

COMPLEX CONTEXTS

Researching the importance of architecture as a temporary layer

Student

Lucas Pol (4220358)

Chair of Heritage & Architecture, "Revitalising Architecture"

Thesis "A new industrial production space"

I INTRODUCTION

The focus for the design professions like for example an urbanist, an industrial designer or a landscape architect all have different expertise's. These work fields are ever changing, just like architecture. Architecture could once be considered the mother profession. Currently it holds a somewhat indeterminate position, this due to the emergence of professions, like the before mentioned urbanists and landscape architects.¹

For me this situation gives the architect a unique position with a certain strength and flexibility that enables him to link aspects from the discipline of a landscape architect to the precise engineering work or that of a product designer. This is apparent, not unique, in *Heritage & Architecture*, this is the chair of my graduation project. Here the architect or student looks at aspects seen from landscape and urban levels to the smallest detail like a specific nut used in fixing a beam to a column in a certain building in a certain time period. This is true for as well the design as the research aspect within heritage in architecture.

The chair *Heritage & Architecture* uses a form of interpretive-historical research. This research is meant for complex contexts with social-physical aspects with a narrative direction. Interpretation can roughly be described as a process with different steps. First, the gathering of data and evidence, then this data is identified and organized, the third step consists of evaluating the finding. Finally, the research is put into narration.²

The course of *Research Methods* in architecture made that I look more critical on my ways of working. I am getting more aware of what I am doing, when researching or designing. The lectures explained, for a part, the complexity of projects and different ways of doing research and eventually design. This gave me ability to make me understand my process and project in a better way and with that the means to make other people understand my project better.

The landscape architect Michael van Gessel, after describing that he approaches his projects with the idea of creating balance and speaking of cleaning up, emptying out and creating quiet and space he quotes the eighteenth-century landscape Architect Joseph Spence saying: "*Nature will always be there and try to undo your work. Man-made nature has its own revenge on man by overgrowing what we did. As long as we inhabit this planet, there will be a need for landscape architects.*"³ This notion about temporality is very important within design projects revolving around heritage sites as they contain many traces from different influences. These influences describe man-made changes as well as natural elements. My graduation project is about designing a new layer, in the form of a new industrial production space that fits in the already existing network of physical and temporal layers with their sub-layers⁴. This paper will explore the importance of the notion of the site and its sub-layers with the following question:

What is the importance of viewing the site and future design as a temporary state that contains physical layers and invisible layers linking values that form the basis for redesigning a former military industrial site?

This question quite specifically aimed but will be answered in a general way as to place in the proper context. It should give me more of an idea of the methods used for a complex site and project where many different historical, current and future layers are or will be present. The research methods me and the group have used will be placed in the context of the graduation studio of the *Heritage & Architecture* department called *Revitalising Architecture* and the tools and methods it uses from the practical work field. To reflect on my approach during the research it will be put next to traditional methods from, for example, landscape architecture. In the end, this paper should give an idea of my position and approach so far and how I could change certain tactics in the future as to create a more efficient workflow with more awareness.

II BUILDINGS=LANDSCAPE?

The graduation project started off with an analysis of two comparable reference projects in Eindhoven and Maastricht⁵. With the analysis we got used to the specific approaches and tools used by the studio to assess a historical site. This is of importance as some of us, including me, had not done a heritage project within the chair of *Heritage & Architecture*.

After this introduction we chose a site within the context of the Hembrug Terrain. I chose a site called *Plots in The Wood*⁶. This site, located in the middle of the former military industrial complex on Hembrug Terrain, has a lot of vegetation that has had free reign during the 10 years that it had been closed. This is still very apparent on site currently; It has become part of its character.

The methods and tactics used in the research are in connection with the studio program based on the following four analytical steps.⁷ The first step consists of compiling collected data in the architectural history of the site. These results are then placed in a value matrix classifying the site-specific values. After this, the significance of these values is determined followed by a position statement. This final step is the basis for the design. This should provide guidance for an objective process within a field of architecture that needs frameworks to handle the “...*built heritage of the Machine Age*” in the current climate⁸.

The three main subjects of the graduation are heritage, building technology and cultural value⁹. These were some lenses for the value matrix and the research that I used for the *Plots in The Wood*. It became important to acknowledge that the site is to be viewed as a whole because the buildings on their own do not make enough sense.

The site needed to be approached similar to the idea that Alex Wall presents in his text about urban surfaces. The urban surface should be considered as a landscape this is not just describing the spaces in between the buildings but the field that carries all the elements like buildings, open spaces, roads, natural habitats and more, so everything.¹⁰ “...*It must concern itself with all man-made elements that form our environments: with roads and highways, with signs and posters, with outdoor spaces as created by structures, and with cityscape and landscape.*”¹¹

This is important because it was important that we did not solely investigate and analyse the individual buildings on site but to the site as green space that is scattered with man-made elements like follies¹² in an English landscape park. We discovered the functions through investigating, maps, photos, some texts and talking to a former employee who had access to the entire the site when it was still fully in use.¹³

The approach can be placed under the wing of *Investigating on Territorial Scales*.¹⁴ This methodology approaches a context or project through looking to the sub-surface. The sub-surface can be defined as the unseen foundation for all physical structures, consisting of both man-made and natural elements. The sub-surface comes with challenges but also present opportunities.¹⁵ My take on the research of the site *Plots in The Wood* and personal statement or position¹⁶ considers the buildings part of the sub-surface. they are part of the landscape and total character. Some of the challenges and opportunities for the *Plots in The Wood* and the Hembrug terrain are for example that the site used to be a classified location, building on ongoing developments¹⁷, the step from isolation and connecting to different networks¹⁸ and finally the former and future functions.

III NETWORKS AND OPEN ENDS

In 1982 OMA proposed a design for Parc de la Villette, then still in an industrial setting and context. Rather than proposing a fixed plan Koolhaas and OMA proposed four layers containing different elements that formed the strategy for the project. These layers were placed on many land-strips that were orientated from east to west. The quality of the design came from different uses, adjacencies, juxtapositions and alternating programs and elements. Alex Wall states that *“Rather than a fixed design, the project offered the city a framework for developing flexible uses as needs and desires changed.”*¹⁹

This could also be translated to design, rather than analysing for one perfect solution analyse a site so that a future design could provide a framework for future layers and changes. This could for example be done by not only mapping physical structures but also different networks.

*“A good strategy is a highly organized plan (spatial, programmatic, or logistical) that is at the same time flexible and structurally capable of significant adaptation in response to changing circumstances. Too rigid a strategy will succumb to a surprise or to a logic other than that for which it was designed...In order to grow and develop, life forms must both persist and adapt, their organizational structures sufficiently resilient to withstand challenges while also supple enough to morph and reorganize.”*²⁰ Landscape and ecological strategic models have very useful strategic models because firstly, they accept complex circumstances and have tools to deal with them. Secondly, they address large scale organisation and structures. Finally, these models and structures deal with time as an open end. Projects and sites are dynamic, grounded temporalities that focus on cultivating, staging and setting up conditions.²¹

This could apply to research in a literal sense but then it would just be a broad description of a methodology like for example the value matrix which is meant to give an objective view of research results to take into a design. It is also applicable to my investigation to give a direction for research, to look for these elements and networks that are dynamic and open for change like the elements of staging, cultivating and setting up. Then taking these elements taking them into my personal statement for example so they can form a basis for my design project.

With this notion, design is not handled as purely aesthetic; It would then be more aimed more towards operational logic and applying strategic instruments, focused on processes and creating a hybrid framework between nature and engineering²².

A lot of the key networks are invisible. Designers seem to focus on a dense visible shape instead of an extending pattern part of settlement. *“If architects are serious in their commitment to function, they will have to reduce their fixation on shells and become responsible for networks.”* However, halfway through the twentieth century networks were drawn that were so complex and dense that they were of no use to anyone.²³

The subject of the research of networks could apply again to landscape scale elements and could be looked and applied in enormous scales. I would like to look at this on a smaller scale now, on the scale of the *Plots in The Wood Ensemble* which contains around a dozen buildings surrounded and several structures relating to safety because of its former function. The buildings were part of a network that produced ammunition and grenades. The buildings were respectively production, testing and storage spaces, these were all placed apart. We analysed these aspects through an alternative way of investigating interactions, mapping, tracking, making notes and looking policies regarding the area²⁴. Alternatively, considering cultural heritage, we did those things through studying various sources like reading archives, drawing, interviewing a former employee and making maps.

The analysis of this network creates an understanding and unity of the structures and spaces on site, it gave a logic to the roads connecting to a larger network, to the other physical structures. These findings immediately gave an idea of the spatial stories and human interactions that used to happen on site.

COMPLEX CONTEXTS

Through reflecting and elaborating on the discipline of *Heritage & Architecture*, I will take this as a representation as an important part of architecture in the current environment, or it should be. There are a lot of different viewpoints and discussions going on within this specific discipline.

Conventionally it was a rule that at least 50 years should pass before a building could be assessed for its historic value. This changed after the eighties, newer post-war buildings started to decay, and quick decisions had to be made²⁵. It is easy to imagine that especially during the early period of these changes things were rushed. Tools and methods were not properly adapted to these changes yet.

Now, almost forty years later, that is quite different. Currently there is new expertise, methods, as used during my own research done for the Hembrug site, have been set up and keep evolving because of the many changes in the work field. *Heritage & Architecture* provides a general guideline and method of working and research. Analysing a site with the following aspects for example: Site, space plan, skin, structure, surfaces and spirit of place²⁶. There are more and the spectrum can be expanded. These aspects should provide a complete and comparable framework to research different buildings.

The idea of conservation changed, first it was connected to the psychological need to be in contact with the past, as a way to ground in an always changing environment. Conservation is shifted to regeneration and adaptive reuse and, only sometimes, reconstruction and replication²⁷.

There are a lot of interests involved in handling heritage from many layers of society. The discipline of conservational planning has shifted towards a more democratic system.

This can be explained by the fact that small groups of specialists and experts constituted how conservation and heritage projects should be handled, recently more experts from different professions have joined. This is a positive and productive development; this confirms the importance of heritage in society.²⁸

A lot of focus has been put on making projects more adaptable because of the ever-changing discipline. These changes have happened more often since the nineteen-eighties and before. The sub-layers of the world in a sense have kept changing and became complicated so this needs new ways of researching for design more focus on open ended aspects so more resilient designs can be made on all scales.

IV TEMPORARY DESIGN

In order to address some of the issues discussed during the lecture I would like name an example to position the research in relation to what we have heard in the lectures. During the lecture on *praxeology* a project in Morocco was discussed to illustrate the problem of how to make a project by understanding the user. In this example the architect was regarded as the inducer for social functional happenings, this is assumed with a total disregard for the user. I do not totally agree with that. I do agree that it is of utmost important to take a user into account, but what if the future of the user is uncertain? Just like in the case of the Hembrug terrain were the project is still in its infancy and the future can head multiple ways. The future or current user needs to be taken in to account of course but it is a good way to research ways of linking into different networks and sub-layers, so the project is aimed at a larger scale. In this case spread the user studies on the past, present and possible future user. The past user can give a direction and the changes in context can be observed and then a future use or user can be anticipated so this issue is handled, like the OMA proposal for Parc de la Villette.

The four-step interpretative method, related to historical research, with as a result a nuanced statement backed up with an objective value matrix. I found it important to discuss this method because it is a given within the graduation chair. I found that the proposed way of working needed a lot of altering and further development. The discipline of landscape architecture, as Corner suggests, gives a lot more openness and flexibility that I feel the project needs. Following this line of thought

COMPLEX CONTEXTS

looking at possibly dynamic sub-layers is usually on a large scale because the mapping of different networks is very important for these methods as well. Researching this way already aims towards a project that takes into account different possibilities and outcomes, this is very important for the work field of *Heritage & Architecture*, which needs to handle a lot of scales because most of the project is already there but just needs to be brought out, like a sculpture.

The approach that the chair *Heritage & Architecture* took is quite well documented. The structure and order of research, following the four steps of interpretive research. The teachers from our studio expect us to follow this way of working, because it is a part of the main strategies for research and interpretation in this discipline. These methods give us enough space to just use this as a basis and add our own methods to create a complete interpretation of the site according to us as well. Furthermore, the importance of a neutral way of assessing the data is quite important in this particular discipline within architecture; As it is democratizing, it is of vital importance to present the research in an objective and universally readable way.

I do not strongly oppose the positions the different readings discussed on sub-layers, networks and handling research in this way as well. Although it is important to mention the risk that was discussed in the text by Wigley about networks. At certain points in the networking craze network research became so complicated that it got rendered useless. The methods presented in conservation can help with keeping the research ordered and discussable, because presentation and ordering take important positions here.

In addition, first I assumed that the aspect of the former use of the space was to be related with research in either *spatial narratives* or *social practices* but during the research it seemed to be more related in regard to other networks as one of the invisible under-layers. What is important here is define what methods could be borrowed from the two other epistemic frameworks.

Architecture is not the same as a landscape, but after having done the research, it is beneficial to handle them together and borrow methods for design and research. Architecture should be considered in the context of its sub-layers in a project. I always had the idea that it should be integrated with its context quite thoroughly and even be considered part of its context in most cases. The idea of making it part or severing it from different mostly invisible sub-layers and networks is a very important and nuanced decision. In the same realm the project benefits greatly from being viewed as a new temporal layer that is placed on other temporal layers that contain different man-made and natural elements.

In conclusion, my research was about finding out what the importance was of viewing the site and future design as temporary state that follow each other. Viewing the project with its sub-layers in its historical and future context gives the designer a complete idea on where the project is positioned in all of this. Considering these sub-layers and connecting or disconnecting to different networks considered in a similar like a landscape architect with cultivating, staging and setting up as the design goal a more enduring and flexible project will unfold. The research regarding the sub-layers and networks can be used a guide for possible variations in the future.

The subject does need more research later during my graduation process. Up to now the results are quite promising and help to shape my project. I look forward to working on it, closer in relation to my own project now.

COMPLEX CONTEXTS

ENDNOTES

- 1 Donald Schön, "Design as a Reflective Conversation with the Situation." In *The Reflective Practitioner*, (New York, Basic Books, 1983), 76-77.
- 2 Linda Groat and David Wang, *Architectural Research Methods*, (John Wiley & Sons, 2002), 135-137.
- 3 Van Gessel, (2019), <http://www.michaelvangessel.com/>.
- 4 A topic introduced during the fifth lecture by Hooimeijer describing the layers that exist in and beneath a context.
- 5 The projects are called Strijp S, in Eindhoven, and Ceramique, in Maastricht. These project both show possible ways of how to handle a former industrial site, they are respectively in an earlier and later state of development.
- 6 The name *Plots in The Wood* originates in the plan of the firm Palmbout for the Hembrug Terrain. They divided the area in several ensembles and derived and created specific characteristics for these different ensembles.
- 7 Marieke Kuipers and Wessel De Jonge, *Designing from Heritage: Strategies for Conservation and Conversion*, (Delft, Heritage & Architecture, 2017), 73.
- 8 Marieke Kuipers and Wessel De Jonge, *Designing from Heritage: Strategies for Conservation and Conversion*, (Delft, Heritage & Architecture, 2017), 65-97.
- 9 These topics are both included in the book by Kuipers and De Jonge and the course syllabus. They are another result of the guidelines of the chair consistently applied in the graduation studio.
- 10 Alex Wall, "Programming the Urban Surface." In *Recovering Landscape: Essays in Contemporary Landscape Architecture*, (Princeton Architectural Press, 1999), 233.
- 11 Victor Gruen in Wall, "Programming the Urban Surface", 235.
- 12 Cambridge Dictionary, "Folly".
- 13 This former employee worked in site logistics, he had access to most of the Hembrug terrain and could provide and confirm a lot of information. This is mentioned specifically because the site used to be classified and most employees had not access to the rest of the site other than their own workplace. Security was obviously high and important on a former industrial area.
- 14 The lecture on *Investigating on Territorial scales* was the fifth lecture of this course, *Lectures Series Research Methods*, from a total of seven lectures.
- 15 F.L. Hooimeijer, F. Lafleur and T.T. Trinh. "Drawing the subsurface: an integrative design approach." In *Procedia Engineering*. (2017), 62.
- 16 The fourth step in the research structure handled in the graduation studio and in Hooimeijer, "*Drawing the subsurface*", 73.
- 17 The firm Palmbout made a strategy for revitalizing the site after it being abandoned for 10 years. The site was only opened to the public in 2014, since then several maker companies, a food market, some restaurants and more like an event business have settled in the area. The developments now are mostly bottom up orientated.
- 18 This is an important step as the area used be classified and secret location that was not accessible for almost everyone.
- 19 Wall, "Programming", 237.
- 20 James Corner, "Not unlike life itself", *Harvard Design Magazine*, (2004), 1.
- 21 Corner, "Not unlike life itself", 3.
- 22 Hooimeijer, "Drawing the subsurface,", 63.
- 23 Mark Wighley, "Network Fever" in *Grey Room* (2001), 82-122.
- 24 Jan Gehl and Birgitte Svarre, *How To Study Public Life* (Islandpress, 2013).
- 25 Kuipers, *Designing from Heritage*. 15.
- 26 Kuipers, *Designing from Heritage*. 31-63.
- 27 Kuipers, *Designing from Heritage*. 68-69.
- 28 Randall Mason, "Assessing Values in Conservation Planning: Methodological Issues and Choices." *Assessing the Values of Cultural Heritage*. (The Getty Conservation Institute, 2002), 3.

BIBLIOGRAPHY

- Corner, James. "Not unlike life itself: Landscape Strategy Now." *Harvard Design Magazine*, number 21 (2004). 1-3.
- "Folly." Cambridge Dictionary. Accessed 22 May 2019. <https://dictionary.cambridge.org/dictionary/english/folly>.
- Gehl, Jan and Birgitte Svarre. *How To Study Public Life*. Washington, Islandpress, 2013.
- Van Gessel, Michael. "About." Michael Van Gessel. Accessed May 22, 2019. <http://www.michaelvangessel.com/>.
- Groat, Linda, and David Wang. *Architectural Research Methods*. John Wiley & Sons, 2002.
- Hooimeijer, F.L., F. Laffleur, T.T. Trinh. "Drawing the subsurface: an integrative design approach", *Procedia Engineering*, Vol. 209 (2017): 61-74.
- Kuipers, Marieke and Wessel De Jonge. *Designing from Heritage: Strategies for Conservation and Conversion*. TU Delft, Heritage & Architecture, 2017. 1-97.
- Mason, Randall. "Assessing Values in Conservation Planning: Methodological Issues and Choices." *Assessing the Values of Cultural Heritage*. The Getty Conservation Institute, 2002. 3-30.
- "Method." Oxford Living Dictionaries. Accessed 18 May 2019. <https://en.oxforddictionaries.com/definition/method>.
- "Research." Oxford Living Dictionaries. Accessed 18 May 2019. <https://en.oxforddictionaries.com/definition/research>.
- Schön, Donald "Design as a Reflective Conversation with the Situation," *The Reflective Practitioner* New York, Basic Books, 1983. 76–104.
- Wall, Alex. "Programming the Urban Surface", *Recovering Landscape: Essays in Contemporary Landscape Architecture*. Princeton Architectural Press, 1999. 233-249.
- Wigley, Mark. "Network Fever". *Grey Room*. No. 4 (2001), 82-122.