typology lecture by R.Gorny. The images shown during the presentation are comparing building typologies versus evolutionary charts of organisms. The keynote about this for me was: "*adaptability to a changing environment*". But as architects we have to deal with the fact that we will never fully understand these environments. While we are able to comprehend and define these physical changes, in both cases with a framework of historical knowledge, it becomes more and more apparent that more and more information seems missing. This information is somehow stored in the physicality of an object. Thus, extracting information to define the object, which is the goal of research methodologies in architecture, is about what we see in it and what we want to discover. For this, the act of defining the physicality an object is parallel to defining the observer. It is important for me to understand that subjectivity in architecture is not introduced at the period of design, but its introduced at the very beginning of conducting research. This act of consciousness makes one critically reflect on the gathered information, but moreover, it emphasizes that originality of ideas are found within the individual and not only in the physicality of his object to define.

REFERENCES

Berkers, M. (2019). *Praxeology*1. Lecture series Research Methods, TU Delft.

Frankel, L., & Racine, M. (2010). The Complex Field of Research: for Design, through Design, and about Design. *Design & Complexity*. From <http://www.drs2010.umontreal.ca/data/PDF/043.pdf>

Gorny, R. (2019). *Types and Typology*. Lecture series Research Methods, TU Delft.

Jacobs, J. (1992). *The Death and Life of Great American Cities*. New York: Vintage Books.

Kaan, K. (2019). *Lecture on Louis Sullivan*. Seminar City and Innovations. TU Delft.

Koolhaas, R. (1994). *Delirious New York: A Retroactive Manifesto for Manhattan*. New York: Monacelli Press.

Landau, R. (1981). Notes on the concept of an architectural position. *AA files*, 1, 111–114. From <https://brightspace.tudelft.nl/d2l/le/content/192743/viewContent/1509593/View>

Witz, M. (2019). *Gateways to New York. Othmar H. Ammann and his Bridges*. Switzerland. Swissfilms