

THE ZZP WORKHOME

DUTCH HOUSING
GRADUATION STUDIO

2018-2019
MAUD KLEIN HORSMAN

Maud Klein Horsman
4657519
G.M.M.kleinhorsman@student.tudelft.nl

TU Delft
Faculty of Architecture and the Built Environment
Graduation Studio - Dutch Housing
Academic Year 2018-2019, Q3/4

Responsible tutors
Pierijn van der Putt
p.s.vanderputt@tudelft.nl

Theo Kupers
info@theokupers.nl

Delft, Januari 2019

CONTENT PAGE

4	6	8
INTRODUCTION	LITERATURE RESEARCH	LOCATION ANALYSIS
-	etic -	etic -
12	18	24
PRECEDENT STUDIES	FORM STUDIES	FIELDWORK
etic -	etic -	emic -
28	32	34
REFLECTION ON OTHER ASPECTS	CONCLUSION	BIBLIOGRAPHY
-	-	-

INTRODUCTION

Combining research and design is essential for creating architecture. Doing extensive research and using the most appropriate and accurate methodology with it ¹, leads to a founded and thought-out design. To my opinion research for design can be divided in two types; the standard superficial type, which I will call the minimal type, and the type which gives the design more depth, the comprehensive type. The minimal research is almost always included into a design process, it exists out of the research about the context of the architectural assignment. This mostly includes a brief research of the history of the location, followed by analytical drawings which gives the designer more insight in the assignment. In this type the conventional knowledge is replicated which leads to an unclear resolution to the design issue². The comprehensive research is the type that gives the architecture more meaning. It contributes to a broader knowledge of the design issues. In this type accurate methodologies are used which leads to results with more certainty.

My goal in this graduation project is to combine the minimal research with the comprehensive research to achieve a design of a building in which the ‘zzp’er’ gets the central position. Instead of only being the designer I should get into the life of the ‘zzp’er’. This approach of research is known by the term emic. According to linguist Kenneth Pike³ emic research is produced from the inside of a culture or activity. This methodology would be very useful for getting to know the target group, the ‘zzp’er’, because it provides an “immediate engagement with people and their lives” . The second approach of how the study of users can be operated is the etic research. This is the research “from the

1. Lucas, R. (2016). Research Methods for Architecture. London: Laurence King Publishing Ltd, 7.

2. Ibid.

3. Pike, K. (1967). Language in Relation to a Unified Theory of Structure of Human Behavior. The Hague: Mouton.

4. Lucas, R. (2016). Research Methods for Architecture. London: Laurence King Publishing Ltd, 10.

point of view of an observer outside the culture or activity in question”⁵. The before called minimal type of research has, in my case, always been an etic research. To achieve the in the before mentioned depth in the research, an emic research should be added because “most successful research will move between these two positions”⁶. ” . In this way a comprehensive research can be created.

In this reflection report I will analyze every research method that I have used. Every research method will get its own chapter, and after every chapter I will conclude if this research method belonged to emic- or etic research. In this way I can test myself, have I worked through those two types and did I create a comprehensive research through combining the two types? I am also curious about the separation between etic and emic research, is this a hard line or are these two types merging with each other during the research? This is what I will conclude in the last part of this reflection report.

5. Lucas, R. (2016).
Research Methods for
Architecture. London:
Laurence King
Publishing Ltd, 10.

6. Ibid.

LITERATURE RESEARCH

With literature research you investigate a problem based on scientific literature and other sources. It is important to check whether there has already been research into your subject. Therefore, visit all investigations that have to do with your subject⁷. For my research I used two types of literature research: books and articles.

To my opinion every design starts with literature research. Firstly with superficial research. Scanning articles behind your desk, getting to know the subject, assignment and target group. In my research I did this in the first couple of weeks. I read about the plans of the municipality of Amsterdam for the area Minervahaven, the location of my project. I also started to investigate what the current problems in dwelling are. These literature studies were mainly quick online readings.

Once I had gained the knowledge about the plans for Minervahaven and the problems and challenges for housing in Amsterdam I could create my target group and thereby my main focus: the 'zzp'er', a person who performs work for his own account or risk in his own company or practice and who does not employ any staff. Knowing the target group and main subject I could concentrate on more specific literature like books about the combination of work and living or articles specific about the 'zzp'er'. The book that gave me most of my knowledge was "Beyond Live/Work" written by Frances Holliss. In this period I wasn't literally designing that much yet. I was forming a concept through gaining information about the subject.

7. btn. (2015, February 17). *Kwalitatieve onderzoeksmethode: literatuuronderzoek*. Opgehaald van Scriptie.nl: <https://scriptie.nl/scriptiehulp/kwalitatief/kwalitatieve-onderzoeksmethode-literatuuronderzoek>

This phase helped me to establish a grounded base for the design. Together with the other research methods I used, which will be explained later, I could list a few points which a home for a 'zzp'er' should meet. This helped me in designing the project because I could always look back on these points. I saw them as the true goals for a, as I call it, 'zzp-workhome'. This part of the research was objective, verifiable and dependable, which made it scientific.

All of the research in this phase was etic, I was creating an image of the 'zzp'er' through research that was done by other people. I was collecting all the information that I could find about the 'zzp'er' to create this image, but not by becoming part of the life of the 'zzp'er' itself.

LOCATION ANALYSIS

To my opinion well designed architecture can't be made without visiting the location. To absorb the area an architect should visit the location and notices what he feels, sees, hears and smells. It allows you to discover more than only the digital information you can find from behind your desk.

Therefore I visited the location Minervahaven in the first weeks of the project. I used the public transport to come there and immediately discovered the good accessibility. It was close to the central station which meant that it was also close to the city centre. When I got off the bus my first reaction was: "it looks like a defined area with offices and storage halls". I didn't do much research on the location on forehand, the only information I had was from the employee of the municipality of Amsterdam. He told us that Amsterdam had huge plans for this area. They wanted to change it into an area in which work and living was going to be combined. It shocked me that there where so many buildings that were just build or even still build. Do they plan to demolish them all?

I wandered around, took photos, wrote down how I felt and what the area did with me and recorded the sounds of the area. It was an area with a lot of industry, visible on the other side of the river, but you could also hear it. The constant sound of metals clashing into each other. Unless this constant noise of the industry you could still hear the water that rippled against the quay. After the visit I choose a few photo's that summarised my experience at the location (image 1). I choose to use three photos. The first one showing the young buildings, the second one the houseboats and the third one the taxi for the employees

of the young offices with the industry in the back. At that moment this felt as the most important discoveries I had during the visit.



Image 1: Summary location visit

Now, when I look back, I still think they are okay but I didn't pictured the atmosphere of the industry. At this moment, after all the other analyses that I did I think this is the industrial atmosphere is the main characteristic of the area (image 2). These are the pictures I also used in my research report and presentations to show the character of the area, the harbour. This character resulted in an architectural style for my design. I wanted to translate the feeling of the harbour into my building by using architecture similar to historical storehouses and using robust and heavy looking materials.



Image 2: Industrial atmosphere Minervahaven

T

he second part of my location research was from behind my laptop. I looked at the location from maps, analysed them and again finding out what the characteristics of the area are. This research led to the choice for the location of my building. I discovered the so called “Danzigerbocht”. This is a road that bends from one quay to the other. Through the historical maps we discovered that this bend was used for the shipment of timber when the area was still a timber port. To my opinion a historical aspect of the area. Together with the main circulation loop and the accommodation on the water that we created in the master plan, the current location of my building was chosen. It also resulted in the ambition to create a landmark at this point, because here these three main components of the new masterplan come together.

Overall I think the location analyses has an etic approach. Especially the second part, in which I almost literally look at the location with a bird's-eye view. In the first part, the location visit, I came closer to the emic approach. I tried to imagine how it would feel to live at the Minervahaven, what the place did with me. In this way I put myself into the position of the future residents.

PRECEDENT STUDIES

Precedent studies are studies of existing or designed projects which are similar to your design or have similar aspects of your design. “They are an idea or guide to a method that you are wishing to employ in your scheme”

8. . I used them as an inspiration for my design but also as a lesson. I used successful aspects of the projects as an inspiration and avoided the failures.

For the research report that I made I did precedent studies, based on the target group and main focus of my project: the ‘zzp-workhome’. A building in which the ‘zzp’er can work and live at the same time. I wanted to better understand how these two function can be combined in one building. Through exploring what has already been done on this subject I could relatively quickly find out what the design options for a workhome are and what the workhome specific aspects are.

I started with the precedent study which led to the design options for a workhome. I combined it with a literature study from the book “Beyond Live/Work” written by Frances Holliss. Here I read about a few projects: the Quilted Office and Strawbale home; House & Atelier Bow-Wow; Klarheit and Hampstead. In this book they wrote about two elements of the design of the workhome in which every designer should make a choice: arranging of the functions and the weight of personalisation and flexibility. I took over these two elements for my list of requirements for a workhome and added two other elements: Position of the entrances and access systems and the expression of the functions. These two elements I discovered through reading in between the lines of the book. The four elements together became the foundation of the second part of my precedent study and for the design.

8. First in Architecture. (2018). *Architecture Precedent Study and Analysis*. Opgehaald van First in Architecture: <https://www.firstinarchitecture.co.uk/architecture-precedent-study-and-analysis/>

I chose to test four existing projects on these four design elements: the Melkfabriek designed by Inbo; Piazza Ceramique designed by Jo Janssen Architecten; Schiecentrale 4B designed by Mei Architecten and Klarheit designed by Koh Kitayama and architecture WORKSHOP. I tried to choose projects in which I expected a variety in outcomes for this test. I also choose them because they combined working and living in different ways. One with these the functions working and living in one dwelling type, the other in which these functions where merged outside of the dwellings itself but still in the same building. And lastly I made sure I could find enough information and documentation for my research. In case of the Melkfabriek and Schiecentrale 4B it took me a lot of effort to get this information. Especially drawings of the floorplans where hard to find for these projects.

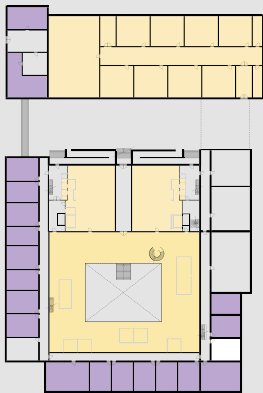


Image 3: Functions Melkfabriek

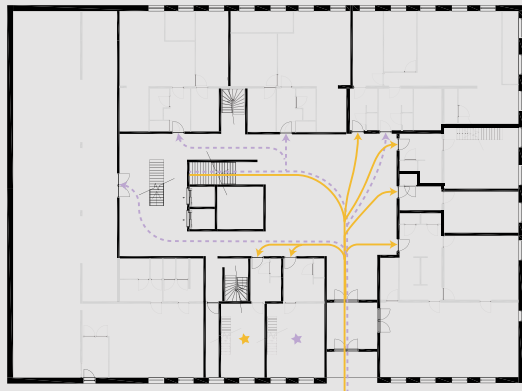
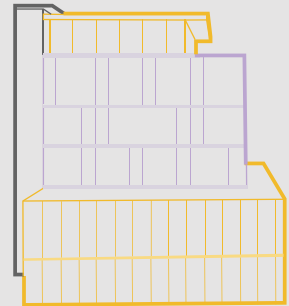


Image 4: Entrances and access systems Piazza Ceramique

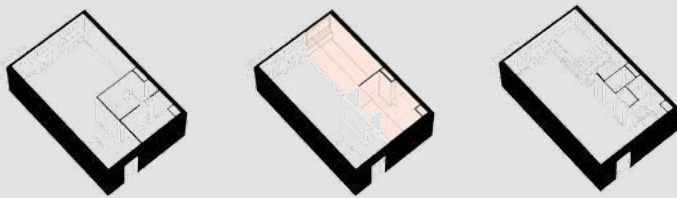


After collecting all the input of the four projects I started to digitally draw them. Once I had done that I could analyse the project on the four workhome elements as mentioned before: arranging of the functions; the weight of personalisation and flexibility; the expression of the functions and position of the entrances and access systems (image 3-6).). I could also analyse the relation between the outcome of these four elements. For example, a workhome in which the functions working and living are merged usually goes together with a shared entrance and access system. And also with the same architectural expression for both of these functions.

This part of my precedent research was structured. I did all of the analyses in the same way for the different projects. This made the research quiet scientific. If someone else would have done the same analyses the outcome and conclusion would have been the same.

Later on in the design and research process I looked again at reference projects but in a less structured and organized way. Which was also directly less scientific. One of the design challenges in my project was to create a dwelling

complex which provides multiple dwelling types and sizes for varying households. I used reference projects to get inspired for the smallest dwelling types: the studios. In these 41,5 m² dwelling types a workspace, living space, eat space, sleep space and bathroom had to be integrated. Through articles about tiny apartments, provided by ArchDaily⁹, I got inspired (image 5). These projects showed how to use furniture elements to create these spaces instead of creating rooms. I also learned that the height of the dwelling can be used to create more space than the present surface.



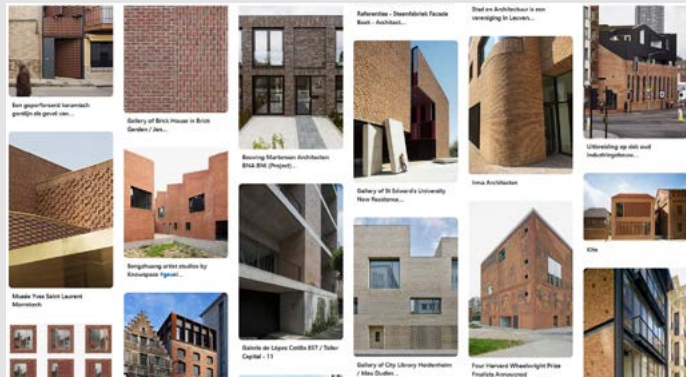
9. González, M. F. (2018, July 29). 10 *Tiny Apartments Under 28 Square Meters and Their Axonometric*

Drawings. Opgehaald van ArchDaily: <https://www.archdaily.com/899070/10-tiny-apartments-less-than-38m2-and-their-axonometric-drawings>

Image 5: Archdaily inspiration

Lastly I used platforms like Instagram and Pinterest to save images of architecture that I liked and suited my vision for the project (image 6-7). It is an easy way to collect reference

projects and ideas to create the architecture you want. It was also an inspiration for the way I wanted to present my work. The advantage of these platforms is that you can collect references and mood boards at every moment and everywhere you go. When I got lost in the design process and forgot about which direction I was going, I used these platforms to get back on track. They showed me what my aim for the project in architectural expression was, which frequently contributed to a design boost. It was pleasant to have an online mood board which reminded me of my goals when I got stuck in the process.



Architectural expression



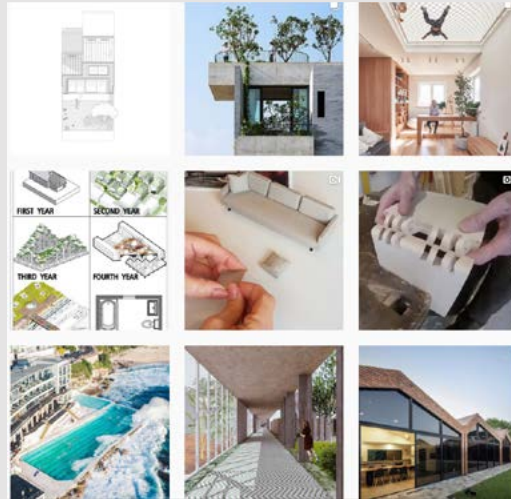


Image 7: Instagram inspiration

The precedent studies belong mostly to the etic research approach. The research I did was based on findings and visions of other architects. I assume that they also analysed their target groups and wanted to get to know the needs of this group. But I didn't become a part of the group myself. I had to trust the architects of the projects for this part of my research. I did compare the projects with each other and with the literature studies that I did, which makes the research more reliable, but not an emic research. It can be concluded that the precedent studies belong to the etic approach. The only part of the precedents study which could belong to emic research are the design solutions that the architects came up with for the workhomes specific. I am not aware of the research methods that the architects of the researched projects used. If the architects used emic research, my own precedent studies will also have an emic aspect. But since I am not aware of this, I am not in the position to make any statements about this.

FORM STUDIES

With form studies you use a model as a main research tool to come to innovative design solutions. It provides insight in the aspects of aesthetics, perception and materialisation of architectural compositions¹⁰. . This was my favourite and most used research tool during this project. It gave me the opportunity to investigate design issues relatively quick. I created the models, experimented with them, reflected on what I did and tested again. I found out solutions for design issues by testing it in an experimental way. By creating the options which I thought would be the solutions on forehand, but also by experimenting with the opposite of these predictions. I tested multiple options for the issues by physical and digital models.

PHYSICAL MODELS

The first model I made was less an analytical model but more a presentation oriented model. Together with Gitta Tolboom and Winde Schipper we created a 1:1000 model of the masterplan we designed (image 8).

10. Koorstra, P. (sd). *Form Studies*. Opgehaald van TU Delft: <https://www.tudelft.nl/onderwijs/opleidingen/masters/aubs/msc-architecture-urbanism-and-building-sciences/master-tracks/architecture/programme/studios/form-studies/>



Image 8: Masterplan

We used this model to show our ideas about the Minervahaven of the future with our P1 presentation. Later, with the P2 presentation and the upcoming P4 and P5 presentations it will function again as an presentation oriented model. But this time to show the relation between the complex I designed and the area of the Minervahaven we designed together (image 9). Now, when I look back, the model could have functioned as an analytical model in between the presentations. To test the relation between the different designs for the complex and the surroundings, but I haven't done that (yet).



Image 9: Relation between designed complex and masterplan

The models that followed where all analytical. Sometimes I got lost in the digital world. Creating models with the computer gave me endless opportunities, but in the beginning of the design phase these opportunities where to overwhelming. Going back to the physical models instead

of designing in the digital world gave me the change to try and experiment with balanced adjustments. Because I had my own foam cutter at home I had the opportunity to make quick models. Because you make all the parts by hand, on your own, you work more consciously. You think about every adjustment you make. This results in well thought options for your experiment. Through the 1:200 physical models I analysed the mass of the building and façade options. I also experimented with the biggest issue in the architectural expression of my project: how can I bring all the elements of the building together, and let it still be one coherent whole (image 10). I used the physical models as a start for every new design issue I was dealing with. An example is the study of the floors in the landmark of the building. On forehand I thought option 2 (image 11) was the most suitable design for this part of the building. But after the form studies with the physical model I found out that option 3 came way closer to the vision that I had for this space.

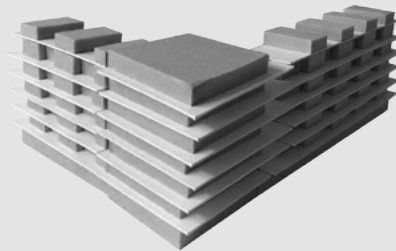


Image 10: Coherent whole physical model



Image 11: Floorplans landmark

DIGITAL MODELS

As I mentioned before the physical models functioned as the start of the search for a solution for a design issue. The next step in this search were digital models. The physical models were very useful to quickly analyse design questions but to give more detail and to analyse more complex problems I had to make the step to analysing by digital models. Logically these analyses came later on in the design- and research process.

I used them for the same aim as the physical models, to design the mass, the façades and to design a coherent building. But also by testing multiple dwelling plans. The first digital test I did was about analysing the sunlight in the courtyard of the building. I used the mass outcome of the physical models and translated these in a digital model. Through Revit I was able to make a sun study (image 12) which led to a very important adjustment in my mass: a gap in between the landmark and the south part of the building which provided sunlight to the courtyard.

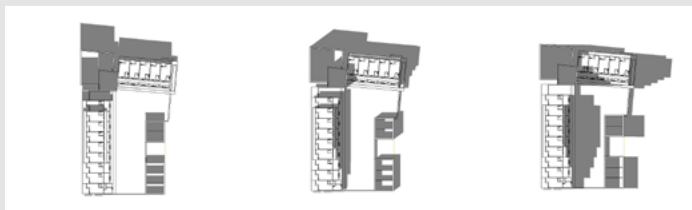


Image 12: Sunstudy

Revit was very useful for the design of the floorplans. It was a quick way to create the floorplans and at the same time get the façade- and section drawings. But in the process I found out that this program limits the freedom

of designing. Revit is a tool which is meant for creating the technical drawings of your design, and not in the first place for designing architecture. Therefore I choose to constantly switch between working in Revit and Sketchup. In Sketchup it is way easier and therefor quicker to design. That's why I did studies in Sketchup, like the façade studies below (image 13-14). And translated this into floorplans, façades drawings and sections in Revit. I learned that the tool that you use for a research method is even as important as the method itself. If you use the wrong tool it hinders the quality and speed of the research.



Image 13: Outcomy façade study

11. Lucas, R. (2016).
*Research Methods for
Architecture*. London:
Laurence King
Publishing Ltd.

There is no doubt about the type of research for the form studies. I literally did research with a bird's-eye view, which is according to Lucas Ray one of the characteristics of the etic research . During this study, I took into account the wishes of the target group, but did not get involved in such a way that I became part of the group. I had a distance to the target group.

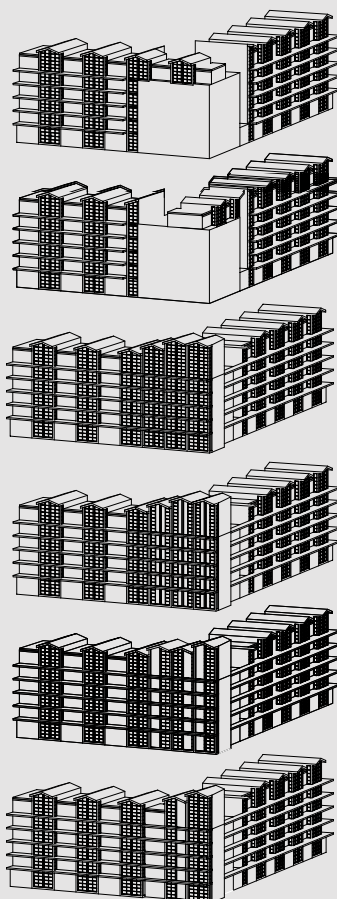


Image 14: Façade study Sketchup

FIELDWORK

Like the word ‘fieldwork’ says itself it is research done in the field, at a particular site, plan or location.

Ray Lucas describes this very clear:

“Field research focuses on context , and prioritizing the messiness of everyday life produces research that is grounded in real life rather than abstracted and aloof, although the issue is that it is difficult to draw clear conclusions or recommendations from such findings, however well they represent reality”¹².

This is exactly what I encountered during my research. With fieldwork I wanted to get to know the target group: the ‘zpp’er’. Fieldwork gave me the opportunity to find out more about the target group than only the information you can read. It gave me the chance to look further than that what people assume. But it is difficult to create a scientific conclusion through this method, I will come back to this later.

Firstly I visited multiple workspaces where the ‘zpp’er’ works, like Spaces and the Volkshotel. They are both located in Amsterdam, this was a deliberate choice since the project is also located here. The studies I did can be separated in two parts, one which was scientific and objective, the other more subjective. I wrote down the different spaces at the locations, which workspaces did the locations provide? Where did people meet for work and which areas were used for other purposes? How did these spaces look like? This was the scientific part of the research, any other person would have concluded the same findings as I did. The second part of the research

12. Lucas, R. (2016). *Research Methods for Architecture*. London: Laurence King Publishing Ltd.

was more personal. Did I feel comfortable working at the locations? Was it quite enough, was there enough space, did I like the way the spaces were divided? It was about my personal experience and the way I sensed the area. For me a space in which people who need to work quietly and people who are meeting each other combined was not distracting, but maybe for someone else this would have been different. Despite the fact that this second part was not that scientific and not measurable, it was not less useful. I was able to combine the scientific findings with the subjective in analytical sketches (image 15) which show the conclusions of the workspace visits. For me it was more useful to translate the conclusions into drawings instead of typing them out. In this way I could quickly look back at the research results and use them for my design.

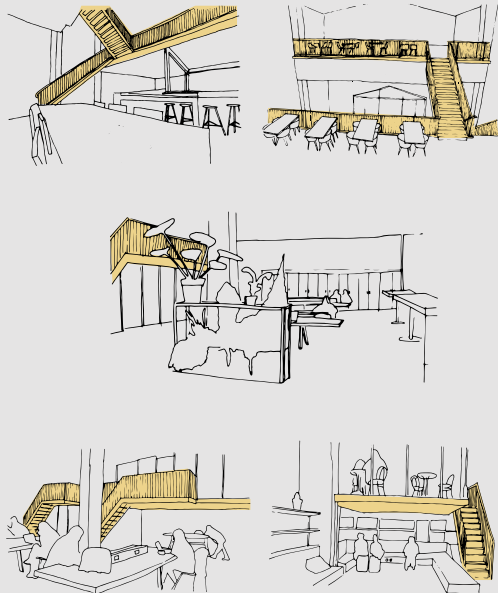


Image 15: Conclusion workspace visits

The second method I used to get to know the target group was through a survey. Together with interviews I think this method gives the researcher the opportunity to come as close to the target group as possible. I choose not to take an interview simply because of time management, but also because this is less scientific. The risk in fieldwork, and especially also in taking a survey, is again the role of subjectivity. When can something that someone says be seen as the truth? In case of an interview there are only a few people questioned. In case of a survey a bigger group of people can be reached. In this way the research gets more reliable. I was able to reach a, to my opinion, big group of representative 'zpp'ers'. I did this through multiple Facebook groups. The 'zpp'er' is a vulnerable group of people that bind their forces through platforms like Facebook. On these platforms they ask each other for help by creating their own website for example. I posted my survey on these platforms and received over 80 responds. Because of these, surprisingly, many responds I was able to use the survey as an scientific source. I saw the answers that where repeatedly given as the 'truth'. For example, almost all of the participators mentioned that it is necessary to have a workspace in their homes, not only across the street. Also more than the half of the people mentioned in the answer to the question "What is your biggest irritation at your current workspace?" that they had the feeling that there was a boundary missing between their work environment and their home. These repeating answers where included in the design requirements for the 'zpp-workhome'.

Fieldwork is the only method I used which is all about emic research. My goal was to become the target group, the 'zzp'er' through fieldwork. I wanted to get close to the life- and workstyle of the 'zzp'er'. Which I, to my opinion, managed to do through fieldwork. What I also described in this chapter is that the fieldwork was one of the least scientific methods that I used. The results are mostly based on subjective findings instead of objective. But at the same time did it provide me the chance to get closer to the real life of the 'zzp'er'. Through using this method I learned that research that is more scientific doesn't has to be more useful than less scientific research.

REFLECTION ON OTHER ASPECTS

ASPECT 2

The relationship between your graduation (project) topic, the studio topic (if applicable), your master track (A,U,BT,LA,MBE), and your master programme (MSc AUBS).

The relation between my graduation topic and the Dutch Housing graduation studio, the master Architecture, Msc AUBS is the focus on the future. I think that we at this faculty are working hard to make our future a better place to live in. Mostly we do this by thinking about durable solutions in our design. In the studio Dutch Housing the city of the future was the main subject of the project. Through thinking what The Netherlands, and especially Amsterdam, needs in the future I came up with this idea of a home for the zzp'er. I think that in the future the whole system of the employee and employer will change, I think that we all will become a zzp'er. Currently the Dutch system hasn't adapted to this group of people yet. This makes them vulnerable. By designing a building which provides a workhome for this vulnerable group, their future will become more promising.

ASPECT 3

Elaboration on research method and approach chosen by the student in relation to the graduation studio methodical line of inquiry, reflecting thereby upon the scientific relevance of the work.

For my research I used two terms I didn't knew before this graduation year: etic- and emic research. As mentioned in the introduction, etic research is research from the point of view of an observer outside the culture and emic is

research from the inside of the culture. I did etic research through multiple research methods: literature studies; location analysis; precedent studies and form studies.

I became part of the culture of the zzp'er through fieldwork. Visiting multiple workspaces and working there, thinking of what I liked about the places and what I didn't. What would I want a workspace to look like if I was a zzp'er? This part belongs to the emic research. To my opinion this is a necessary part of research for a dwelling related design. Especially for a design for a place where people need to live, to my opinion, it is very important to create a place that suits the needs of the residents.

Working in these two research types also gave me the possibility to compare the research that has been done by others, the etic research, with my own personal findings, the emic research. In this way the less scientific emic research, could be tested and became more scientific than when I had only worked on etic- or emic research.

ASPECT 4

Elaboration on the relationship between the graduation project and the wider social, professional and scientific framework, touching upon the transferability of the project results.

As I mentioned in the answer to aspect 2, I am working on a change in our labour relations that is not at its end station yet. By thinking about how I can create a living environment for them to live in now, can help when the relation between the employee and employer completely

disappears. The zzp'ers have told that they are already feeling like they are living in a little bubble and that they miss the interaction with the outside. What if everyone is going to work like this? By thinking about it and creating architecture now, we can minimize the negative effects of the changing labour market to our lifestyles for the future.

ASPECT 5

Discuss the ethical issues and dilemmas you may have encountered in (i) doing the research, (ii, if applicable) elaborating the design and (iii) potential applications of the results in practice.

With the research I did about the workstyle of the 'zzp'er' I always doubted if this is the way we should work in the future. It has been conclusively proven that this group is growing. Special platforms have been launching apps which gives the 'zzp'er' the chance to work randomly for a company, with as little continual contact with colleagues or an employer as possible. I do think that the future work environment should change, with the possibility to work from home. But I am not sure if it will be a wise step to change it so drastically as some parties are planning to do.

CONCLUSION

When I started with this reflection report I wondered if I had combined emic- and etic research. As I mentioned in the introduction a comprehensive research should exist out of a combination of emic- and etic research. Through reflecting I came to the conclusion that I indeed did, I used etic methods like literature- and precedent studies, and emic methods like fieldwork and surveys. In the beginning I thought there would be a clear line between emic and etic research. But after reflecting I came to realize that most of the etic research have little emic influences. Overall these methods can be seen as etic research but there were some emic elements, an example of such a method is the project location visit. I didn't became part of the culture of the 'zzp'er' but I did imagine what it would feel and look like if I was a 'zzp'er' and lived at that area. I thought about what a 'zzp'er' would have wanted on that plot. It is not that I spoke with a 'zzp'er' about the plot, so I didn't knew for sure if that what I thought was the truth. But I did tried to image what it must be like for a 'zzp'er' to live and work there.

I also realized that doing etic research is more likely than emic research. Etic research can been done everywhere you go, as long as you have a book or laptop with you. In the train, at the University, at home or somewhere else. But for emic research you need to go somewhere, you need to plan an figure out what you want before you start the research. It costs more time and effort. That's probably why most of the methods I used are part of the etic research.

Another difference between these two types of research is the objectivity, verifiability and reliability. These are all

aspects of scientific research. While etic research is mostly objective, verifiable and reliable, emic research is not. Unless the results of the emic research were subjective, they were of great value for my design. By comparing these results with the etic research I was able to make the results less subjective, and therefore more scientific. I think this is what Ray Lucas meant in his book when he said that “most successful research will move between these two positions”¹³. ”, because through emic research you can find new discoveries, but by combining this with etic research they become new scientific discoveries.

13. Lucas, R. (2016).
*Research Methods for
Architecture*. London:
Laurence King
Publishing Ltd, 10.

BIBLIOGRAPHY

btn. (2015, February 17). *Kwalitatieve onderzoeksmethode: literatuuronderzoek*. Opgehaald van Scriptie.nl: <https://scriptie.nl/scriptiehulp/kwalitatief/kwalitatieve-onderzoeksmethode-literatuuronderzoek>

First in Architecture. (2018). *Architecture Precedent Study and Analysis*. Opgehaald van First in Architecture: <https://www.firstinarchitecture.co.uk/architecture-precedent-study-and-analysis/>

González, M. F. (2018, July 29). *10 Tiny Apartments Under 28 Square Meters and Their Axonometric Drawings*. Opgehaald van ArchDaily: <https://www.archdaily.com/899070/10-tiny-apartments-less-than-38m2-and-their-axonometric-drawings>

Harmen van de Wal, M. v. (2016). *Privacy script*. Bussum: THOTH.

Holliss, F. (2015). *Beyond Live/Work*. New York: Routledge

Koorstra, P. (sd). *Form Studies*. Opgehaald van TU Delft: <https://www.tudelft.nl/onderwijs/opleidingen/masters/aubs/msc-architecture-urbanism-and-building-sciences/master-tracks/architecture/programme/studios/form-studies/>

Lucas, R. (2016). *Research Methods for Architecture*. London: Laurence King Publishing Ltd.

ACTION REPORT REFLECTION RE