

Definition and redefinition of architectural essence through Grounded theory

AR3A160 Lecture Series Research Methods

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I INTRODUCTION

Methodology is a systematic analysis of principles of methods, rules, and postulates employed by a discipline¹. It illustrates possible ways for human being understanding the world. However, methodology is not a synonym of method, which offers trailer-made solutions to specific cases. It is the theoretical foundation for researchers formulate appropriate set of methods for their research.

Methodology to the researchers is glasses to the ill-eyed. To be aware of the research methodologies is to sharper our eyes look through mist of knowledge in order to find the answer exact we want. Like various kinds of glasses that create entirely different visual effect, methodologies directly determine the outcome of research. In return, the scenes see from the glasses inspire the observer adjust the scope he/she uses. In the architectural activities and architectural topics, such as 6 "S": site, structure, skin, services, space plan and stuff², research methodology plays such an important role that it helps architects continuously from framing the structure of their architectural research in the early stage and partially determining the measurements architects apply in their future design.

Several common types of methodologies and methods were introduced in the series of lectures. The importance for graduation students to have this course and the awareness of methodology is that it guides student to explore more methodologies, find research methods that are closely related to their design and finally form their own methodological and architectural position. Furthermore, the interactive parts of the course such as the group work before and after courses promise the real-time feedback from the "outsiders" (audience) and new scopes provided by the "insiders" (groupmates). The courses itself are well organized, the methods introduced are relatively universal that promises the liberty and richness of students' choice of research methodology. However, it can be more operational when related to certain kinds of graduation studio.

The thesis mainly focuses on defining and redefining the essence of designated heritage architecture under the framework of the grounded theory. Heritage architecture essence manifests in chosen building's value, characteristic and potentials, which are the foundation for continuity and change aimed at guaranteeing its future life.³ However, unlike other graduation studio, in which architectural research as the starting point of design, the conclusion from the heritage research serves as a guide book that determines designers' choice throughout the design circle. The guide book is non-universal that it will be revised through the design process in order to have a better compatibility with the building. From this point of view, the research process of the thesis should be able to be continuously defined and redefined. Compare to other qualitative approaches, in the grounded theory research, "it is assumed that the object of study is not fully explained 'on the first take'; rather, repeated observation, data collection, and structuring the data into a working explanatory framework are all part of an iterative process that leads to an emergence of a theory."⁴

The graduation design studio topic is "Adapting 20C Heritage", which emphasizes on the remaining value of the building built after the 20th century. The aim of my graduation project is to renovate the Beursgebouw and bring it to a more sustainable future life. Aimed building called the Beursgebouw is

the firstly built office building in Almere that has been vacant for 10 years. The research question started by “what is the impression of the Beursgebouw?” Later transferred into “what is the heritage value of the Beursgebouw that can be reserved and unfolded to guarantee its future life?”.

II RESEARCH-METHODOLOGICAL DISCUSSION

Continuously evaluate and integrate data into the research make it possible for the researcher to have relatively holistic understanding of heritage building. Corresponding research strategies needed to be selected to gain certain conclusions. Grounded theory is the one not only promised a holistically investigation of building and its setting, but leave space for future adjustment by its tradition of “explaining through analyzing”. During the research, there will be several phases conduct under the structure of: induction (data collecting through interview, in situ observation, photographing, etc.), deduction (“drilling in” and “abstracting out”⁵ the massive data), and verification (interpret data into drawing, mapping, etc.).⁶

Heritage & Architecture design is made up by three stages: Cultural value, Design and Technology. Conclusion drawn from the research serves as the guideline for the whole design circle in order to understanding and preserving historic buildings, which seeks a continuity between past and present and the reason for future intervention. There are mainly two reasons for choosing grounded theory as the research methodology. Firstly, as one of the qualitative approaches, the emphasis on natural settings guarantee the researcher have a complete and neutral understanding of the monument and its natural setting. On the beginning the researcher may only gain some general information like the appearance of the building etc. By conducting several phases, the focus point of research transfers spontaneously from macro to micro and from tangible to intangible. After the last phase, both positive phenomenon and problems that related to the monument can be explained by physical, social, economic settings. The mass data gain from the research is the firm foundation for the future design. Secondly, some concepts become conspicuous by repeating similar phases. These concepts are the so-called “essence” of the monument which will directly influence the starting point of the intervention, program and decision in the transformation. Compared to other methodology, the grounded theory refuses to present opinions when the research is insufficient that prevent the researcher’s subjective impression disturb the conclusion. As a quick designer, the starting point of my design is always vulnerable and subjective which is the results of lack of thinking and research. The grounded theory slows down my pace of thinking and push myself to fully understand the object before conduct any action.

In Microscopic Designing Methodology, Japanese architect Hiroshi Nakamura used the computer program called “Motion Capture” recording target users’ daily motions. By collecting, comparing and interpreting the mass data gain from the program. The conclusion of the research is used as the base for creating physical space to rich the communication by space design.⁷ Although the grounded theory has already developed relatively complete, there still some processes generate in the theory and new technique are applied not only in data collecting like GIS and data filtering by advanced computer programming. Recently, the grounded theory has developed a critical realist version aiming for explaining social phenomena through mechanism.⁹ Critical realist grounded theory generates the explanation through a verification of the three domains of social reality: the 'real'; the 'actual'; and the 'empirical'. Compare to the general research procedure of grounded theory, critical realist grounded theory is more operable and clearer.

III RESEARCH-METHODOLOGICAL REFLECTION

Grounded theory was developed by two sociologists Barney Glaser and Anselm Strauss, first articulated in the late 1960s and 1970s.¹⁰ In 1965, they applied a research to the patients in the dying hospital by encouraging them write their awareness about death. Constant comparative method was gradually developed. During 1960s-1970s, because of the explicit and systematic conceptualization of the theory and the book *The Discovery of the Ground Theory* (1967), sociologists and psychologists in the United States and United Kingdom started to know and appreciated the theory. After the publish of the two books of “dying in hospitals”, this theory drew some attention from the field of medical sociology, psychology and psychiatry.¹¹ As the result of disagreement of the way of appliance, Barney Glaser and Anselm Strauss developed a number of versions of the grounded theory method during the year 1967 to 1999. However, the ground theory method still plays a very important role in some research field such as management, manufacturing, education and even drama.¹²

Since the 1990s, after several decades of debates between Barney Glaser and Anselm Strauss, the school of Grounded Theory Method has formed a relatively complete research system that few new approaches developed since then. The change mainly occurs in researchers' way of application. For example, in the field of Health Informatics, grounded theory is still used to gather information like requirements, develop ontologies and systems, while more attentions are paid to the usage as evaluation approach. Furthermore, researchers apply the method into the development of empirically based models and theoretical structures that can guide them in their design and future implementation. In general, grounded theory is a systematic research methodology and has the ability to guide research a large number of research fields.

The positioning of the thesis becomes more clearer after fully understanding the historical and theoretical background of the thesis. Under the framework of grounded theory, the research was designed to have three phases: identifying the heritage essence, defining the heritage essence, transforming the heritage essence. The first stage was conducted before the field trip to the Almere that only focus on collecting of the Beursgebouw and other cases, by using the easiest way – internet. In this phase, historical/current photos, drawings were gathered, the virtual representations of building and sites became relatively clear. Some public documents and audio/visual material were found as well, possible essence of the Beursgebouw was gathered and listed at the first time in value assessment matrix. A field trip to the building and cases was conducted on the beginning of the second phase. During this phase, interactive researches was applied. In site observation was applied and some paper version only material was collected from the city archive. The value assessment matrix on the first stage was adjusted according to the conclusion of the second phase and the research question became more specific “what is the heritage value of the Beursgebouw?”. With the conclusion of the second phase, the scope the research became larger, from building to the city in order to answer the ultimate research question: “what is the heritage value of the Beursgebouw that can be reserved and unfolded to guarantee its future life?” Under the thought of “building make the city”, in the third phase data from the urban scale was gathered and was casted to the building. Urban factors participate in the value assessment.

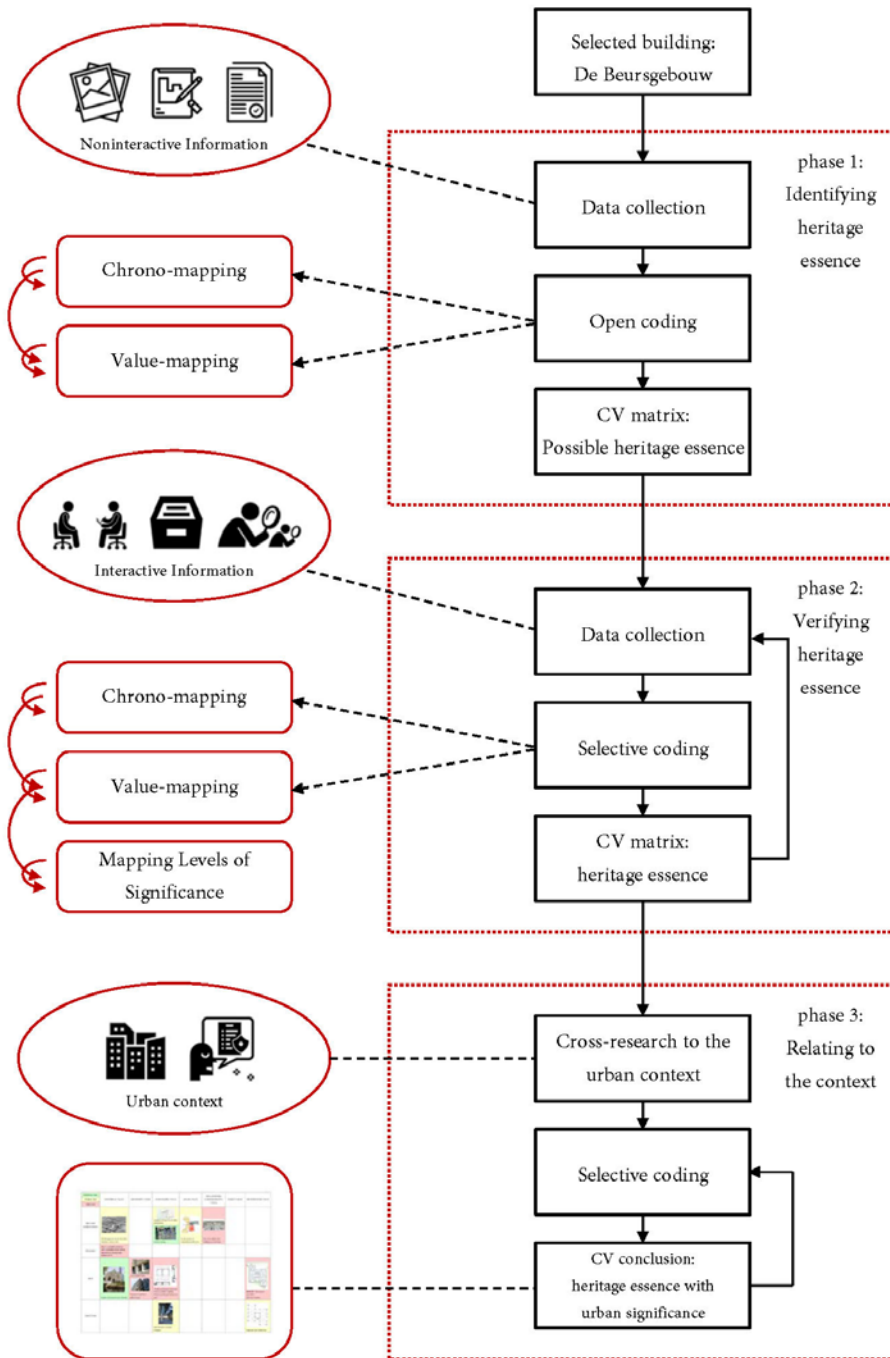


Fig 3.1 Diagram of grounded theory approach in heritage intervention (Author, 2018)

The first two phases of the grounded theory help me form a holistic narrative to the building. The third phase figure out the possibility of the transformation in terms of city scale. Only by conducting different phases, it is possible to truly grasp the essence of the heritage building and conduct appropriate transformations to the building for gaining second the youth in the building itself, the more important, become more meaningful in the urban level.

IV POSITIONING

Heritage & Architecture deals with not only the current client, but the to more essence: the main idea of the original architect and time trace on legacy buildings. During the prosecution of the inquiry, two positions become clear, one is: Architecture is no longer a reflection of the individual will of the architect, but more of a profound impact on society. Since the 1960s, heritage definition has widened that more modest buildings representing societal developments and everyday life of the past are concluded.¹³ Architects during that time held critical anti-monumental stance that building should be purely functional.¹⁴ If these buildings loss their initial function, they should be demolished. Rigorous ruled by the principle, the vanguard architects translated these ideas into practice and fostered some remarkable buildings such as Van Nelle Factory in Rotterdam¹⁵ and its contemporary Sanatorium 'Zonnestraal' in Hilversum¹⁶ of 1928. They are two poles of the magnet. Sanatorium 'Zonnestraal' directly responses to a short-lived functional program with specific defined space and Van Nelle Factory emphasized on the opposite. Ironically, later due to the extraordinary architectural quality, Sanatorium 'Zonnestraal' was restored and have an eternal life as a monument. Van Nelle Factory fulfilled it will and still being actively accommodated. This position relates to the architects who are going to design new building that does he/she has the responsibility to leave the building open-ended, in other words, sustainable?

Is the restoration of the original situation of the building refer to architects' negative design? Another position more roots in the building itself: heritage architecture is never a replica of the original even though it looks the same. There is always a debate of whether the addiction should or not to be recognizable. In my opinion, appearance should not be the only criterion for judging whether the heritage is effective designed. The user's sense of follow-up experience and continued contribution to society are the ultimate embodiment of the transformation.

As a firm believer in the position that Architecture has profound impacts on society, I believe that the consequence of the transformation is the incarnation of inhabitant's will. Although I am more inclined to solve the architectural problems in a subtle way, so that the building has a better sense of space experience, and the essence of the original architect will remain. The intrinsic quality of the heritage design lays in what the building can furnish rather than the personal desire of the later architect. De Beurs lose its social status and gradually be neglected by the public. A conspicuous addition maybe a feasible way for the building gain its identity again. This also means that the position of architects is not always the first principle toward the transformation.

In Heritage & Architecture approaches the design challenge from three angles: Cultural Value, Technology and Design. Cultural value is enteral the starting point for the design. It is further specified and assisted by technology to restore the past situation as well as the radical new design. The design approach can be symbolized by a triangle, with cultural value and technology as the basis for the design.¹⁷

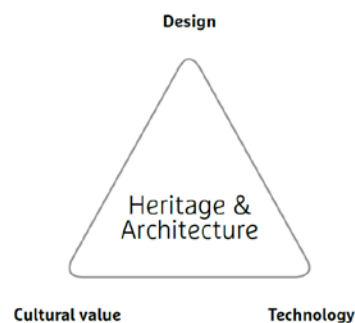


Fig 4.1 Three commons of Heritage & Architecture

Two positions mention above mainly correspond to the attitude in the research process of cultural value, the base of the future design. Architects have strong personal design style may unable to perform a tailor-made suit for the building. Some buildings even lost all its identity after transformation. Andou Tadao's Pinault Contemporary Art Foundation maybe a good spokesperson. A concrete cylinder was built in the central of the original building that separate doom and the rest part of the building, block the beautiful view and dome mural from corridor to the hall vice versa. While visitors can tell it is Andou's work at the moment of entering the door. Is this building still a heritage? For me the outcome of the design has partially out of orbit and become the product of personal will.



Fig 4.2 Model of The Pinault Contemporary Art Foundation

In general, architect' role becomes more involved in the social ethics and my architectural positions are deeply buried with it. Firstly, architecture is no longer a reflection of the individual will of the architect, but more of a profound impact on society. Second, heritage architecture is a media that links the past to the future. Each generation gets the chance to acquire an understanding of the ancient heritage. No matter what kind of form they will become, it should not just be the carrier of individual designing will.

The research question redefines during the process of inquiry. From a first impression to a research on the change of social background and the situation of the building itself. After collecting and interpreting the data. The intangible power of society like economic and city policy can have a decisive influence on the future position of the building. Architect is no longer an artisan design only for self-entertainment but become a volunteer that takes the responsibility for maintaining a society.

1. Irny, S.I. and Rose, A.A. (2005) "Designing a Strategic Information Systems Planning Methodology for Malaysian Institutes of Higher Learning (isp- ipta), Issues in Information System, Volume VI, No. 1, 2005.
2. Steward Brand's Shearing Layers diagram from his book *How Buildings Learn* (adapted).
3. Marieke Kuipers and Wessel de Jonge, 'Designing from Heritage - Strategies for Conservation and Conversion' (TU Delft - Heritage & Architecture (Fac. Architecture) on behalf of the Rondeltappe Bernoster Kemmers Foundation, 2017), P12.
4. David Wang and Linda Groat, 'Architectural Research Methods' (Hoboken: John Wiley & Sons, 2013), p 235.
5. Working with qualitative data: drilling in and abstracting out. Courtesy SAGE Publications. Zina O'Leary, *The Essential Guide to Doing Your Research Project* (Thousand Oaks, CA: SAGE, 2010). p. 263, Figure 14.3.
6. *Ibid.*, 11.
7. Hiroshi Nakamura. 'Microscopic Designing Methodology'. LIXIL Publishing (2010). P 29.
8. Pettigrew, Simone F. "Ethnography and Grounded Theory: a Happy Marriage?". acrwebsite.org.
9. Kempster, Parry; Parry, Ken (2011). "Grounded theory and leadership research: A critical realist perspective". *The Leadership Quarterly*.
10. Barney Glaser and Anselm Strauss, 'The Discovery of Grounded Theory: Strategies for Qualitative Research' (Chicago: Aldine, 1967); Barney Glaser and Anselm Strauss, 'Time for Dying' (Chicago: Aldine, 1968).
11. Strauss, A., & Juliet, C, 'Grounded Theory Methodology: An Overview. In N. Denzin & Y. Lincoln *Handbook of Qualitative Research*.' 1st ed. (1994), p 273–284.
12. Fletcher-Watson, B. 'Toward a Grounded Dramaturgy: Using Grounded Theory to Interrogate Performance Practices in Theatre for Early Years'. *Youth Theatre Journal* (2013). 27 (2): p 134.
13. Wessel de Jonge is Professor of Heritage and Design. His inaugural address was presented on 10 June 2016 under the title 'Sleeping Beauty – About Transitoriness, Timelessness, the Future and Architectural Design'.
14. Duiker 1932.
15. The Van Nelle Factory was designed by Johannes (Jan) Brinkman (1902–1949) and Leendert van der Vlugt (1894–1936) during 1925–1931 and constructed between 1928–1931.
16. Sanatorium 'Zonnestraal' was designed by Johannes (Jan) Duiker and Bernard Bijvoet (1889–1979) between 1926–1928 and completed 1928–1931. The design team also involved structural engineer Jan Gerko Wiebenga (1886–1974). In this text, the name of Duiker is used so as to represent the team of designers.
17. Rob van Hees, Silvia Naldini and Job Roos, 'Durable past – sustainable future' (2014), p 11-13

V BIBLIOGRAPHY

- Glaser, B. G., & Strauss, A. L. (1967). *The Discovery of Grounded Theory: Strategies for Qualitative Research*. Chicago: Aldine.
- Glaser, B. G., & Strauss, A. L. (2005). *Awareness of Dying*. New York: Aldine Transaction.
- Grounded theory methodology. (n.d.). Retrieved December 5, 2018, from <https://www.mheducation.co.uk/willig+>
- Hyppolite, J., Cherniak, S., & Heckman, J. (1979). *Genesis and Structure of Hegel's "Phenomenology of Spirit"*. Evanston, Illinois: Northwestern University Press.
- Kuipers, M. A. R. I. E. K. E., & De Jonge, W. E. S. S. E. L. (2017). *Designing from Heritage*. Delft, Netherlands: Delft - Heritage & Architecture.
- Lucas, R. (2016). *Research Methods for Architecture*. London: Laurence King Publishing.
- Mesly, O. (2015). *Creating Models in Psychological Research*. United States: Springer International Publishing.
- Meurs, P. A. U. L. (2016). *Heritage-based design*. Delft, Netherlands: Delft - Heritage & Architecture.
- R Gibbs, G. R. A. H. A. M. (2010, June 19). *Grounded Theory - Core Elements. Part 2* [Video file]. Retrieved December 5, 2018, from https://www.youtube.com/watch?v=dbntk_xeLHA
- Russon, J. E. (2004). *Reading Hegel's Phenomenology*. Bloomington, Indiana: Indiana University Press.
- Van Hees, R. O. B., Naldini, S. I. L. V. I. A., & Roos, J. O. B. (2014). *Durable past – sustainable future*. Delft, Netherlands: Delft - Heritage & Architecture.
- Wang, D., & Groat, L. N. (2013). *Architectural Research Methods*. Hoboken, New Jersey, The United States of America: Wiley.
- Strauss, A., & Juliet, C. (1994). *Grounded Theory Methodology: An Overview*. In N. Denzin & Y. Lincoln *Handbook of Qualitative Research*. 1st ed.
- Fletcher-Watson, B (2013). "Toward a Grounded Dramaturgy: Using Grounded Theory to Interrogate Performance Practices in Theatre for Early Years". *Youth Theatre Journal*. 27
- Kathy Charmaz, *Constructing Grounded Theory*, 2nd ed (London: Sage 2014 (2006)), pp1-7. Glaser, B. (1965). *The Constant Comparative Method of Qualitative Analysis*. *Social Problems*, 12
- Stray, Viktoria; Sjøberg, Dag; Dybå, Tore (2016-01-11). "The daily stand-up meeting: A grounded theory study". *Journal of Systems and Software*. 114
- Alexander, Chr., 'A City is not a Tree', in: *Architectural Forum*, Vol 122, No 1, April 1965, pp 58-62, (herdruk in boekvorm 2015)
- Berg, J.J., S. Franke, A. Reijndorp, *Adolescent Almere. Hoe een stad gemaakt wordt*, Rotterdam 2007

- Berg, J., Peetvaders van Almere. Interviews met bestuurders en ontwerpers, Almere 2001
- Berkum, A en D. De Jager. Iconen van Almere, Beilen, 2016
- Bijlsma, L., Nio, I. & A. Reijndorp, Atlas Nieuwe Steden. De verstedelijking van de groeikernen', Trancity/Valiz 2012
- Brandes, E., De stedenbouwkundige inrichting van nieuwbouwwijken, Studierapport 17 Rijksplanologische dienst, Den Haag 1980 (1975?)
- Brouwer, P., Van stad tot stedelijkheid. Planning en planconceptie van Lelystad en Almere, Rotterdam 1997
- Brouwer, P., & T. Verlaan, Symbolic gestures? Planning and replanning Amsterdam's Bijlmermeer and new town Almere since 1965, Informationen zur modernen Stadtgeschichte (2013)1, 48-59
- Cammen, H. van der & L. de Klerk, Ruimtelijke ordening van grachtengordel tot Vinex-wijk, Utrecht 2010