

# AR3A160 LECTURE SERIES RESEARCH METHODS

## Self-Assessment on Research Methods

Student

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Chair of Public Building, "The Public Condenser"

Thesis "Place of Non-Consumption"

## I INTRODUCTION

As an architectural master student at the TU Delft, I was once confronted with a bachelor course that emphasized the importance of architectural research in the design process. This was for me the first time to be aware of the fact that research has a great influence on empowering the design. This awareness opened for me a new approach towards the design process. As a result I started with the studio Complex Projects, a studio in which doing research is more important than the design itself. Eventually, I gained a grown interest in designing through research, instead of just following my intuition. However, the research process was always a bit chaotic since I was not aware of the different research-methodological approaches. I would start doing intuitively-based research on different interesting topics, with as a consequence ending up with an uncoherent story due to the lack of choosing a certain research method. However, thanks to this course I gained awareness in the different research methods one can opt before conducting a research. The lecture series provided a wide range of methods that might be of great use for the final design assignment.

The graduation studio I have chosen is the chair of Public Building. The aim of the studio is to design a public condenser within the context of Copenhagen that can act as a catalyst for the development of their environment. Multiplicity is one of the key aspects that the public condenser aims for. This refers to buildings that provide different kinds of program that make the building more resilient and thus less singular in function. However, consumerism is the topic that most interested me, therefore I want to keep that as the main overlapping umbrella. Of course there are several reasons for choosing this topic. Considering the Scandinavian-Mediterranean Corridor, Copenhagen situates itself in a crucial north-south axis for the European economy. The city thus becomes influenced by an urban model based on the flow of goods and people through its railway systems, airports and harbors. These so called centralities stimulate the storage and flow of material goods through the city. One of the results is the large amount of commercial spaces within the city, promoting the concept of a consumerist society. However, this concept is intended to make people believe that human worth and happiness are best achieved in terms of our consumptions and possessions<sup>1</sup>. According to the 'Harvard guide to shopping' by Rem Koolhaas, "Shopping is arguably the last remaining form of public activity", and "perhaps the beginning of the 21<sup>st</sup> century will be remembered as the point where the urban could no longer be understood without shopping". The large amount of commercial spaces is shocking and asks to consider the opposite: a place of non-consumption. Therefore, the public condenser should react on consumerism by providing a place that does not relate to the consumption of objects, but rather to the consumption of space itself. The research question thereby is: How can the public condenser serve as a place of non-consumption?

## II RESEARCH-METHODOLOGICAL DISCUSSION

In a place of non-consumption, the freedom in which people give meaning to the space tends to be the protagonist, rather than a place in which people are delusively forced to consume objects. In order to design such spaces, I have chosen to combine two research methods: case study analysis as well as typological research. Through the study of precedents I am able to enlarge my knowledge about existing building typologies and thus be able to re-invent them in such a way that they match the site specific conditions.

The importance of the case study methodology is thoroughly emphasized by Robert K. Yin. According to Robert, conducting case studies is of great use when one has to answer the questions "how" or "why" <sup>2</sup>. Of course one could argue that these questions are more or less present in every research and thus it becomes vague whether this method is of best use for such questions. However, he elaborates on the importance by mentioning that the case study method is especially useful when one has to understand a phenomenon within its context<sup>3</sup>. This makes sense when it comes to architectural case studies since projects are very much influenced by their surroundings, thus to

<sup>1</sup> Rem Koolhaas, *Project on the City II: The Harvard Guide to Shopping* (Taschen, 2001), 1

<sup>2</sup> Robert K. Yin, *Case Study Research: Design and Methods*, 4th ed. (Thousand Oaks, CA: Sage, 2009), 1

<sup>3</sup> Ibid, 2

understand certain design choices one has to understand the context in which the project operates. Besides, when it comes to case studies, the question arises whether it is more important to conduct a single case study or a multiple case study. This choice depends very much on the uniqueness of the phenomena. When opting for a single case study, the aim is to gather qualitative information about an unusual topic, whereas multiple cases provide a wider understanding through a quantitative way of research. According to Robert, multiple case studies tend to be more effective and built up stronger arguments, but require a larger amount of time in contrast to a single case study<sup>4</sup>. However, John Gerring provides a contrasting perspective on the case study methodology. He states that there is no such thing as a single case study, since when choosing a case one has at least thought about a wider frame of cases from which he has chosen that one specific case. He elaborates on this argument by questioning that if one would conduct a single case study, then “what is this a case of?”<sup>5</sup>. This means that the so called ‘single case studies’, whether directly or indirectly, are part of a wider frame of cases and thus there is no such distinction between single and multiple case studies.

However, case study research tends to be a complicated method since it is not quite defined by a specific rule or frame which guarantees effective outcomes<sup>6</sup>. Willard Waller defines the case study method as an “artistic process”, in which people who are able to conduct successful case studies should be called artists, and that the key to a achieve a case study as such is insight<sup>7</sup>. Others have provided several strategies in order to reach useful outcomes. One of these strategies is provided by Robert, which consists of a five-step strategy that serves as a guideline<sup>8</sup>.

### III RESEARCH-METHODOLOGICAL REFLECTION

When it comes to case study methodology, typological research is quite interrelated since architectural case studies can be focused specifically on buildings that share the same typology (in this case hybrid buildings and social condensers). Therefore, the historical development of typological research is of great influence on case study methodology.

Anthony Vidler mentions three typological discourses that took place throughout the history: the turn of the 19<sup>th</sup> century, the early 20<sup>th</sup> century and the 1960s<sup>9</sup>. The first discourse is very much shaped by Quatremère de Quincy. He was the first to give definition to the concept of type at the end of the 18<sup>th</sup> century<sup>10</sup>. He stated that: “*The word type presents less the image of a thing to copy or imitate completely, than the idea of an element which must itself serve as a rule for the model.*”<sup>11</sup> And that there is clear distinction between type and model: “*The model, understood in the sense of practical execution, is an object that should be repeated as it is; contrariwise, the type is an object after which each artist can conceive works that bear no resemblance to each other. All is precise and given when it comes to the model, while all is more or less vague when it comes to the type.*”<sup>12</sup> In other words, type is an underlying concept which can be translated in different ways through physical entities. When relating this to case study analysis of architectural projects, the building itself becomes the model, while the concept, the untouchable underlying thought defines the type of the building. However, Jean-Nicolas-Louis Durand provides another perspective on the meaning of type. First of all, it needs to be mentioned that Durand did not specifically use the word type, but rather genre, in which he classified architecture according to their program<sup>13</sup>. His aim was to systemize architecture knowledge in order to create a method through which architects could design. To achieve this he

<sup>4</sup> Robert K. Yin, *Case Study Research: Design and Methods*, 4th ed. (Thousand Oaks, CA: Sage, 2009), 45

<sup>5</sup> John Gerring, *Case Study Research – Principles and Practices* (Cambridge University Press, 2007), 13

<sup>6</sup> Marja Sarvimaeki, *A Case Study on Case Studies* (Charlotte: North Carolina University, 2013), 338

<sup>7</sup> Willard Waller, *Insight and Scientific Method* (American Journal of Sociology, 1934), 296-7

<sup>8</sup> Robert K. Yin, *Case Study Research: Design and Methods*, 4th ed. (Thousand Oaks, CA: Sage, 2009), 16

<sup>9</sup> Anthony Vidler, *The Third Typology, Oppositions* (Princeton Architectural Press, 1976), 1-4

<sup>10</sup> Rafael Moneo, *Oppositions: On Typology* (Massachusetts, MIT Press, 1978), 28

<sup>11</sup> Quatremère de Quincy, *The Historical Dictionary of Architecture* (London: Papadakis Publisher, 2000), 254

<sup>12</sup> Ibid, 255

<sup>13</sup> Rafael Moneo, *Oppositions: On Typology* (Massachusetts, MIT Press, 1978), 29

classified the different architectural elements, like columns, pillars, vaults, etc. so that through the composition of these elements architects could create new entities that would result in a building. The documented classification of elements and buildings according to their program started to serve as manuals, not only for architects but also for the wider public, which to a certain extent could be called typological.<sup>14</sup>

The second discourse was during the modern movement. This period is known for the denial of the previous definitions of type. Architects tended to see type as a constrain that limited them in their design and prevented them from reaching complete freedom in the design process. Therefore they started ignoring past examples in order to be freed of any kind of restriction. This is what Gropius was aiming for, an architecture that is not established on previous typology. Through the industrial developments it became possible to rethink architecture in the sense that it became merely connected to any kind of precedent. The consequence was a mass-production-based architecture, paradoxically to the intention of the modern movement. Thus, as stated by Rafael Moneo “type had become prototype.”<sup>15</sup>

The third discourse, which was in the 1960's, is mostly influenced by G. C. Argan and Aldo Rossi. Paradoxically, in contrast to the modern movement, Argan grabbed back on the definition provided by Quatremère. Likewise Quatremère emphasized the vagueness of type in relation to the model, Argan saw type as an abstract layer that is inseparably connected with the programmatic use and form of buildings which made them relatable. This again emphasized the link between type and form. Argan elaborates on this by mentioning two moments in the design process: the moment typology and the moment of form<sup>16</sup>. Whereas the moment of typology searches for connections with the past, the latter, which was the most important, searches for connections with the current. While Argan's definition of type stayed quite implicit, Rossi's point of view created a more explicit understanding. Instead of describing type as something abstract, he stated that type is something which is “functionally indifferent”<sup>17</sup>. An example as such is the corridor, which functions in the same way even if placed in different buildings. In addition to that, Rossi's also emphasizes the relation of type and its past by mentioning that types are reminders of the past. Eventually, both characters clarify a relation of type with the past in both implicit as well as explicit ways.

Having discussed the three historical discourses of typology, I would like to end this section with a recent interpretation by C.M. Lee of typological research, the so called “fourth typology”. He states that: *The theory of type can therefore be this device for reasoning and experimentation that enables the re-engagement of architecture with the city in a critical and inventive manner.*<sup>18</sup>

#### IV POSITIONING

Jorge Mejía Hernandez's lecture on Heuristics was very inspiring, in which he stressed the importance of research within the field of architecture. He divided the design process in four categories: purpose, form, technique and communication. Here the purpose refers to the design question, the form to the design itself, technique to the technical aspects of the building and communication to the presentation. According to Hernandez, research takes place in all four categories.

However, for me the most inspiring lecture was by Robert Alexander Gorny on Investigating Typologies. The way he thoroughly dissected the methodology, not only in etymological sense, but also in terms of its historical development was very intriguing. During the research process I could recognize the different theoretical approaches on typology. The distinction made by Quatremère between type and model became even more understandable while conducting case studies. I could read the building itself as the model, and the underlying concept of the building as the type. Moreover,

<sup>14</sup> Rafael Moneo, *Oppositions: On Typology* (Massachusetts, MIT Press, 1978), 31

<sup>15</sup> *Ibid*, 33

<sup>16</sup> *Ibid*, 36

<sup>17</sup> *Ibid*

<sup>18</sup> Christopher C. M. Lee, *The Fourth Typology – Dominant Type and the Idea of the City* (University of Technology Delft, 2012), XIII

I focused on dissecting the architectural elements that gave shape to the type according to Durand's understanding.

Nevertheless, in my point of view, to understand architecture thoroughly, case studies and typological research are far from enough. Even though they serve as an important factor in which the study of precedents leads to possibilities for reinvention, as Marieke Berkers mentioned in her lecture on Praxeology, the social aspect in architectural design is also important. She describes praxeology as "*the study of human action and conduct*". Through this study architects increase their knowledge and gain more insight in the 'actual' users of the building, instead of the imagined ones. Therefore, the social and cultural context play an important role in order for the design to operate successful in its environment.

Unfortunately, due to the many factors that influence architecture, it is almost impossible to imagine architecture as an autonomous practice. This is not only proved by many architectural studies, but also by the studied literature for this paper. An example given in this paper is Waller mentioning that successful case study research is an artistic process that is very much shaped by insight. In my opinion, architecture itself is an artistic process and this artistic factor extends even into the architectural research. I assume that this kind of 'vagueness' is what makes architectural projects fascinatingly different from each other. Additionally, this lack of precise definitions is very much relatable to the general approach of the Public Building studio. Besides conducting case studies, the studio provides four lenses through which a city should be analyzed. These lenses are: City, Connection, People and Power. None of the topics are elaborately defined by the studio, thus requiring students to interpret each topic according to their personal understanding. This approach led in the end to different outcomes within the same topic, since each student defined their topic differently. Again, this shows that abstraction in architectural definitions leads to unexpected results and circumstances through which imagination and creativity are continuously being stimulated. Peter Carl stated that theory tends to limit our imagination needed for the design<sup>19</sup>. I agree with the general idea of not limiting architect's imagination. However, I do not see architectural theory as a constrain, but rather as existing knowledge provided by predecessors, allowing us to transform and translate existing knowledge into new kinds of architectural interpretations.

To conclude, architecture is a complex discipline in which multiple factors are involved. Thus when it comes to conducting architectural research one should be aware that perhaps multiple approaches should be combined in order to achieve a thorough understanding<sup>20</sup>. Referring back to the research question in the first part of the paper, indeed the study of precedents was useful and led to new insights. Yet, in order to reach more comprehensive answers, multiple approaches should be took into consideration to understand the social, cultural, historical context and many other aspects. According to this, the question that still remains in terms of architectural research is: what defines architectural research, and which methods are best for what, and when does research reaches its maximum potential?

<sup>19</sup> Christopher C. M. Lee, *The Fourth Typology – Dominant Type and the Idea of the City* (University of Technology Delft, 2012), VIII

<sup>20</sup> Ray Lucas, *Research Methods for Architecture* (London: Laurence King Publishing Ltd., 2015), 21

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