

# THE CONVERGENCE OF GROUNDED THEORY AND PRAXEOLOGY FOR THE PRAGMATIC IMAGINATION OF THE FAR FUTURE

*A dialectical review of grounded theory and praxeology as a humanistic and constructivist research method to deal with  
the urban landscape of the future*

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## INTRODUCTION

The Research Methods lecture series put emphasis on conducting research within the field of architecture and built environment with research methodologies. From the internal spatial layout to extensive urban design, architecture is a discipline that is worked closely with a framework of methodologies to reach a design decision. The methodology is the tool of a method we use to improve or increase our knowledge<sup>1</sup>. When it comes to architecture, we must be aware of the mutual relation to its practical side of the building and design of space, as well as a tradition of knowledge – intellectual and systematic study of behaviours, all the tangible and intangible information.<sup>2</sup>

Architectural design is not generic but with specific questions and concerns. Research as a part of the design process is a response to the architectural problem and create knowledge and finally lead to a design position, critically reflecting on various hypotheses through the constant switch between research and design. The kind of awareness and knowledge in methodological research, heuristics are unique when compared to other professional fields which concentrate at the processing of a certain aspect of knowledge. With methodological research, architects should have the ability to comprehend different cross-over disciplines, domains and considerations and balance. Stanford Anderson mentioned architects do not establish his knowledge positively to conclude whether the finding is right or wrong but let the knowledge grow after comprehension.<sup>3</sup>

The graduation studio of my thesis is under the chair of Complex Projects, surrounding future scenarios the city of Amsterdam in the future of the year 2100. Under complex projects, the architecture is closely linked to urban issues and considerations and understanding of the socioeconomic context. All scales and dimensions of the built environment would be critically reviewed and questioned. All the aspects of knowledge should be considered to balance the interests of different parties, covering a broad range of scales and cultural context through divergent perspectives as a planner, politician, economist, or philosopher. This creates the complexity in “Complex Projects” in which a range of layers of the built environment is overlapping, leading to architectural narratives – the critical element of the studio. With rapid urbanisation, more than half of the world population lives in the city environment, where there are many conflicts between human development and nature, between the old and new elements of the city.

My thesis deals with the aspect of the crossing and meeting of multi-cultures in Amsterdam Zuid-Oost, with a focus on reasserting the positions and values of humanity and traditional cultures and human interactions in a future society where technological advancement and artificial intelligence may dominate the sociocultural environment. How significant are the elements of traditional culture and ways of living to establish social sustainability influencing the spatially the city and urban landscape?

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<sup>1</sup> Jorge Mejia Hernandez, *On Heuristics, Research and Design*, Delft Lectures on Research Methods, lecture, TU Delft, 13 Sept 2018

<sup>2</sup> Ibid.

<sup>3</sup> Ibid.

## RESEARCH-METHODOLOGICAL DISCUSSION

The research methodology for my thesis has to do with grounded theory and praxeology in parallel. In the chair of complex projects, data collection and analysis are the essential aspects in the research approach. A narrative for the year 2100 scenario would then be data-driven, derived from history and past trends based on the current data, which is highly associated with the methodology of grounded theory.

Grounded theory is primarily classified as a qualitative research method, which is a method of observation to gather data in order to comprehend underlying causes, motivations, and phenomena and meanings to people, although sometimes it also deals with quantitative data. Grounded theory approach aims to identify an explanatory theory as it emerges from the analytical process.<sup>4</sup> With the proposed theory, further analysis can be carried out on other data and contexts for further explanation of an architectural position. The approach is helpful when it comes to an understanding first-hand and specific context – in my case it is the future in 2100 – and gaining an understanding of the “real-world” situations of their environment and the people.<sup>5</sup>

In grounded theory problems are investigated holistically without preset opinions. The full comprehension of study can only be done after repeated examination of data collection, extraction with an emerging theory.<sup>6</sup> Hence it is about the decoding the meaning of the data. With this research methodology, various layers and aspects in the urban and built environment are revealed and reorganised by regularly reviewing them with different scales and perspectives simultaneously, which is in line with the nature of Complex Projects that architects need to take care of crossing and intertwining subjects.

The future scenario requires analysis of the current knowledge through grounded theory which provides a solid foundation for the arguments of the scenario itself. However, grounded theory alone might not satisfy my ultimate aim and target of thesis for the people in Amsterdam Zuid-Oost. When it comes to the analysis of how people exactly act and what people exactly need, paper data might not tell everything of the real social picture and the process of decoding data might stay at an imaginary contextual level. Therefore, the research has to be carried out in parallel with praxeology which goes in-depth into the elements of people.

Praxeology is the study of human action, based on the notion that humans engage in purposeful behaviours, as opposed to reflexive and unintentional behaviours.<sup>7</sup> The term praxeology is derived from the Greek word praxis – “purposeful action” and logos – “thought” or “principle of knowledge”.<sup>8</sup> It was first mostly applied for the research in the field of economics. Later it was also extended to social sciences and psychology. Grounded theory is mainly qualitative but can also be quantitative, while praxeology is mostly a qualitative methodology. Praxeology also involves the study of history and a range of parties in sociocultural practice.<sup>9</sup> By studying the praxis of architecture, one can develop an eye for the actual users of the building, and not the imagined ones.<sup>10</sup> This is even more crucial when it comes to comprehends the existing problems of the site of Amsterdam Zuid-Oost which has long been labelled as a ghetto of Amsterdam.

## RESEARCH-METHODOLOGICAL REFLECTION

Grounded theory was developed as qualitative research as explanatory frameworks in the early 1970s by Glaser and Strauss. It was a departure from traditional scientific research of quantitative, positivistic methodology, which may not provide an empirical and pragmatic understanding of complex social processes. It depends on the researcher's own interpretation of data and his/her personal incentives to investigate the specific established field of knowledge. While it is claimed that grounded theory is mainly qualitative and constructivist, it was at first accused of accompanying positivistic assumptions<sup>11</sup> that is first assuming that there is “a reality out there” to come up with new theories from data.<sup>12</sup> Then there

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<sup>4</sup> Linda Groat & David Wang, *Architectural Research Methods* (New Jersey: John Wiley & Sons, 2nd edition, 2013), 225

<sup>5</sup> Linda Groat & David Wang, *Architectural Research Methods*, 222

<sup>6</sup> Linda Groat & David Wang, *Architectural Research Methods*, 235

<sup>7</sup> Wikipedia, *Praxeology*, retrieved from <<https://en.wikipedia.org/wiki/Praxeology>> on 01.12.2018

<sup>8</sup> David Coghlan & Mary Brydon-Miller, *Praxeology*, SAGE research method, retrieved from <<http://methods.sagepub.com/reference/encyclopedia-of-action-research/n265.xml>> on 01.12.2018

<sup>9</sup> Marieke Berkers, *Praxeology*, Delft Lectures on Research Methods, lecture, TU Delft, 20 Sept 2018

<sup>10</sup> Ibid.

<sup>11</sup> Linda Groat & David Wang, *Architectural Research Methods*, 239

<sup>12</sup> Ibid.

is a risk of oversimplifying the reality, the complex data and their meanings.

Indeed, the grounded theory is not necessarily mainly inductive in which deduction and verification are essential as well. While the Complex studio is encompassing utopic vision about the future, the research is not exactly about solid data in the future since there are too many variables influencing the outcome of future. To create a scenario also means to make a hypothesis which is then comparable to natural science research we need to come up a theory first then with observation and justification, which is deductive in nature. Based on temporary concluded prediction, we need to work again with an inductive approach to understand the phenomena. The process is repeated until one can describe and explain the phenomenon and new data collected does not change the emerging theory anymore.<sup>13</sup>

Later grounded theory shifted from positivistic towards constructivist, rooted in pragmatism and relativist epistemology<sup>14</sup> which can be linked to the contemporary qualitative way of 'thinking, knowing and communicating'.<sup>15</sup> Mixed methods approach should be adopted on top of grounded theory. Apart from open-ended questions, emerging approaches, text or image data from a constructivist approach, I should also include closed-ended questions, pre-determined approaches, numeric data,<sup>16</sup> and both qualitative and quantitative data analysis for a pragmatism methodology for the real and comprehensive re-invention of theories.

Praxeology is also qualitative and anti-positivist in nature that empirical data is insufficient to describe human actions as human events are unique and unrepeatable<sup>17</sup>. However, it also works with a deductive methodology to discover truth starting with a hypothesis and more theory testing, which helps to understand the whole picture in reality. History and the past are the critical parts of the deduction of theories in this case, which serves as the reasoning and base of the hypothesis. This is essential because of the development history of the site Zuid-Oost, which has always been labelled as an "unsafe city", boring and not nice neighbourhood to live in, despite the fact that it has an enormous amount of green space in the area. It would be critical to study what happened to the past modern planning from CIAM and how people use or why not using the space, and how the design is related to the psychological drive of spatial usage. The approach is also constructivist assuming that the reality is constructed socially and it is people who give it meaning and the aim of research is to understand what people think, feel, how they create constructs of the reality that surrounds them.<sup>18</sup> Hence we should not simply look up for established principles to explain a given behaviour but comprehend it thoroughly to explain the phenomenon instead.

The challenging part of the thesis project is while it has to construct a vision and generate theory and social structure of the unknown future, there is also an urgent need to understand and solve the existing urban problems of Zuid-Oost which associates a lot with the element of people and spatial relationship.

To develop further by adapting the grounded theory more precisely into my research framework, the concept of reverse engineering is introduced, which is inductive and deductive approach at the same time. Coming up with what scenarios I want to end up with either a dystopia and utopia, which would help to achieve a basic framework. For instance, cyberpunk as a dystopian view in many movies expresses a rather pessimistic view of how humankind can be developed to in which technology development can be out of control from the human in which social segregation and inequality become more serious. Personally, I tend to imagine the future to be a more livable environment with sustainability, clean and pleasant environment. From that backtracking to the present, it is essential to know the relevant data to come up with plans and schemes to achieve the better version future vision. Hence the research about the future trend is actually based on today's data and information which would be the foundations of predictions and assumptions, in which grounded theory plays a vital role in the process. When it comes to the understanding of today's people action in Zuid-Oost, praxeology also takes an integral part in the study.

## POSITIONING

In the future-oriented studio, the issues that most concerned me are the elements of humanity in

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<sup>13</sup> Wikipedia, *Grounded Theory*, retrieved from <[https://en.wikipedia.org/wiki/Grounded\\_theory#cite\\_note-34](https://en.wikipedia.org/wiki/Grounded_theory#cite_note-34)> on 01.12.2018

<sup>14</sup> Ibid.

<sup>15</sup> Linda Groat & David Wang, *Architectural Research Methods*, 241

<sup>16</sup> John Dudovskiy, *Constructivism Research Philosophy*, retrieved from < <https://research-methodology.net/research-philosophy/epistemology/constructivism/s>> on 02.12.2018

<sup>17</sup> Ludwig Von Mises, *Human Action The scholar's edition*, (Alabama: The Ludwig von Mises Institute, 1998), 59.

<sup>18</sup> Matgorzata Striker. "Applying Praxeological Analysis of Activities In The Assessment Of Management Performance In Health Care", *International Journal Of Contemporary Management*, 2014, 13(1), 137-149.

planning and the needs of people.

First, it is about the considerations of planning. Zuid-Oost in Amsterdam as the project site of the thesis has been known as a ghetto for immigrants. The neighbourhood of Bijlmermeer was notorious and the planning and had long been a representation of social segregation in the Netherlands until the recent redevelopment. Concerning the planning of site, I have a critical reflection on the modernist planning in the site in which they had forgotten about the feeling of people – the human scale, dimensions and therefore the feeling of staying in specific urban space. No one is using the existing open space, too large and too much open space as the density is too low. In contrast, people are using the undesigned space under infrastructures such as high-overs and corners in the city for markets and various kind of daily activities. Praxeology is therefore relevant. *Cities for the People* by Jan Gehl is one of my key references for studying actions of people and the study of praxis in urban environments.

At the same time, the new city in the future should be experienced in a way that the technology advancement in automatization and artificial intelligence would definitely reshape the urban landscape. However, there have always been doubts that this would undermine authentic human interaction and communication while it is crucial to human psychology and health. Signs of humanity and people interest us most since we are among the social primates.<sup>19</sup> Human interaction is always taken into design considerations in architecture, which is no exception when we design urban spaces. In the new city, on top of the technologies we have, we should not forget the experience should be the people as the primary role and the lesson learnt from Bijlmermeer.

Second, the elements of needs. There are a few future scenarios concerned me most. Future jobs and technology may affect people way of living and thus the cityscape. When it comes to 2100 in the future, my suspicion is what roles do human have with the existence of A.I. and all the new technologies. Meanwhile, the public is so fascinated about the robots and enjoy the convenience and entertainment brought by advanced technology and internet, I am highly concerned about the element of humanity which A.I. and technology can never replace - creativity, empathy, and authentic human interaction and touch. Therefore, my research would instead focus in what aspect A.I. can never replace human and realise the positions of human beings and robots, which needs to be sorted out with a new emerging theory from the process of grounded theory.

The studio guidelines keep pushing us to imagine about the future. Although in the first sight, many scenes in sci-fi movies about the future come into mind. Therefore, I aim at research to know what people really need and the quality of space in the past that still works in today's society. There must be something to learn and be reinterpreted and applied to the future. Understanding how people want to live and what do they need influences the way to the way construct and place architecture.

## CONCLUSION

Indeed, in many cases, different components intertwine and interact with each other. Architectural design is, therefore, a “wicked problem” since different stakeholders and the parties of interests.<sup>20</sup> The Bijlmermeer planning is a perfect example that we can learn from that many parameters have been missed. When we reflected on the development of Bijlmer, we know that the ideal case bought could be traced back to CIAM or even the Radiant City model by Le Corbusier. However, in the details of execution in the visionary plan, architects and planners have seemingly forgotten the fact that the culture and social environment then that people were not willing to live in identical and non-individualist types of dwelling. When we think of dwelling, we also need to consider the culture, social acceptance but not according solely to the emerging new theory from research and trends.

Architects should therefore by no means approach the urban questions or problems with non-linear thinking. The virtue of non-linear thinking has to do with the openness and anti-essentialism that systems are not open to outside influences or sources of energy or information.<sup>21</sup> In the end, no matter how grounded theory and praxeology together shape the research framework, there are always a duality of methods to deal with. The repeated back and forth process of re-analysis and re-organisation between qualitative and quantity data, and induction, but also deduction, leading to a reasonable future scenario of 2100 that strike a balance between virtual vision and authentic needs of the city for the people.

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<sup>19</sup> Jeff Speck, *4 ways to make a city more walkable*, TED, retrieved from [https://www.ted.com/talks/jeff\\_speck\\_4\\_ways\\_to\\_make\\_a\\_city\\_more\\_walkable#t-22649](https://www.ted.com/talks/jeff_speck_4_ways_to_make_a_city_more_walkable#t-22649)

<sup>20</sup> Jorge Mejia Hernandez, *On Heuristics, Research and Design*, Delft Lectures on Research Methods, lecture, TU Delft, 13 Sept 2018

<sup>21</sup> Anrej Radman, *On architecture as psychotropic practice*, New Urban Questions, lecture, TU Delft, 7 Sept 2017

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