RE-BUILDING RETAIL

Understanding the Future of Commercial Space through
the Map, the Past and the Type

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Chair
Complex Projects

Studio
Hotel New York

Thesis
Re-Building Retail

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I   INTRODUCTION

        The Research Methods course is probably the most important course in the MSc degree at TU Delft. This is not because it is the most content rich, or the most valuable in developing specific skills. Rather, the course is important because it teaches us as designers to formalize the work that we do and provides us with means to hold a discourse about processes which are specific to architecture design and research. This discourse is essential in the future development of the field.

        While humans have been building shelters, or "architecture", since the beginning of time, research-methodological awareness is a relatively recent development dating back to the 1950s. This is due in part to the broadening of architectural research at this time[1]. Since, the discipline has expanded to include new fields of interest. In parallel, the phenomena architecture addresses are increasingly complex and increasingly require that knowledge gained from discrete disciplines be integrated. Theoretical frameworks of research-methodology "enable researchers to systematize their work and thus create opportunities for collaboration across disciplines, by establishing points of commonality between methodologies[2]" and are therefore key to the future development of architecture as a discipline. In this respect, I believe the knowledge I have gained from the course will be invaluable to me as a professional architect.

        Additionally, I believe that being aware of research-methodological theory has in itself great benefits for the individual researcher or architect. Throughout my studies, I have participated in many design studios and project courses. In each of these courses, a certain form of research was performed through different methods and tactics. This course has offered me a means to relate one body of work to another and offered me the means to better understand my work and the profession. It has also made me aware of certain assumptions which I make in my work, relating to my system of inquiry and the biases they hold. In the context of my graduation thesis, an understanding of research methods has been instrumental in designing my research. By being aware of different forms research can take, I have been able to look back on my past work in a critical way, and been able to make a deliberate choice of methods to ensure my research can be successful at generating knowledge[3].

        Within the chair of Complex Project, the approach of the studio is to provide a topic of research and a general geographical area of investigation. In the case of the Hotel New York studio, this area is the center of Rotterdam, and the topic of research is the Migration of Ideas.

        In the frame of the studio, the site and the theme are investigated in parallel in relation to a topic which is specific to each student. This topic is determined in the first weeks of the studio when, after a preliminary mapping of the project site, students are urged to define a "fascination". In this initial phase, I proceeded to mapping mobility networks in the city. While mobility networks for people are easily read in the urban fabric, through thoroughly embedded public spaces, the transport of goods, while equally as critical to the life of the city, is an almost invisible phenomenon. This fascination brought me to my thesis topic, the transport of goods. My interest was in uncovering the true impacts of the invisible forces at hand on the urban built environment. Consequently, my research question was formulated as such: What value does the transport of goods hold for the life of the city and what potentials do evolving trends in logistics and trade have in public life?

[1] Linda Groat and David Wang. "Architectural Research Methods" (New Jersey: John Wiley & Sons, 2013) p.7
[2] Linda Groat and David Wang. "Architectural Research Methods" p.11-12
[3] Linda Groat and David Wang. "Architectural Research Methods" p.26

II   FROM TERRITORY, TO HISTORY, TO TYPOLOGY: AN EMERGENT METHODOLOGY

In the chair of Complex Projects, the method of research is typically highly prescribed. However, the spread of the coronavirus significantly impacted the structure of the semester (to be developed in part 4). As a result, albeit the studio is method-led, a significant part of the research was emergent as the research progressed.

In order to unpack my research question, I first sought to gain an understanding of what the transport of goods signified in the context of my project, the Netherlands. In order to untangle the logistical landscape of the Netherlands and understand its spatial implications, I utilized mapping as a heuristic tool. In my analysis, I mapped several phenomena pertaining to transport, such as transport networks and the locations of distribution centers as well as the geographic distribution of populations which these systems serve. By overlaying the resulting drawings I was able arrive at conclusions concerning the territorial impacts of the transport of goods. In fact, current logistics systems result in the emergence of dense peri-urban areas which group together increasingly larger transport infrastructure. These areas are predominantly located with proximity to transport networks rather than in proximity to the markets they serve. This suggests an increasing "logisticalization" of transport. This phenomenon is subject to invisible forces and systems. Mapping has served to make these forces visible. In recent years, the role of mapping has evolved from representing the physical reality of a territory to that of a "plane of consistency[4]", enabling new relationships to come to the forefront through their graphic translation. This initial portion of research revealed that the transport of goods was currently undergoing a significant transition, whereby physical proximity is no longer determinant in the effective distribution of goods.

To understand this phenomenon in a broader frame of reference, I chose to investigate the evolving condition of the transport of goods through historical analysis. In my study, I investigated the development of transport and information technologies through the use of determinative evidence, such as dates. Through this, I gained an understanding for the chronological spread of the development of transport and information technologies. The developments specific to the last century have caused the unprecented obsolescence of retail space in the distribution of goods to consumers. Since the invention of e-commerce in the 1990s, people can purchase goods by bypassing commercial space. This condition became of primary importance in my project. I continued my historical analysis by investigating the qualities of commercial space over time. This part of my research sought to determine the social and cultural roles of retail environments, and therefore required evidence which could provide such information. This investigation inserts itself in the current context of historical research, whereby following the cultural and spatial turns (expanded upon in the next section), contextual evidence and artifacts gained new recognition as tools of investigation[5]. My research lead to me the analysis of textual and visual evidence depicting the social uses of commercial space, which revealed the parallel haptic and social dimensions of retail, extending beyond distribution.

This understanding led me to delve deeper into new typologies of commercial space and to better respond to my research question in determining new potentials for public life. Through research, I discovered that as a result of growing competition, online companies are increasingly making a return to physical space as an effective branding tool. My next step was to perform a typological study of physical spaces generated by online companies in urban environments. I identified a number of these physical venues in different geographical context, and abstracted their functions and spatial organization through the use of graphic devices, such as diagrams. My aim was to understand what

[4] James Corner. "The Agency of Mapping: Speculation, Critique and Invention". In The Map Reader: Theories of Mapping Practice and Cartographic Representation. Edited by Martin Dodge et al. (John Wiley & Sons, 2011) p.90
[5] Linda Groat and David Wang. "Architectural Research Methods" p.176

commonalities lay at the heart of buildings designed for different local contexts, in order to apply these commonalities in a building appropriate to the context of my project, Rotterdam. In other words, I sought to unravel the typal idea at the heart of each typological expression[6] of a brick and mortar ecommerce environment. Typological studies in architecture have evolved significantly since their inception in the 18th century, albeit as argued by Sam Jacoby and Oechslin, in an overly direct way and simplistic way. My research avoided this pitfall by best aligning itself with the discourse of Quatremere de Quincy.

III   FROM ONE TRUTH TO MANY: LEAVING BEHIND DETAILED REPRESENTATION AND POSITIVISM

Generative Mapping

The map has long been used by civilizations to understand and organize territory. Cartography as a scientific and geographic endeavor first took off during the Greek era. Soon after, during the Roman Empire, cartography was used in order to control the territory with respect to economic, political and military interests[7]. Cartography and the making of maps has long been a tool which has been reserved to the governing powers over a territory; the information required to represent a territory graphically and the skills to do so were not common. However, over time maps have become increasingly accurate and detailed, seeking to represent reality as exactly as possible.

The function of mapping came into question in the 20th century. In his short story "On Exactitude in Science", Jorge Luis Borges describes how the qualities of mapping are lost if indeed graphic representation attempts to capture reality in a comprehensive way. In his story, the map becomes a duplicate of what it tries to describe, and therefore, useless[8]. He highlights a need for the re-conception of the map as a means of representation, and foregrounds the importance of abstraction and selectivity of information in the production of mappings.

Gilles Deleuze and Felix Guattari made the distinction between a tracing and a map, whereby a tracing is a reproduction of reality, whereas a mapping "constructs the unconscious"[9]. In their understanding, the distinction between a broad understanding of cartography and the map is in what the representation aims to accomplish. A tracing is an attempt at an accurate representation of reality, whereas a map makes use of cartography as a surface which allows many different elements to come together and establish new relationships. In this context, maps have increasingly taken on roles as generative devices in design. James Corner supports the view of mapping as a generative tool, "a project that both reveals and realises hidden potential[10]". He identifies the activity of mapping as different from "tracings" or what he dubs "empirical cartography" in that in the activity of mapping, many choices must be made which give turn the map into a rhetorical device[11]. My research utilizes one of the techniques he specifies, that of "layering", from which new ideas emerge.

[6] Sam Jacoby. "Typal and typological reasoning: a diagrammatic practice of architecture". p.947
[7] Caitlin Dempsey. "Mapping Through the Ages: The History of Cartography". GIS Lounge. January 29, 2011.
[8] Jorge Luis Borges. "On Exactitude in Science", trans. Andrew Hurley (Deckle Edge, September 1, 1999)
[9] G. Deleuze and F. Guattari. *A Thousand Plateaus: Capitalism and Schizophrenia*. (University of Minnesota Press, Minneapolis, MN. 1987) p.12
[10] James Corner. "The Agency of Mapping: Speculation, Critique and Invention". In The Map Reader: Theories of Mapping Practice and Cartographic Representation. Edited by Martin Dodge et al. (John Wiley & Sons, 2011) p.1
[11] James Corner. "The Agency of Mapping: Speculation, Critique and Invention" p.7

Historical Study

Until the beginning of the 20th century, historians adopted a positivist system of thought. The rise of empiricism in different fields of science stimulated a search for causality in historical events[12]. Carl Hempel was a strong figure in the positivistic understanding of history. Throughout his life, he developed theories of logical positivism which sought to establish relationships between "explanans" & "explanandum", or between cause and consequence[13]. In his reasoning, "covering laws" could be established based on history which would make it possible to both predict outcomes with a certain probability, as well as inversely deduct causes. His understanding of history relied on the idea that there one single correct understanding of history from which such conclusions could be drawn.

Between the 1960s and the 1990s, the broad discourse amongst historians drastically shifted. Geoff Eley describes the transition from a positivistic understanding of history, to the evolution of social history, followed by cultural history. Throughout this evolution ultimately, the "practices, subject matters, and composition of the profession became dramatically pluralized"[14]. The single history which was previously aimed at was based largely on written documents, which often only represented privilege perspectives of events and which broadly recorded national histories. The cultural turn brought forward the multiplicity of history by recognizing new sources of evidence as relevant and equally valuable. This evidence could be of contextual, inferential or recollective nature[15]. In parallel, the subject of investigation was expanded to include the seemingly mundane, rather than only the exceptional.

The cultural shift extended to become a spatial shift. Henri Lefebvre conducts a "search for a unitary theory of physical, mental and social space"[16] In his writings, he parallels spaces of behavior with physical space and relates them between each other. In his portrayal, the analysis of space itself gains credence in developing knowledge of broader cultural themes. In my research, visualizations of space as artistic artifacts and the spaces they depict become sources for historical information.

Typological Analysis

The same rise of empiricism which caused the development of a causal approach in historical studies also stimulated the development of new systems of organizing knowledge in architecture. Theories of typologies emerged in the 18th century which sought to provide an empirical basis for the discipline of architecture. Le Roy sought to form this framework by introducing a division between theory and history. In his understanding, architecture was based upon theoretical principles, whereas history consisted of a framework through which their evolution could be understood[17]. He believed the form of architecture to be adaptive to its historical and geographic context, but also that it had an effect on the development of the "primitive ideas" of architecture.

Quatremere de Quincy followed Le Roy in the development of typology. Contrastingly however, he did not share in the positivist viewpoint, where a single thread of evolution could be followed, but posited instead that type emerged organically and from disparate contexts[18]. In his discourse, he makes a distinction between the model, as an object which is imitated in its form, and the type, a recomposed

[12] Linda Groat and David Wang. "Architectural Research Methods" (New Jersey: John Wiley & Sons, 2013) p.185
[13] Mauro Murzi. "Carl Gustav Hempel (1905—1997)". Internet Encyclopedia of Philosophy. https://www.iep.utm.edu/hempel/
[14] Geoff Eley. "Dilemmas and Challenges of Social History since the 1960s: What Comes after the Cultural Turn?". South African Historical Journal, 60:3 (January 2009) p.312
[15] Linda Groat and David Wang. "Architectural Research Methods" (New Jersey: John Wiley & Sons, 2013) p.201
[16] Henri Lefebvre. The Production of Space. Translated by Donald Nicholson-Smith. (Cambridge, Massachusetts: Basil Blackwell. 1991) p. 21
[17] Sam Jacoby. "Typal and typological reasoning: a diagrammatic practice of architecture". The Journal of Architecture, 20:6 (January 2016) p.942
[18] Sam Jacoby. "Typal and typological reasoning: a diagrammatic practice of architecture". p.945

and abstracted principle which emerges from models. He speaks out against the repetition of the model, and instead supports that processes of abstraction are required in understanding history[19]. In his view, it is this typal idea which must be imitated, rather than the typological idea of the model, leaving to the individual the role of adapting the specificities of the form to context[20]. My research adopts method of typological study in addressing new developments in the type of commercial space.

IV   POSITIONING

In conducting my research in the frame of the graduation studio, I have had to position myself with regard to the different approached to each method and heuristic tool I adopted.

My use of mapping extended beyond the representation of reality in the form of a "tracing". While cartography has served for centuries to understand territory, nowadays, like Corner, I believe it has tremendous potential as a rhetorical tool to reveal realities which are coming into being and offering designers opportunities to shape how these realities are embodied. I developed my research by producing graphic representations of specific phenomena relating to the transport of goods. I chose not to represent the detailed reality of the territory, as I believe, like Jose Borges, that such a depiction would not serve to reveal anything new. Instead, I made deliberate decisions in what to depict and used "layering" to bring forward and make legible new relationships over the territory. From these maps, new lines of inquiry emerged, which stimulated the next steps of my research.

As information technologies are becoming increasingly ubiquitous, as demonstrated in this coronavirus pandemic, I believe the way in which our lives relate to space will evolve drastically. In recent months, events have demonstrated that physical presence can be replaced by virtual connectivity. I believe that as phenomena continue to be de-spatialized, mapping will become an increasingly important tool of abstraction as a common plane between the physical and the virtual. My research on ecommerce marks one instance where mapping can serve to describe such parallel and offer opportunities for potentials as well as issues to be addressed.

While a portion of my historical research focuses on the development of technologies, which is information largely derived from determinative data, another portion seeks to study the social roles of shopping, which are seldom documented in written documents. In fact, shopping as an everyday occurrence was seldom considered as a valuable topic of study before the cultural turn, and the value of commercial space seldom considered before the spatial turn. I believe analysis of cultural and spatial artifacts are essential in developing a better understanding of history and, consequently, of developing ideas for the future.

History has for a long time been understood as a singular reality. However, current events where minority groups are taking up a stand against injustice are demonstrating that there are many histories which have yet to be understood. As historical study has evolved in the past, I believe it will have to broaden further to become inclusive of all peoples and in order to allow designers to design in more inclusive ways.

In my research on typology, I considered examples of physical spaces in different global contexts. However, I did not consider them as Le Roy does, as causal evolutions of primitive ideas. Rather, my analysis sought to determine the idea at the center of the typology I was investigating, that

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[19] Werner Oechslin. "Premises for the Resumption of the Discussion of Typology". Assemblage, No. 1 (Oct., 1986) p.51
[20] Jonathan Noble. "The Architectural Typology Of Antoine Chrysostome Quatremere De Quincy (1755-1849)" (M.Arch. diss., University of Witwatersrand, 2011) p.157

which was not specific to the context but rather common across contexts, or what Quatremere de Quincy defines as "type". In order to arrive at a typal understanding of the typologies of physical ecommerce spaces, I first attempted to abstract the functional role of the space, then the spatial organization and the programmatic divisions. I believe that in the broader development of architecture, it is important for designers to retain a strong understanding of the distinction between concept and type and ensure that the architecture generated is valuable and creative, rather than an a-contextual copy of form.

The studio of Hotel New York is method-led and generally guided by a strictly imposed series of methods and heuristic tools. The semester is sequenced into 4 week segments, each of which is concluded with a product deliverable and presentation. These segments are in turn site mapping, emergent research, fieldwork and typological study. In the past months, the pandemic has caused changes to this methodology. While certain steps of the process remained the same, such as the initial mapping sequence and the typological study, one important element could not be realized: fieldwork. The studio was originally intended to travel to New York City and Rotterdam, trips which could no longer be realized. This caused a large portion of the semester to be unaccounted for by specific deliverables and consequently led a greater portion of research to be self-guided and process emergent.

This has eliminated the possibility of praxeological and qualitative research, which could have stimulated new and highly relevant lines of inquiry. It has caused certain inherent preconceptions of our site to remain unchallenged. In addition, it has required us as students to make a greater exercise of designing our research. I believe this has been of benefit to our work, by offering us greater freedom in structuring our research and therefore our future design. However, this newfound freedom has not been unbounded; while methods were modified, the deadlines remained the same, with the expectation of products every few weeks. This restriction has limited the range of methods to be used.

Ultimately, my research has been successful in addressing my research question, which was formulated as such: What value does the transport of goods hold for the life of the city and what potentials do evolving trends in logistics and trade have in public life? Mapping served to reveal the spatial implications of transport, historical research led me to understand its evolution and implications on the built environment, and a typological study, to determine new potentials for design. It is my conviction that awareness of research methodological issues has shaped my work and enabled me to generate more reliable and relevant knowledge. By utilizing each method in accordance with research-methodological positions I support, I have produced research which is generative and sufficiently suggestive to initiate opportunities for design.

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