# Timed structuralism

I RESEARCH METHODOLOGY

The realm of architecture is a diverse and complex discourse touching many other fields like sociology, engineering and humanities. In order to research architecture, inevitably a form of simplification needs to be applied to understand for example the spatial characteristics, sociological influences an environmental impact. Admittedly, this simplification is not limited to architectural research. Indeed, every interaction we have with our surroundings, including the medium of language, is submissive to simplifications.[1] This is also the case in researching architecture, using a simplification of reality to understand the complexity and, in the case of architecture, to apply the attained knowledge into a design. The research itself can be simplified and understood when studied. This contributes to the systems of methods, called methodology. The tools and methods and their according methodology in a way dictate the outcome of the research. Therefore, it is most useful to try to understand which methods you use, and why you choose to use these methods. What is the underlying system, what is your methodology?

The aim for this course is to become aware of your particular research methods, and furthermore become acquainted with different methods, which in turn might help in the graduation project. In my case, what is most notable for the lectures on research methods is that every lecture contains recognisable methods, that I often use myself. However next to that, the personal choices for these research methods are mostly unconscious. Through this course, my mind is taken from the unconscious *way of doing* into a more conscious *way of practicing*. More frequently asking myself what the underlying concept is that I want to grasp through my research.

The topic for this paper is my personal research in the graduation studio. My graduation studio is part of the chair Heritage and Architecture, called the Future of Structuralism. Of course, the chair of heritage and architecture differs from the other design chairs within the faculty of architecture because in these studios there is always an existing building to deal with. This is not to say that this cannot be the case in other studios, or that other studios consider the context to be a *tabula rasa*. However, for the chair of Heritage it is one of the core starting points. As a case I chose to transform and redesign the Faculty of Humanities in Leiden, a structuralism building designed by Joop van Stigt in 1983. In order to structure this paper on my methodology I ask a main question based on the epistemes as talked about by Tom Avermaete: **How does thinking within the realm of epistemes change my research methods when researching and designing with structuralist buildings?** Thereby I focus on the methodologies given by Avermaete, try to understand how I use these in my personal methodology and finally relate this to the historical practice within the epistemes and how this changes my methodology.

II THINKING WITHIN EPISTEMES

Within the chair Heritage and Architecture and in relation to my previous design studio's, the studio Future of Structuralism is exceptional. The project is considering not only an existing context and building, but rather a building within a certain architectural style and therefore an architectural historical discourse. Understanding the building and moreover structuralism as an architectural style therefore requires different methods than other projects, making it almost comparable to an architectural historical research. For instance, a literary review plays a big role within the analysis to understand structuralism, how it developed and what its intentions were. At the faculty of Architecture in Delft we are practiced and used to research according to morphological and typological research methods. This is mostly recognisable by used methods like mapping of situation, development and context. However, due to an available analysis done by other students focussing on these typological research questions, our research could focus more on other topics. Some examples for tools we used

in our analysis are chrono-mapping and profile drawing. These could still be considered within the typological methodology. In addition, we made Nolli maps and Cullen drawings. These tools are focussed more on the experience of architecture. These methods were done next to the aforementioned literary review, relating structuralism and Joop van Stigt to the *Zeitgeist* of their era.

In understanding these methods an overarching methodology can be derived, basically uncovering the system of methods. For these methodologies there are multiple ways of categorising the methods.  For instance, Groat and Wang, and Lucas mention the difference between qualitative research, and quantitative research.[2] Quantitative research is based on measurable and quantifiable data. This makes the research very objective and a much-used method in scientific research. Qualitative research on the other hand, is the understanding of qualities. This makes the research rather subjective and open for interpretation. Within this categorisation my research methods are rather qualitative. On a different level however, Lucas also gives the example of etic and emic research. This categorisation in research methods is based on the position of the researcher in relation to the studied object and is mostly recognisable within the realm of Humanities (to which Lucas also considers architecture).[3] The etic methodology in this categorisation takes an overview from outside the context, while the emic methodology blends with the researched context and looks at it from the inside. Within this categorisation my methods are divided between the two, on the one hand seeing the building as a part of a bigger narrative and within a larger city. While on the other hand the building is experienced on a personal level. Of course, there are also other kinds of categorisations and methodologies as given through the lecture series on research methodology. For me the most recognisable manner of indexing and understanding research methods was given in the lecture by Tom Avermaete. He describes four epistemes from which architects can view their projects. In this typology studies types within architecture, phenomenology studies experience of architecture, semiotics studies symbols in architecture and finally praxeology studies the use and function of architecture. This list is not exclusive however, other epistemes could also be shown. Our research could within this perspective mostly be seen within the realm of the phenomenological episteme.

III PHENOMENOLOGY

Epistemes are in a way a reflection of the general *Zeitgeist* of a certain era. The episteme in which architects act always reacts on the epistemes other architects use, trying built upon or fill the gaps in their research. In the same way however, these epistemes do not exclude each other and can exist next to each other. As Tom Avermaete notices in the perception of the public through the 20th century, many architects saw the notion of the public in a vastly different way, resulting in different research methods.[4] As an episteme phenomenology is the study of phenomenon, experience or perception of architecture. Rather than the material form of buildings, this episteme focusses on how people experience the city and its architecture. Or as defined in a paper for the University of Kansas:

> *"Phenomenology demonstrated in architecture is the manipulation of space, material, and light and shadow to create a memorable encounter through an impact on the human senses."*[5]

Phenomenology therefore is strongly related to sensory stimuli, and mental memory. According to Avermaete, phenomenology originates within architecture at the last moment of the 19th century, when Auguste Choisy investigated the Acropolis in Athens.[6] Choisy did this not by studying the types of buildings on the mountain, or the development of the site over time. Rather he chose to investigate the experience of the architecture when climbing the mountain and passing the several buildings.[7] He thereby combines plan and perspective drawing to investigate a certain sequence of space. However, especially in the 20th century Phenomenology was practiced by architects. Most notably, Gordon Cullen and Kevin Lynch. Cullen, like Choisy did before him, investigated the city through the use of perspective drawing. Kevin Lynch on the other hand made mental maps, trying to communicate his experience through memory. Today, some architects could also be considered to be designing within a phenomenological framework. Think of architects as Peter Zumthor, Steven Holl or Alberto Pérez-

Gómez as seen in by Peter Zumthor who has been quoted to say that: "I believe architecture is (…) not about forms. It's about space and material."[8] Thereby solely focusing on the sensory experience of architecture, rather than the form or image of architecture. Phenomenological architecture is not only rational but uses intuition and unconscious collective knowledge.[9]

Through this course Lectures in Research Methods it became apparent that the tools we used are part of a phenomenological episteme. Especially the use of Cullen drawings in our research helped to understand the existing building of the faculty of Humanities and how it could be compared to the rest of the city Leiden. In this way the technique of drawing as introduced by Cullen is a way of filtering and extracting useful information to draw conclusions. However, these techniques were not sufficient to answer our research questions. Most notably, we also used very different techniques like the aforementioned Nolli maps, profile drawings and a literary review. We made these tools our own by combining several different methods in order to answer our main question. The aim for our drawings is not only to understand the experience of space in the work of Van Stigt and the city of Leiden, it moreover tries to understand how structuralism is experienced in the context of the city and how it differs from what is happening in the rest of the urban setting. In the end, the way we tried to understand our methods and the aim for our research, we considered our research to be a research on time. By making two timelines, crossing each other like a Greek cross, we can relate the timeline of structuralism to the timeline of the work of architect Joop van Stigt. This double timeline, as can be seen in figure 1, summarises our research methods. Explaining this timeline fully will go beyond the scope of this paper. However, it also shows the extend of our research on Joop van Stigt, Leiden and Structuralism. Moreover, in a way we could consider our own timeline to be an extension of this double timeline.
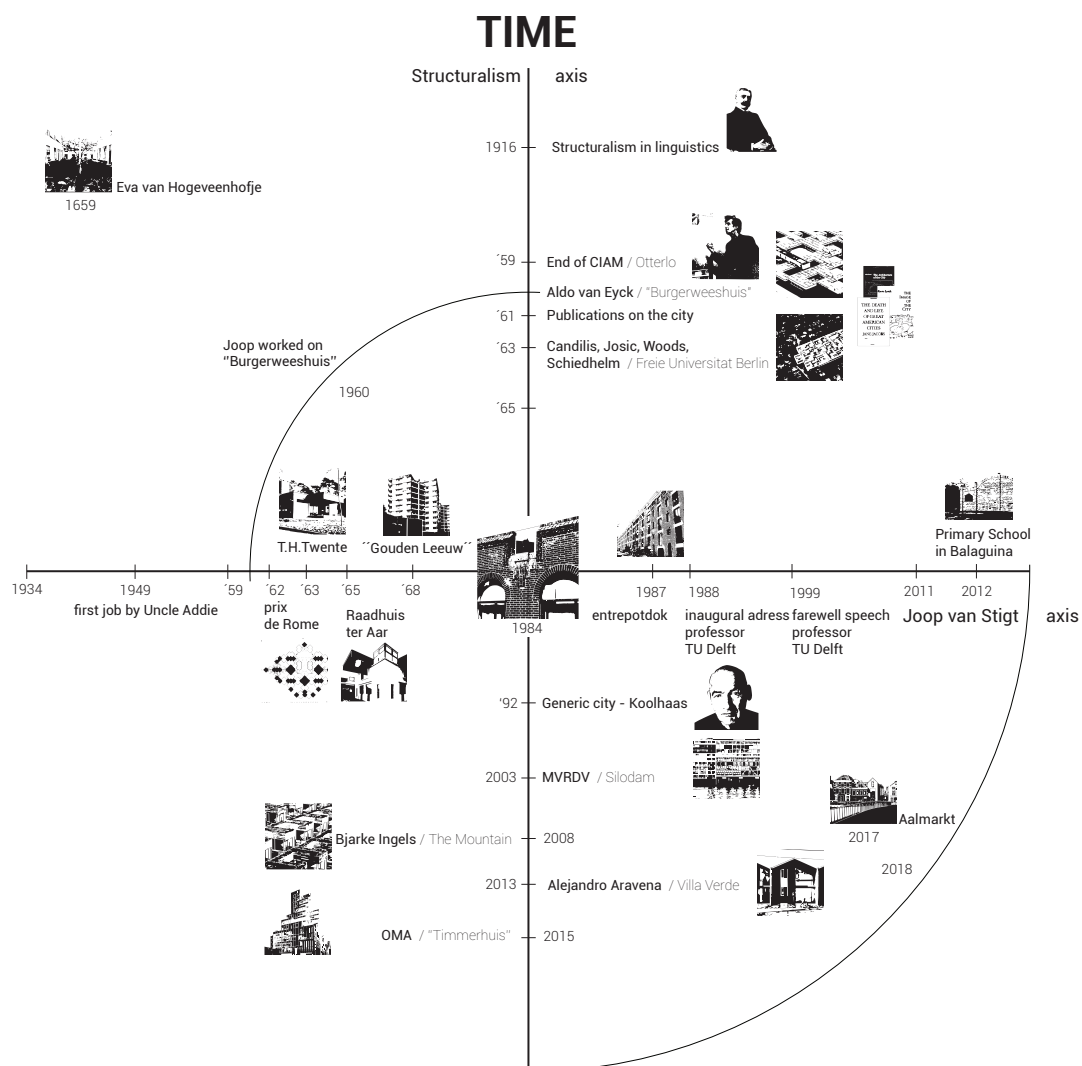


Figure 1. Double timeline, connecting Joop van Stigt, Leiden and Structuralism.

IV SYNTHESIS

As stated before, in this design studio the Future of Structuralism, we focus in our research not only on the physical form of the existing architecture, but try to understand the underlying ideas, concepts and ideologies building the architecture. Moreover, our research is focused on the experience of structuralist architecture in order to conceptualise our ideas. However, our methods are not limited to one episteme. Notably, some tools and methods in our research are placed within the typological episteme as familiarised at the Faculty of Architecture. This is not a bad thing whatsoever, but in acknowledging this fact, it can help us to understand the answers we are trying to find. One could state that the methodology on the one hand dictates a certain kind of tools, however the reverse might be true as well. In practicing a certain number of tools in your research, you could consult the overarching methodology in order to understand your unconscious aim in the research. Thereby we were able to use these epistemes in our advantage and combine them into this research on time.

However, our method is quite different from the general methodology used in the chair of Heritage and Architecture. The chair commonly provides a framework for students in the form of a value matrix. This value matrix is based on the work of Alois Riegl and Stewart Brand and tries to make the building and its separate layers measurable on different levels of valuation. The value matrix mostly focusses on typological and material values, that don't become apparent through our research methodology. The matrix is focussed on all layers of the building, starting with the site, and going to structure, skin and stuff, to name a few. The aspects of the conceptual design and ideology of the architect however don't come to the foreground. Only the last layer, named the spirit of place, somewhat grasps these intangible layers associated with the building. Furthermore, the value matrix is quite focused on the age or historical values of the material and the building. This is not that important in the case of structuralist buildings, because they are relatively young. So, while the matrix is a very useful tool in making intangible values measurable, this matrix is not useful in getting grip on the values of the intentions or ideologies of the original design. The matrix makes a rather useful framework for the design and transformation of the existing building, in a strictly material level, based on intangible values. However, through the matrix the more intangible aspects of the design, like the intentioned articulation of space, relations and atmosphere can't me made measurable through this matrix and therefore it doesn't give grip on these aspects of the design. Because of this, in our research result we changed the last layer within the matrix to be the layer of *spirit in time*. This timed aspect comprises the place of the building both within the structuralist history as in the oeuvre of Van Stigt.

When starting the Research Methods course my research unconsciously consisted mostly within the typological episteme. However, through this course I became aware of my methods and came to know different methodological tools. Especially these more subjective phenomenological tools in relation to the literary review helped in understanding the design of Van Stigt in a more comprehensive way. This thinking within the epistemes not only helps to become aware of the used methods in this graduation program but can also function as a means of checklist to provide multiple angles on the topic. Admittedly, the graduation studio is only halfway there, with much more research to come. But becoming aware of our research methods in this initial stage of the project helped in understanding our process and helped us in using the epistemes and the tools provided to us to our advantage and tailoring them to our needs.


ENDNOTES

[1]      Stefano Milani, *Typology* (Delft: Lecture, 2018)

[2]      Linda Groat & David Wang, *Architectural research methods* (Hoboken: John Wiley & Sons, Inc., 2013), 71., Ray Lucas, *Research Methods for Architecture* (London: Laurence King Publishing Ltd, 2016) 10.

[3]      Ray Lucas, *Research Methods for Architecture* (London: Laurence King Publishing Ltd, 2016) 10.

[4]      Tom Avermaete, *The Architect and the Public: Empowering People in Postwar Architecture Culture* (Rotterdam: Nai booksellers, 2010)

[5]      University of Kansas *Theory of Phenomenology Analysing substance, application and influence* Retrieved from: https://cte.ku.edu/sites/cte.drupal.ku.edu/files/docs/portfolios/kraus/essay2.pdf on 19-05-2018

[6]      Tom Avermaete, *Architecture and its epistemes (lecture Notes for students)* (Delft, 2017)

[7]      Tom Avermaete, *Architecture and its epistemes (lecture Notes for students)* (Delft, 2017)

[8]      Peter Zumthor Retrieved from: https://www.brainyquote.com/quotes/peter_zumthor_542965 on 20-05-2018

[9]      Abiboo studio, *Quick Tour through Phenomenological Thinking in Architecture* Retrieved from: http://www.abiboo.com/arch/quick-tour-through-phenomenological-thinking-in-architecturequick-tour-through-phenomenological-thinking-in-architecturequick-tour-through-phenomenological-thinking-in-architecture/ on 20-05-2018