

Museum of Magical Realism Arnhem (MMRA)

“Connecting the KEMA terrain with the city of Arnhem by the use of art”

Thesisplan

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Museum of Magical Realism Arnhem

Thesisplan

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**"The primary objective is no longer to build the new,
but to add to the existing structures"¹**

¹ Prof. dr. ir. Jo Coenen

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Figure 1. The High Voltage Laboratory at the KEMA terrain

Introduction

In this thesisplan I will show the background of my graduation project. What am I doing? What is my goal? How do I want to achieve all that in the next eight months left in front of me?

This is in a very short way where this thesis is all about. This report will therefore be a guideline for my graduation project, so I can always look back to see what my ideas were in the beginning. In this way it is easier to reflect on the actual design process at the end and during my design process itself.

Maartje Meijs

_Personal motivation

The most interesting thing for me about my masters in Architecture has always been the search to the social aspects of society and it's relation to architecture. In what extend and more important in which way does a designer have got influence on how people feel, propel and especially behave at a certain place.

In my opinion do play architects, urban architects, interior designers and artists, as well historians and researchers an important social role in society. These disciplines are more entangled than one should at first maybe think and to my opinion one can't exist without one other.

During my studies, I found out that I, besides and especially before actual shaping a building, am really interested in the story behind and the investigation of the environment. What I also learned about myself was that my creativity and 'out of the box thinking' is, however it may sound contradictory, the best when a project is in a way curtailed. In this way I learned how to transform disadvantages into opportunities.

The world is changing. Centuries ago there were functions and buildings who housed these functions. From miles away one could see what was happening in a building; living, making bread, going to the church.. Today we find ourselves in an incredible dynamics. Everything goes faster, better and newer as a result of digitization, globalization, commercialization and individualization.

There are numerous examples of buildings that accommodate a function which seems surprising. Churches become mosques, bookstores, hotels, skating halls and even dwellings.

I am sorry to see that often the dynamics of change and the need for continuity are in conflict, while they could strengthen each other as duality and are able to produce great results. Because any intervention in existing structures is a contribution focussing at continuity and further development. It is about the balance between the addition and the original building and the story that is been told by that.

Existing buildings intrigue me, the function(s), physical and structural changes and the context, but especially the history of a building. The story that a building is telling.

Besides my interest in research and the pleasure I experience by making my own personal program brief and looking for functions I also love renovation projects because of my personal taste.

Apart from of course the growing vacancy of existing buildings and our responsibility in this matters, I believe modern architecture in a way almost always misses something; The relation between different timescales and the flexibility buildings should imply these days. I want to look at the values in regard to architectural history and the various grades of architecture, urbanism, construction and interior.

Why I especially have chosen for the KEMA studio is because I knew Arnhem is famous as a fashion and art city and I am very interested in these topics. Also the rich history of Arnhem, in combination with its unique location between the beautiful Veluwe and the river the Rijn attracted me to choose this studio.

KEMA, which stands for Keuringsdienst Elektrische Materialen Arnhem, was settled in 1938 on the border of the municipalities Arnhem and Oosterbeek, less than 2 km from Arnhem central station. Arnhem is the capital of the province Gelderland and is situated between 'de Veluwe', the largest lowland nature reserve in the northwest of Europe, which measures about 1000 km², and the river de Rijn. There are almost 150,000 people living in Arnhem.²

However, the history of the area goes decades back. The influence of the former estate that owned the area in the fifteenth century is still reflected in the style of the surrounding park. Many buildings designed in de Haagse School Stijl between 1938 en 1948 are located on the site. This style is characterized by its overhanging roofs, straight and cubist forms and the use of brick.

Also characteristic are the horizontal lines of the front tires over the windows, window frames and balconies, the urban coherence and the symmetry in the facades of the building.

In 2005 TCN bought the area. TCN is 'a developer of comfortable, functional and sustainable environments'.³ Most of their buildings at the KEMA terrain house offices, but recently they changed the name of the KEMA terrain, what they before called 'Business Park Arnhem' into 'Arnhems Buiten' because they want to focus more on both leisure and dwelling. The most interesting part of the KEMA terrain with her beautiful landscape architecture is also the place where the oldest buildings are located and is called *Den Brink* since 1604. For the continuation of my research I will mostly focus on the Den Brink area. This part has been declared a national monument, together with three buildings located on Den Brink.



Figure 2. The different parts of the KEMA terrain: Mariendal, Den Brink, De Hes and Rosande.

² 149.272 inhabitants (1 february 2012, source: CBS)

³ www.tcnpp.com

I believe this is not all 'just' based on beauty but also because of the story of the terrain; First the history of the estate and then the contribution of the KEMA terrain on the status of Arnhem as an energy city.

These two main items have made sure the buildings and the parklands contain enough culture-historic value to be considered a real national monument.⁴

These days however the 40's buildings do not longer meet the requirements for the KEMA work. As a result, KEMA built new industrial buildings in the south of the terrain, near the water. That is why the beautiful Haagse School buildings have lost their functions and nowadays most of them are plagued by vacancy. The empty building I chose is the high voltage laboratory, designed by H. Fels and R.A.L. Schoemaker in 1937. It is a large industrial building, situated on a hill in the middle of Den Brink with a huge central hall of nearly 30 meters high. It has both a large culture-historic as an aesthetic value.



Figure 3. High voltage Laboratory designed by H. Fels and R.A.L. Schoemaker in 1937

The high voltage laboratory is compared to the surrounding buildings a really big and also a really dark building. This is however perfect for the function I would like to transform the building in: a museum. I came up with this idea, not only because I have always wanted to design a museum and the fact that I am also interested in art. Bit more importantly because I believe the Den Brink area needs a specific function which is able to bring the whole area to a higher level. You will find more about these matters in the chapter 'Problems and Possibilities statement.

⁴According to the Monumentlaw 1988, the definition of a national monument is 'all cases existing for at least 50 years which are of general interest because of their beauty, their significance to science or their cultural and historical value' - www.cultureelerfgoed.nl

_Problem and Opportunity Statement

Despite the fact that the city centre is only a 20 minutes' walk, the inhabitants of Arnhem are hardly aware of the existence of the impressive KEMA area. Logically, because the field is almost everywhere surrounded by fences with barbed wire.



Figure 4. barbed wire around the KEMA area

Despite this fact, there are several problems now taking place at the KEMA terrain. As earlier mentioned there is this vacancy problem. Mostly in Den Brink in a few years there will be hardly any functions housed anymore. This is a waste of existing buildings and doesn't give a positive atmosphere in the area. The fact that this is not happening for the whole KEMA terrain is only strengthening the difference between the various parts in the area. The railway and roads have already cut the terrain in several parts geographically and now the parts will have completely different functions in a few years. Because of this Arnhem's Buiten doesn't have its own character and so doesn't Den Brink.

The routing issue is not only a problem in the connections to and through the area but also causes problems in the area itself. In Den Brink there are a few little footpaths where you really feel like walking in the park. This in contrast to the main roads where cars are allowed and also are parked everywhere. These roads are made of concrete and don't make a distinction between possible cyclists or pedestrians and cars. There is no doorstep or any difference in height or materialization. Also the direction and the viewpoints in Den Brink are sometimes missing.

The entrances to the area are a bit random and fail in clarifying the route in Den Brink.

Then, finally, what I personally miss while walking in the beautiful landscape, are just places to stay instead of only to walk. I believe the whole area is never meant to be an attraction for visitors and so it isn't behaving like one.

As mentioned before, there are of course also great opportunities. To start with the perfect location of the area. For example from Dusseldorf it is one and a half hour by car, from Utrecht by car it is a 50 minute ride and from Arnhem central station it is five minutes by public transport.

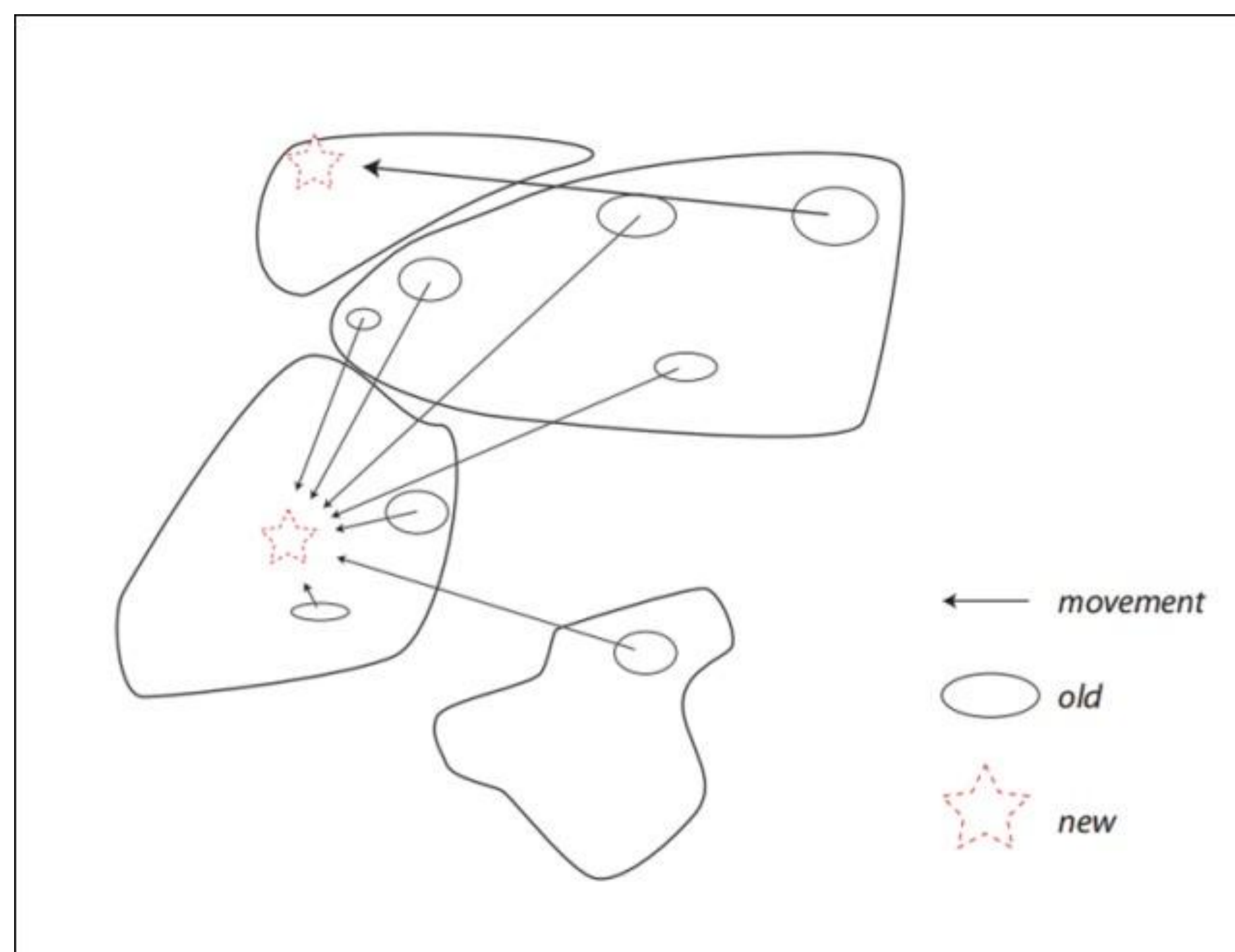


Figure 5. economical movement from Den Brink to other areas.

The KEMA area is located between de Rijn and the green of the city. This green is covering the whole north of Arnhem and is flowing over from west to east and from the Veluwe in the north to the river in the south.

However Arnhem, in 2008 proclaimed to be the greenest city in the Netherlands⁵, clearly doesn't have a lack of parks, Den Brink is not like any other park. Because of the English landscape style, buildings are located in such a way that they are hardly visible from another buildings perspective. There are three national monuments located in the area and trees which are older than 100 years.

⁵"Arnhem en Sluis hebben Goud gewonnen in de nationale groencompetitie Entente Florale 2008. Een jaar lang mogen zij zich de groenste stad en dorp van Nederland noemen. De Gelderse hoofdstad Arnhem won in de categorie 'steden' en het Zeeuwse dorp Sluis werd tot winnaar uitgeroepen in de categorie 'dorpen en kleine steden'. De twee winnende gemeenten vertegenwoordigen Nederland volgend jaar in de internationale Entente Florale, waaraan door 12 Europese landen wordt deelgenomen. Tijdens de prijsuitreiking op 8 oktober in het Theater Markant in Uden ontvingen de winnaars hun prijs uit handen van Mr. G.B. Raaphorst, directeur Natuur van het ministerie van Landbouw, Natuur en Voedselkwaliteit, die Minister Verburg verving."www.degroenestad.nl

Aims of the project

My goal is to give the KEMA area its character back. This doesn't necessarily mean the old English landscape character or the industrial 'KEMA look' but these two stories will play a role. I decided to make an ArtPark (APA, Art Park Arnhem) of Den Brink, a specific function combined with daily life from Arnhem. The KEMA terrain should be given 'back' to the inhabitants of Arnhem and the rest of the world, which could be done by realizing a specific function.

As mentioned before, I decided to design a museum; a specific and not a daily function, which guarantees the fact that the terrain will remain its exclusiveness. Besides that I think a museum should have a link with its surroundings and culture, which are two main themes in the KEMA terrain. Also routing is very important. In the museum itself but also the routing towards a museum. Museums with the greatest social influence have generated large urban spaces for example the pedestrian routes in the extension of the Staatsgalerie in Stuttgart by James Stirling, the terraced park of the Municipal Museum in Mönchengladbach by Hans Hollein, Angels plaza near the MACBA by Richard Meier in Barcelona, the riverbank promenade near the Guggenheim Museum in Bilbao by Frank Gehry and the vestibule of the Tate Modern in London by Herzog and De Meuron. In the dictionary 'museum' says: "museum; a place or building where objects of historical, artistic, or scientific interest are exhibited, preserved or studied."⁶ However, to my opinion, the thing is that the meaning of this word is changing during time. A museum used to be a place to store, study and exhibit objects where to great value is attached. Nowadays the amount of space meant for these main tasks is reduce to make room for other activities. The modern museum also houses a store, restaurant and a stage for lectures. Sometimes it even has a workshop, multimedia centre and a recording studio.

"In its interior spaces, the museum has become a place for the massive influx of an active public., for stimulus and interaction, and also for consumption in its broadest sense (cafeterias, restaurants, shops, bookstores and so on). In its relationship with the outside world, the museum has reinforced its collective dimension, becoming one of the most characteristic public places within the contemporary city. This process of transformation, which was influenced by both the avant-garde and some of the museums from the 1950s, has been consolidated within the past three decades."⁷

For the museum, where the high voltage laboratory will be transformed in, I searched for specific exhibitions. The thing with art these days however is of course that it is not easy to justify the reasons and cost of making a new museum. That is why I went looking for a concrete example. I came out at the Scheringa collection. After the bankruptcy of the DSB Bank, also the art collection of the museum of Dirk Scheringa was certified bankrupt. The wish of Scheringa was to keep the collection as a whole. That is partly realized when businessman and millionaire Hans Melchers from Vorden bought about 1000 art pieces. Mister Melchers would like to expose this collection magic realistic art in a museum somewhere in the east of Holland.

The art movement 'magical realism', in English also called Precise Realism en Sharp-Focus Realism, finds its inspiration beyond the reality and in dreams and delusions.

An important theme is also nature. Melchers only bought the works of Dutch painters, for example

⁶ www.dictionairy.reference.com

⁷ Josep Maria Montaner, museums for the 21st century. Barcelona (SA) 2003

Carel Willink, Charley Toorop and Wim Schumacher. Another remarkable fact is that these works are all from around the same time as the buildings at the KEMA terrain.

Despite the earlier mentioned bad times for culture I believe we should pay extra effort in these matters. “Paradoxically, each crisis has ended up reinforcing the museum’s power as an institution that is at once a reference point and a synthesis, capable of evolving and providing alternative models, and especially appropriate for spotlighting, describing and transmitting the values and signs of the times.”⁸

Arnhem already has a modern museum with works from the same art movement; MMKA; Museum Moderne Kunst Arnhem. This museum is already extended several times and has a sculpture garden with view at the Rijn.



Figure 6. Laan van Borg Rusthoven, Eric Bos

An idea could be to combine these and make a cultural route from one to one other, knowing that by foot this is only 15 minutes and having in mind that the MMKA is located in between the city centre of Arnhem and the KEMA terrain. This route could lead along the train track or along the riverside.

⁸ Josep Maria Montaner, museums for the 21st century. Barcelona (SA) 2003

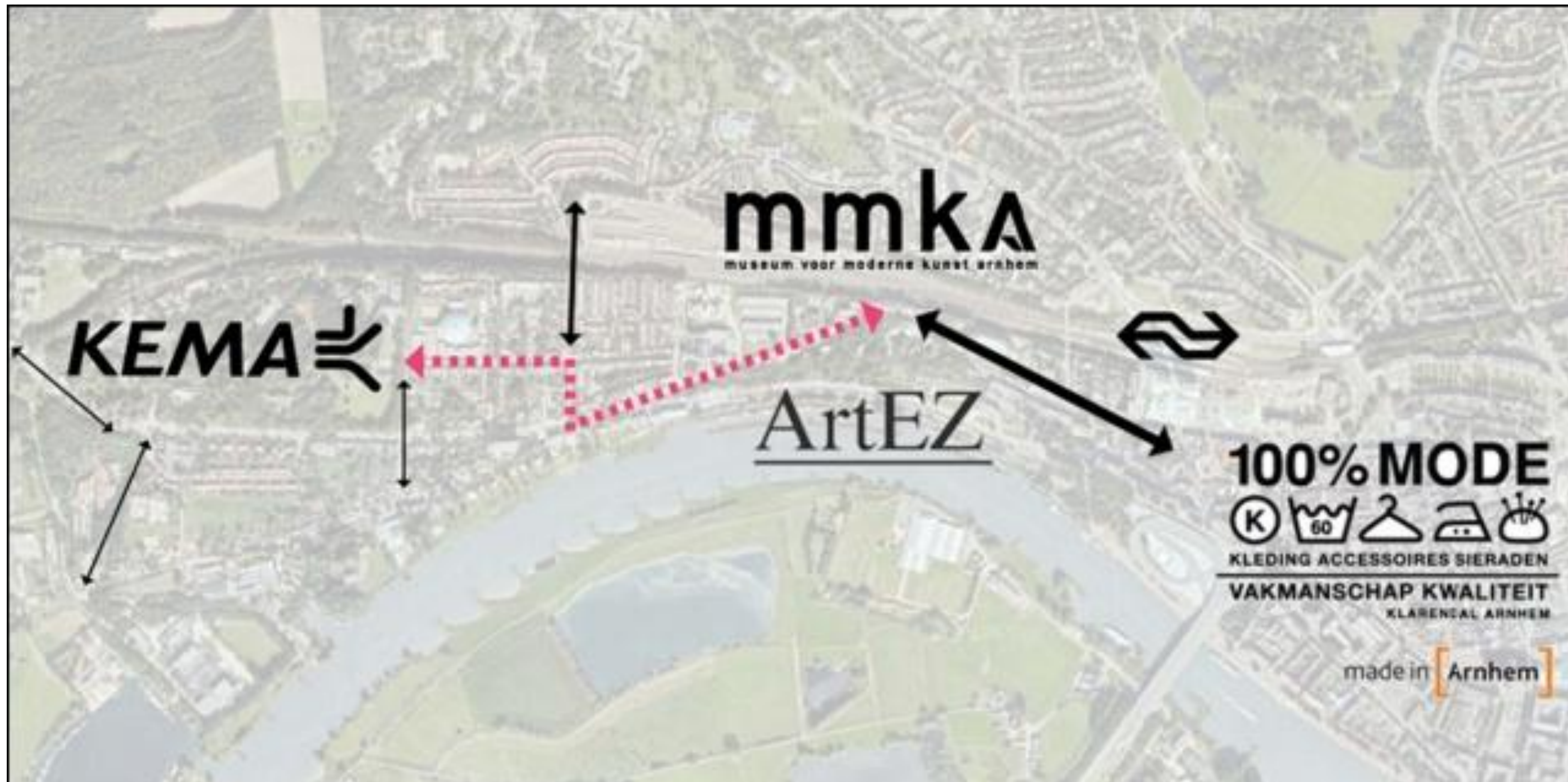


Figure 7. Scheme about the routing from the centre of Arnhem, along the MMKA towards the KEMA terrain.

In the design process of the transformation from laboratory to museum I will take all the results of my value assessment into account. I cherish the materialization, the location and construction of the enormous building.

The human scale, however, is hard to find and the building is too small. Visible extension above ground level will be limited to half of the area of the existing building and will be designed in a contrasting architecture. This because it will add a new piece to the story of the high voltage laboratory.

_Research Questions

My main research question derived from a combination between earlier mentioned both problems as possibilities at Den Brink:

“How to transform the former high voltage laboratory at the KEMA terrain into a new museum for magical realistic art?”

Sub research questions:

How to establish new connections with the city centre of Arnhem?

- What kind of connections?

How to upgrade the quality of the public space within the terrain?

- What is the quality of the public space?

- How to make as big as possible changes with as small as possible interventions?

How to attract visitors from Arnhem?

- What does the term ‘attracting’ actual mean?

- Who exactly are considered the residents of Arnhem?

How to attract visitors from outside Arnhem

- What distance is reasonable to expect visitors?

- What do (inter)national visitors need/want?

What is a museum in the 21st century?

- What is a museum?

- What is the difference between museums now and earlier built?

- What kind of museum could be an addition to the MMKA (Museum Moderne Kunst Arnhem)?

What can the realization of a museum do for its surroundings?

- What does the surroundings need in terms of social activities?

- What does the surrounding need in terms of spatial design?

- How to improve the coherence between the different buildings?

Research approach

Overall I will work according to the 'research by design' method. Designing will determine what will be researched. In the beginning however, I will use the conversely method; 'design by research' because of the specific need for framing the task.

The investigation will consist of the urban analysis of the KEMA terrain and of Arnhem and both of their connections with the surroundings. After that comes the architectural and technical analysis and the value assessment of the high voltage laboratory. The interests of all the stakeholders will be studied. A program brief will be made by the use of references. Other methods except designing and analyzing are interviewing citizens and professionals, in the field of urban planning and museums and the search for usable references.

The conclusion of an important study is the value proposition. The symbiosis of the two methods will probably take place during the concept phase from both the urban and the architectural design. The results of the analysis, including the value assessment, will be converted into preconditions for the design. In this phase, many new questions will pop up who require research. This is for example interviewing the target groups, constructing a program of requirements for the new museum and looking for information in the archive.

Probably some research questions need to be clarified by defining the used terms.

During this project I expect this method is slowly changing to 'research by design'. New questions will on the other hand arise while being deeper and further into the research. Finally, critical reflection points are important for the project.

Roughly seen the project will be like a cocktail glass in terms of broadness. The analysis one starts with will contain as much as possible, the research question is a bit more specific, the methodology will lead one towards the design which is very specific and cost a lot of time.

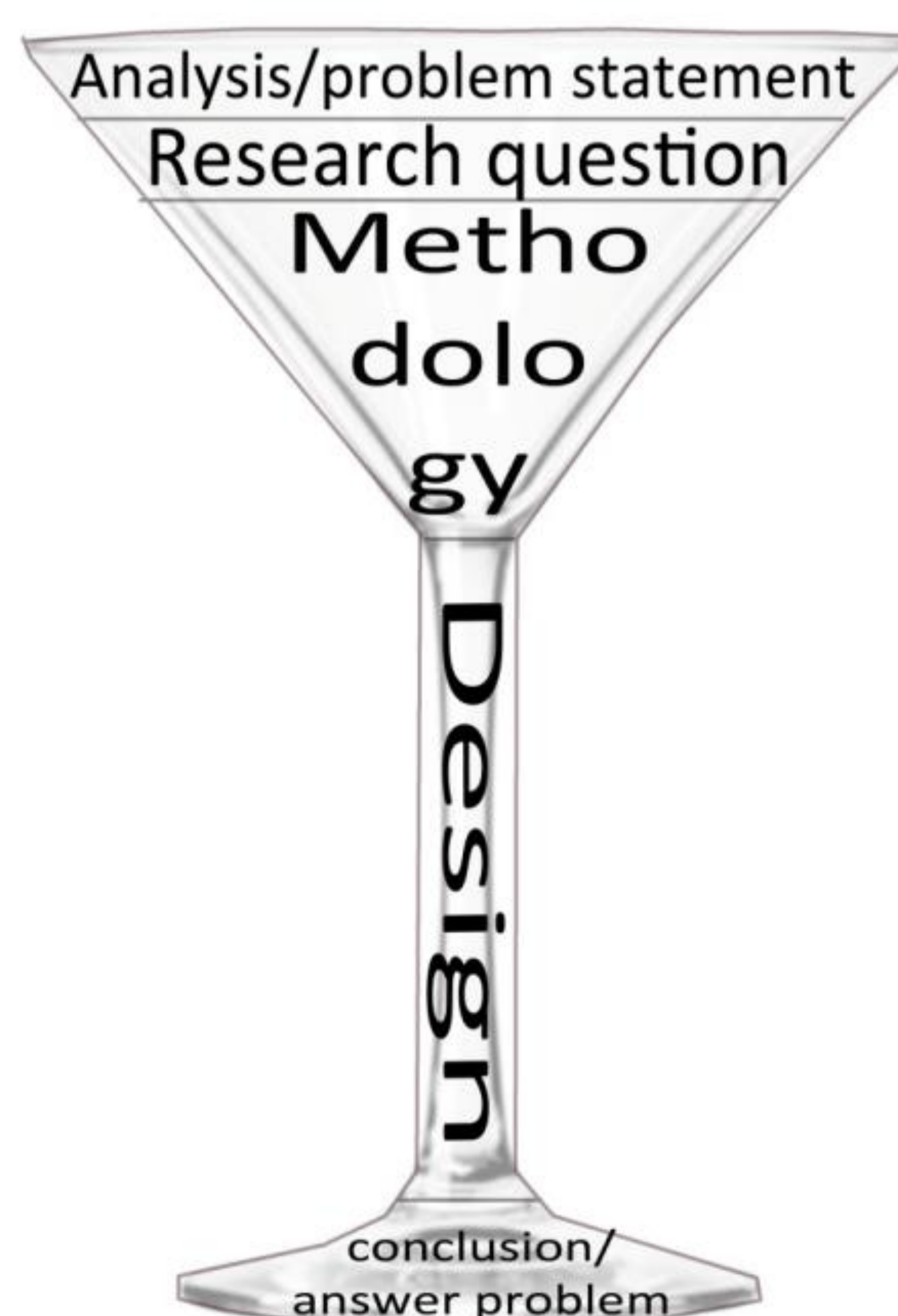


Figure 8. Scheme about the research approach

But also important; after the design phase, one has to zoom out again to see the answer on the research question and place it in a generic overview.

Hard to see is that often the dynamics of change is colliding with the need for continuity. This while they also could strengthen each other and may deliver fantastic results. Any intervention in existing structures is in fact a contribution focused on continuity and further development. It is about the balance between the addition, what stays left and by that the story one is telling.

_Societal and Scientific relevance

These days it is almost no news, and yet it is news; currently a farm per day, two churches a week and a monastery a day become vacant in the Netherlands.

“The Netherlands will house ‘ghost neighborhood’s’ of empty offices. Nationwide 14% of the offices is empty en in some districts this is even half of it.”⁹

The debate about the degree of transforming monuments but also other existing buildings is continuing. Fortunately this also has as response creative solutions; nowadays churches are becoming mosques, bookstores, hotels, dwellings and even skate halls.

The world is changing. Centuries ago, one could see from miles what was happening in a building; living, making bread, going to the church.. Today we find ourselves in an amazing dynamic. Everything goes faster, better and newer as a result of digitization, globalisation and individualisation.

In English one makes a distinction between ‘sustainability’ and ‘durability’, a difference that doesn’t exist in Dutch where one only uses the term ‘duurzaam’. I believe there is an important difference between both terms and we should carefully express ourselves in this matters. To my opinion we should need to reach a way of designing where sustainability, or durability, is always present in the background of every decision, from architecture, to materialization and detailing. The term should lose its trendy, and with that also her maybe temporarily image. Because trends are always passing. Socially seen, besides the fact that empty buildings will deteriorate, are cost money and have a negative influence on their environment, in this matters we are also dealing with plural national monuments; both Den Brink as three buildings on the site.

In my opinion ‘national’ implies ‘important for the whole country, a national interest’. So the KEMA area should be accessible for people.



Figure 9. One of the national monuments on the site

⁹ ‘Het is ondertussen al bijna niks nieuws meer, en toch is het nieuws; Er komt op het moment een boerderij per dag, twee kerken per week en een klooster per maand leeg te staan in Nederland. “Nederland krijgt ‘spookwijken’ van lege kantoren. Landelijk staat 14% van de kantoren leeg en in sommige wijken is dat zelfs de helft.”⁹Koot, J. (11 januari 2012) Financieel Dagblad, De leegstand van kantoren groeit, wat nu? Amsterdam: FD Mediagroep

Beside the considerations about what to do with a national monument and the residents living around the KEMA area, the only other involved party is TCN. The scientific relevance this project remains is that I am a totally objective person, not working for TCN and taking as much as possible, if it is not all, different factors into account.

Another thing that adds further scientific relevance is the fact that there almost doesn't exist an earlier comparable project like the KEMA terrain. This site is pretty unique in its location, function, architecture and especially the combination of those. Because there is not a lot of information about transforming areas this big, scientifically seen the research will be even more interesting.

_Products

The products I will deliver during my graduation project, are strongly related to the main lines of the process. Mainly the five 'peilingen' (see Time schedule) will define when which products will be completed. The products are always the result of the research and an answer to a research questions.

I want to focus on the total process of zooming in from urban scale till detail. The trick I believe is to start broad and go deeper in the project by research more and making defined choices. The thing however is, one shouldn't forget to zoom out once in a while as well. For trying to look objective to the project and the reasons why things are made this way. Sometimes, when you're in the middle of a project, it is hard to judge yourself and everything you're doing from a certain distance. Talking a lot with both teachers as classmates will help. Also explaining something to for example my sisters or roommates who don't have architectural knowledge could help.

Another focus point for me will be the presentations. I found it hard to explain something very convincing in English. Though, preparing my presentations very thoughtful and learning by doing is the answer.

Other products during my graduation will be models, sketches, drawings in AutoCAD and 3D models made on the computer with renderings as result. I made a precise time plan but of course changes could be made over time and knowing myself I will adjust the schedule now and then.



Figure 10. Sketch model high voltage laboratory with height difference in surroundings

_Time schedule

Month	Week 1	Week 2	Week 3	Week 4
	ma di wo do vr za zo	ma di wo do vr za zo	ma di wo do vr za zo	ma di wo do vr za zo
February	excursion - research area	excursion - urban analysis	finish history thesis, complete analysis future KEMA area	Knowing everything about the site and start architectural analysis
March	research question arch. analysis	architectural analysis	technical analysis	making presentation P1*
April	deliver research questions thesis-plan	making buildings-choice + arguments	making urban model excursion veluwe materialisation	make presentation urban plan
May	start designing deliver essay heritage development	finding references, making PVE	finish thesisplan	provisionally design deliver thesisplan
June	provisionally design meeting Rainer Bulhorst	making model en presentation	P2**	
July				
August	adjust design to P2 commence	design references	designing	designing
September	designphase working with different methods, drawings, models, computer etc, and on different scale levels.			
October	designphase working with different methods, drawings, models, computer etc, and on different scale levels.			
November	making presentation P3***	sending files to lasterprinter	Making presentation drawings	Making model
December	Finetuning presentation	P4****		
January	By making a powerpoint presentation and practising a lot the essence of the plan will become clear again. Also good is to experience a lot of P5 to see what is a good or not a good way.			P5*****

Figure 11. Time Schedule Graduation Project

Products Peilingen

* P1

- _ Theoretical research
- _ Investigation of the location
- _ Urban analysis
- _ Architectural analysis
- _ Technical analysis

** P2

- _ Function and program building
- _ Urban design
- _ Preliminary design
- _ Graduating thesis
- _ Plans 1:500
- _ Sections 1:500
- _ Facades 1:500
- _ Model

*** P3

- _ Plans, facades, sections 1:200/1:100
- _ part of building section and plan 1:50
- _ Fragment of facade with horizontal and vertical section 1:20
- _ Details 1:5

**** P4

- _ Situation drawing 1:5000/1:1000
- _ Plan ground level in situation 1:500
- _ Plans, sections, facades 1:200/1:100
- _ Part building plan and section 1:50
- _ Fragment of facade with horizontal and vertical section 1:20
- _ Details 1:5

***** P5

- _ Theoretical support research and design + reflection architectonic and social relevance
- _ Situation drawing 1:5000/1:1000
- _ Plan ground level in situation 1:500
- _ Plans, sections, facades 1:200/1:100
- _ Part building plan and section 1:50
- _ Fragment of facade with horizontal and vertical section 1:20
- _ Details 1:5

Figure 10. Products Graduation Project

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- _Figure 10. Sketch model of the high voltage laboratory with height difference in surroundings. Model made by M. Meijs, may 2012.

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