THE PATH TO THE PLAYGROUND
The relevance of Grounded Theory in the Analysis of Urban Conditions

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I   INTRODUCTION

The diligent and systematic investigation into a subject, through observation and experiment, can inform the design in many ways. Moreover, it is necessary to be informed by different practices in order to see the built environment not only through the eyes of an architect but also as a planner, philosopher, politician and economist.

Methodology makes us master the language we speak to the world[1]. Organize our process of thoughts while evaluating the study reliability. We should recognize that in every field our knowledge is imperfect, is not open to ultimate verification yet is the product of a particular history[2].

The method defines the quality of research and consequentially the result and translation in architectural forms. The course made me understand research as an expanded field of possibilities. In fact, as architecture is a multifaceted field of study there can be no single approach to what we need to unveil. It is important not to be restricted but rather be informed by several approaches. By presenting different examples the lecturers underlined the importance of placing one's own design into the intellectual debate of the discipline. We should challenge research by looking at conventional models establishing why and how it differs from them. Moreover, by expanding my knowledge of different research methodologies, the course made me question the relationship between research and design. Namely, is research informed by design or is design informed by research? Yet design in the 21th century continues to expand its meaning and connections as designers are exploring concrete integrations of knowledge that combines theory with practice and technology for new productive purposes[3]. When approaching a methodology, it is important to define the purpose of the research yet being careful not to limit and oversee elements of the finding to reach a specific predestined result twisting and marginalizing certain data.

Since the beginning of my studies in architecture I have been applying different methodology to my researches, yet I have never been fully aware of the specific one I was using possibly resulting in confusing outcomes. The course made me question the actions I was undergoing in order to formulate my research question. It results necessary to apply different methodologies based on different moments of the research for inconsistencies to emerge and successfully implement the findings. Indeed, I realized that one methodology often leads to another.

The thesis focuses on the city of New York and more specifically on the area of Midtown. The research started tackling different scales as to understand the context of the Metropolis of rigorous chaos[4]. Establishing the importance of the physical, social or historical setting the research was context led. The area of midtown we were assigned by the studio was examined as a case study and constantly placed in comparison with other areas using the contextual study of the *unique* seeking to understand what the specificity of the selected area were[5]. The context is a constantly changing set of parameters that can lead to completely different results even a couple of years apart especially in a constantly renewing city like New York. More specifically I focused my researches on the role that different mode of transportation play in the development of Manhattan.

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[1] David Seamon and Robert Mugerauer, eds., *Dwelling, Place and Environment: Towards a Phenomenology of Person and World* (Springer Netherlands, 1985).
[2] R. G. Collingwood, A. E. Taylor, and F. C. S. Schiller, "Are History and Science Different Kinds of Knowledge?" 31, no. 124 (1922): 443–66.
[3] Richard Buchanan, "Wicked Problems in Design Thinking," *Design Issues* 8, no. 2 (1992): 5–21.
[4] Rem Koolhaas, *Delirious New York: A Retroactive Manifesto for Manhattan*, 1994, 30.
[5] Raymond Lucas, *Research Methods for Architecture* (Laurence King Publishing, 2016), 12.

II   RESEARCH-METHODOLOGICAL DISCUSSION

In the Chair of Complex Project students are free to develop their vision and design scenario. However, such vision needs to fit in the larger discourse of the group. The methodology of the studio is rigidly structured through the group work deliverable. The studio was divided into four groups each one researching on a different area of Midtown Manhattan. Different groups need to confront their finding in order to have a more contextual understanding of the data. Moreover, discussion with MSC4 students that researched on the city in the past semester is promoted. The methodology of the studio was tested in previous years through the study of different settlements around the world that are ambiguous in their development. The crossing of different disciplines allows to think differently about the place of research offering a scaffold for discussion.

The method placed an emphasis on an inductive process of open-ended research questions that change during the investigation to reflect the increased understanding of the context. The focus of the research was shaped after data collections and observations on a range of different topics. Communication skills and mediums are promoted by the studio to successfully transform personal fascinations into a clear design task. What are the contemporary postmodern realities the architectural profession is facing?

The research began with the reading of books about the city of New York in order to grasp a fundamental understanding of the context without any particular purpose of the outset. Seminar, lectures and debates indirectly fed the research.

Meanwhile we started gathering hard data. In order to gather as many hard data as possible on the area of interest we decided to divide the researches by topics: History, Identity and Demographic, Real Estate, Collectivity and Public Space, Tourism, Mobility and Nature. The typological analysis in the area led us to distinguish three architectural typologies that reflect the zoning. Attempting to frame a systematic approach to types can also lead to describe its variations. Such data are translated into graphs and maps. The mapping results in a method of deconstruction of the existing environment as well as of the past one.

The process of gathering data goes along with the production of a 1:1000 model. The model is the first step to gain spatial understanding of the city of New York and the impact that the grid system has on the city structure. The rigidity of the Grid shapes blocks of 61 m by 190 to 280 m wide imposed a framework that resulted in a hyper densified and unique fabric, yet such rigidity allows for a three-dimensional anarchy defining a new balance between control and de-control that makes the city a metropolis of rigid chaos[6]. The context therefore goes to take the lead in the research process establishing the importance in relating the physical and the anthropological.

The visiting of the site made us confront the gathered data with the existing spatial qualities of the city speculating and predicting a vision for each research area. During the visit we interviewed citizens. There is always a danger in architecture, especially when working abroad to have an overly deterministic approach to design. Thanks to social science we can attempt to really understand how people live questioning how the engagement with the built environment shaped their identity. Our etic account was therefore confronted with a more emic[7], somehow verifying the assumption we had made as a group.

III   RESEARCH-METHODOLOGICAL REFLECTION

The context-led research allows the urban fabric to become the driving force of research underlying the importance of the physical and historical aspect. The research evolved from quantitative to quantitative data analysis in order to accurately grasp what the city is and how it is experienced by its inhabitants. Data collections and observations were structured into a solid framework. The concept of site shifted from a geometrically defined area of Midtown preimposed by the tutors to a much larger milieu considering even the different boroughs to a potentially boundless area. The city results ambiguous in its development demanding critical reading of its role as a global city on the larger scale.

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[6] Koolhaas, *Delirious New York: A Retroactive Manifesto for Manhattan*.30
[7] Lucas, *Research Methods for Architecture*, 10.

Grounded theory collects data to develop a theoretical analysis. The grounded theory philosophy developed during the 1960s and 1970s by Barney Glaser and Anselm Strauss. They promoted the use of data gathered during research process rather than the deduction from existing theories and using inductive reasoning. The grounded theory method offers a set of general heuristic devices rather than formulating rules. The early data are synthetized though qualitative coding. The action of coding is essential in order to make comparison between other segments of data[8].

The theory developed as a reaction of the mid-century positivist conceptions of scientific method that stressed observation, generality and replication of research as well as falsification of competing hypothesis. Researchers that adopted the positivist paradigm aimed at discovering the causal explanations in order to make predictions about the world: "reducing qualities of human experiences to quantifiable variables"[9]. Thus, qualitative and quantitative research created disputes about the positivist paradigm. Researchers of the 1960 treated qualitative analysis only as a preliminary exercise for refining the quantitative instruments[10].

Glaser and Strauss countered such methodological strategies offering new strategies for a more qualitative research practice "joining epistemological critique with practical guidelines"[11]. They aimed at moving qualitative inquiry beyond descriptive studies into explanatory theoretical frameworks providing conceptual understanding of the data gathered. Namely, grounded theory legitimized qualitative research not only as a precursor of the quantitative analysis.

The use of mapping was an essential instrument in the understanding and construct of the lived space and categorization of quantitative data. Mapping was used not only to understand and mirror the urban reality but also as a tool to reveal hidden potentials of the urban fabric[12]. By making visible disparate conditions, the mapping projects the complex and dynamic imbroglio of social and natural processes. The import step int in the mapping process is to select and reformulate the hidden forces of a given place often layering historical data with economic and legislative conditions and programmatic and regulatory mechanisms. Such maps are highly artificial and fallible constructions that greatly differs form the carthographer's mute and empirical documentation of terrain.

Ever since the fifteeenth century carthography and planning have enjoyed mutually influential relationship, the inventive capacities of mapping have not been recognized. In the 20th century mapping has been conventionally used as an analytical and quantitative reflection of exsting spatial and statistical conditions[13]. Indeed mapping is considered by most designers and planners as an unimaginative analytical practice , a codified technique of institutional conventions and limited critical experimentation of alternative forms. Yet is the selection and prioritization of different informations that shapes the project and makes the mapping never neurtral as it stages different conditions of the urban reality. In my opinion mapping is part of the creative activity and not finished artefacts and is essential as comparative method typical of gorunded theory. Mapping can project both quantitative and qualitative data. This evolved in the application of a more correlational strategy and even a typological analysis indentifying key elements[14].

IV   POSITIONING

Thanks to grounded theory it is possible to shape and reshape the data collected and constantly refine the research question. The method is an enhancing tool to provide the organization and reading of such data, it does not however provide automatic insight. Grounded theory is able to provide flexible guidelines for the direction of the study. Such methodology led to the formulation of different research questions: how did the impact of transport infrastructure affect the development of Manhattan? How does the limitation of different network flows affect the life of the citizens as well as the future development of the area of study?

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[8] Kathy Charmaz, *Constructing Grounded Theory* (London ; Thousand Oaks, Calif: Sage Publications, 2006), 3.
[9] Charmaz, 4.
[10] Charmaz, 5.
[11] Charmaz, 5.
[12] Professor Denis Cosgrove, *Mappings* (Reaktion Books, 1999), 214.
[13] Cosgrove, 226.
[14] Linda N. Groat, David Wang, and David Wang, *Architectural Research Methods* (John Wiley & Sons, 2002), 263.

Data had been quantified and confronted using correlational strategies. In the specific case of my research analysis from the grounded theory I moved onto shaping predictions. Such predictions are based on data analysis of the changes in productivity, migration and relative competitiveness that occurred in the past years. Based on the data gathered two socio-economical scenarios for the possible development of the city were outlined.

One scenario sees future job and population growth in the area of Manhattan slowing to half its rate due to an inadequate respond of housing production and infrastructural capacity.

The second scenario instead is based on an approximately constant growth and a recentralized organization of the city regardless of the limited crossway and roadway capacity. Indeed, if the existing challenges of congestions in reaching Manhattan from New Jersey will continue to persist it is unclear if people will choose to locate their home and work outside the center contributing to the creation of new cores of interest and the expansion in the suburbs[15]. The data gathered is contextualized in the theoretical framework that sees contemporary urban society as a highly mobile one, making necessary to redefine urbanity. The continuing diversification and growth of mobility is both a consequence and an instrument of contemporary lifestyle to the extent that the right to work and live now incorporates an implicit right to mobility[16].

The prediction goes along with a trend analysis based on historical data and the observation of ongoing change. The point of trend analysis is to identify the trend early in order to predict its consequences in the urban evolution. The further in time the prediction the greater its uncertainty. Extrapolating the trends is not only based on the quantitative but also on qualitative research and it requires creative and systematic thinking.

Tension between different urban plannign mentalities generally described as top-down versus bottom-up are emerging from the divergence of architectural design, computer sciences, politics and socio-cultural factors. Indeed our cities are confronted with a new reality. As physical and digital space can no longer be separated. As the material space and the virtual network merge the question to answer is if the specificity of place have any significance today. Frances Cairncross supports this concept with her theory called the *death of distance*[17]. Yet in the past two decades cities have grown as never before and such theory have been proven wrong. More than ever cities are human magnets. It seems than in the deth-of-distance theory the importance of physical interaction between humans and humans and thier environment was underestimated.

Does the act of prediciton have inherent value? What is the methodology that can lead us to successfully confront the quantitative and qualitative data in order to reach a successfull understanding of what the future urban forms will be? Looking at the past regional plan for the city of New York such as Urban Design Manhattan we can in fact see how the predicted needs and assumptions on the future of transportation`and urban develeoment led to wrong conclusions.

Contemporary design techniques still need to find adequate ways to portray and creatively engender with the dynamic character of time and space in today's urban settlements. Ideas about spatiality are moving towards a variety of political and social processes that flow through space and time.

New approaches to the study of built environment are emerging due to the layers of digital information and networks that blank urban spaces. Mapping and spatial design techniques still need to find adequate ways to creatively analyse the global forces and the promiscuous charachter of today's time and space.

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[15] The Fourth Regional Plan, "Trans Regional Express: Transforming The…," text/html, The Fourth Regional Plan, December 10, 2019, http://fourthplan.org/reports/trans-regional-express-transforming-the-new-york-regions-commuter-rail-system-into-an-integrated-regional-rail-network.

[16] Luca Bertolini, "Fostering Urbanity in a Mobile Society: Linking Concepts and Practices," *Journal of Urban Design* 11, no. 3 (October 1, 2006): 319–34.

[17] Carlo Ratti and Matthew Claudel, *The City of Tomorrow: Sensors, Networks, Hackers, and the Future of Urban Life* (Yale University Press, 2016), 18.

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