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# 1 OBJECT OF STUDY AND ITS CONTEXT

## 1.1 OBJECT OF MY STUDY

The object of study will be elaborated on several scales for 2030 on District(1km) scale with smallest details on Material(1mm) level.

## 1.2 PROBABLE FUTURE CONTEXT: FIELD OF PROBLEMS

My assumptions about the probable future context of the object of study until

Future 2030	Global(10000km)	Continental(3000km)	Subcontinental(1000km)	National(300km)	Subnational(100km)	Regional(30km)	Subregional(10km)	Town(3km)	District(1km)	Neighbourhood(300m)	Ensemble(100m)	Buildingcomplex(30m)	Building(10m)	Buildingsegment(3m)	Buildingpart(1m)	Buildingcomponent(300m)	Superelement(100mm)	Element(30mm)	Subelement(10mm)	Supermaterial(3mm)	Material(1mm)	Submaterial(<1mm)
management	!			!		!			!													!
culture				>						>												
economy									+						-							+
technique	/																					/
ecology					=		=															
mass	C	C				C			C													D

Legend:

- management is initiating (!) or executing or controlling initiatives (?)
- culture is innovative (>) or traditional (<)
- economy is growing (+) or declining (-)
- technique is internally specializing subfunctions (/) or internally combining subfunctions (X)
- ecology is internally differentiating into heterogeneity (|) or internally egalizing into homogeneity (=)
- mass is concentrating in space (C) or dispersing in space (D)

As far as this future is not desirable it will generate a field of problems (Jong and Priemus(2002)).

As relevant probable but undesired developments (emerging problems) I consider how the many actors perform their role in the future. Especially on the global level, the entire world has influence on the future. On the more detailed level, the changes are less dependent on the changes of the global level. My study would concentrate therefore on the more detailed level, where problems can be solved and serve as an example to use more often and on larger levels.

### 1.3 DESIRED IMPACTS OF MY STUDY: FIELD OF AIMS

My study derives its motivation, intention, aims or even programme of requirements from fields indicated by a P in the next table:

Impacts 2030	Global (10000km)	Continental (30000km)	Subcontinental (10000km)	National (300km)	Subnational (100km)	Regional (30km)	Subregional (10km)	Town (3km)	District (1km)	Neighbourhood (300m)	Ensemble (100m)	Buildingcomplex (30m)	Building (10m)	Buildingsegment (3m)	Buildingpart (1m)	Buildingcomponent (300m)	Superelement (100mm)	Element (30mm)	Subelement (10mm)	Supermaterial (3mm)	Material (1mm)	Submaterial (<1mm)	
management						P	I																
culture										P	I												
economy									P	I													
technique																P	I						
ecology																P	I						
mass									O													O	

Legend:

largest drawn frame of study (O) and smallest characteristic detail of study (o) affected without intention (I) or origin of my motivation or programme (P)

They also indicate which actors (problem owners) will be primarily favoured by realising the results of my study:

Therefore is every letter 'P' filled in for the level on which my study will have research actors. The aim for a better future is mainly fixed on the building components. While improving the techniques, ecologic factors are taken in the production methods. Apart from these, the economy develops on a greater level, in my aims the district. The culture changes in the neighbourhoods in the Netherlands, wherein de architect's role is a great issue. Finally, the managementlevel is set regional, because especially the more influential actors are responsible.

They possibly will support an assignment and programme of requirements to change undesired developments.

Unintended impacts in the fields indicated by an I in the table above could put other actors at a disadvantage like:

The letter 'I' is filled in every level more detailed than the 'P-level'. Because my aims are mainly concentrated on the higher levels, the lower levels can have disadvantages.

### 1.4 MY DESIGNERLY REFERENCES: FIELD OF MEANS

Previous public examples with similar context below fascinate me professionally.



Image 1.4.1 Kop van Zuid

Source:

<http://www.skyscraperpicture.com/rotterdam059.JPG>  
(28-01-2009)

**Wilhelminapier / Kop van Zuid, Rotterdam**

Keywords: Kop\_van\_Zuid, Wilhelminapier, Montevideo, Hotel\_New\_York, Rotterdam, World\_Port\_Center

The urban development project 'Kop van Zuid', Rotterdam, is an example of a project which is meant to stimulate on different scale levels. In first place, Rotterdam has a new piece which is representative for economic health and the possibility for economic growth within the city. In second place it creates spaces for people who have much money to spend and want to live on a toplocation (Montevideo), offices who want to have a prominent place in the society etc.



Image 1.4.2 VROM

Source:

<http://www.skbodem.nl/upload/images/nieuws/vrom.jpg>  
(29-01-2009)

**Probleemwijken**

Keywords: Problem\_Neighbourhood, Problem\_area, Vogelaar, VROM, Large-scale\_project, detailed\_level

There is published a list of 40 neighbourhoods to give more attention to those problem areas. This project stands for a detailed approach, which is realized in a very open way. Everybody in the Netherlands is kept informed about the way this will be done, so you can speak about a large-scale project which is in the end approached on a very detailed level.

A programme of requirements resulting in designs like this would contain next elements:

- What is the **current situation** that has to be improved?
- What **elements** can be brought in to make the situation better?
- How can these elements best be **organized**, in detail, to make sure that everyone can see the advantages and wants to participate?

From these images I derive next types of composition, components and details, relevant in my study.

The types can be divided in four categories. In my study mainly the characteristics play an important role. These kinds of details perform on larger scale levels, and create a certain connection between scales. Even important is the fact that the lowest level can perform more than once. This kind of study though gives the most information that can help more situation within the bigger whole.

Source: T. M. d. Jong and D. J. H. v. d. Voordt Ways to research and study urban, architectural and technical design (Delft) Delft University Press, Chapter 49.6 *Composition analysis*



Image 1.4.1  
*Characteristic details*

From these images I derive next possible generating conception directing my study.

The basic concept of the project will descend on making the initial part of the study better. This thus depends on the kind of situation which is kept representative for the overall problems that can be found in other places as well. This concept will be called as **generality**.

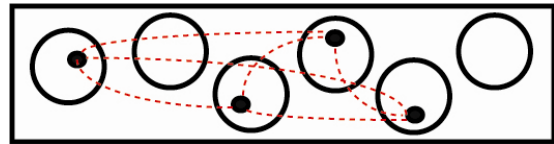


Image 1.4.2 Concept

Source: T. M. d. Jong and D. J. H. v. d. Voordt Ways to research and study urban, architectural and technical design (Delft) Delft University Press, Chapter 13.5 *The concept organizes design choices*

To elaborate and evaluate such types and conceptions for my study next kinds of models could be used:

For as far as can be said at the moment, the verbal model is a very important model. This model is based on a well organized organization. This is because of the very differentiating scale-levels a very important factor, referring the efficiency of the program. In this model every participant gets a place within the diagram on the right. Everyone has a certain space in which it has to perform and 2 important other participants; the one below them and the one above them. All participants get information from higher levels and can inform at different other higher levels. In this way each gets a contact person and knows where to go with information, problems etc. Other models, such as mathematical or mechanical are not at the order on the moment. The spatial model has to come in the time when the project is more specific.



Image 1.4.3 Verbal model

Source: T. M. d. Jong and D. J. H. v. d. Voordt Ways to research and study urban, architectural and technical design (Delft) Delft University Press, Chapter 22.2 *Kinds of models*

To use such models I will need data and assumptions. Sources where I can find data are:

Objective instances, such as governmental reports and research bureaus concerning issues related to the project.

For data I cannot find within the available time, I will make assumptions like: The possible consequences for the choices which were made, having influence on the final product of the project. They can best be taken within a reflection, because otherwise this issue can't possibly be solved. They are supposed to be elaborated in other studies.

key words: methods design\_research\_and\_typology evaluating modeling design\_study In the study there will be a few kind of methods, which will be used. These methods are for example based on design research and typology, evaluating, modeling and a design study. The methods basically refer to previous projects or information which can be used to describe or explain the current situation.

## **1.5 MY PORTFOLIO AND PERSPECTIVE: FIELD OF ABILITIES**

From my previous work next elements are useful for this project. The work I have previously done is maintained at a different level. Since beginning September '08 I began to think a lot different and more in a way of

making new things. In previous works of my HBO-career, you can see that I have always been searching for designs that are in one way or another rather complex. The displayed images, also to be seen on the website <http://home.deds.nl/~m.buysen> refer to the period that I developed especially the internal organization; how to make the design so that the builders can almost directly start building. In this project I will also search the boundaries, to make the project work; there will be few limitations.

In this project also new elements will be developed. The sphere of activity and their boundaries which I have known for the last couple of years are more or less restricted in practical ways: there have to be systems available to make the design possible. In this project, boundaries extend to for example product development, but also the scale will be very different. The work isn't limited within the parcel boundaries, but also researching and weighing up consequences will not be less important. This makes the project seen as a total a lot more complex.

## **2 MY STUDY PROPOSAL**

### **2.1 LOCATION AND OTHER FUTURE CONTEXT FACTORS**

The object of study will be elaborated on several scales for 2030 on District(1km) scale with smallest details on Material(1mm) level. The actual object won't be located on a certain place, but will contain several places. One of the difficulties of the project is finding a solution that solves many situations in for example different streets.

If the context will change like I assumed in 1.2 it will influence the location as follows.

The changes assumed in point 1.2 refer to a different situation than that is being thought of at the moment. At this time, problem areas are very hot items. Tens of years later, there may probably be problems on the existence of very neutral areas, which have no (dis)advantages looking at other areas? This makes the concurrence smaller and probably the prices higher?

If management will be initiating (!) on Global(10000km), on National(300km), on Regional(30km), on Neighbourhood(300m), on Submaterial(<1mm) level, it will influence the location by the way the different levels face each other. The levels which are called all have a different sphere of activity and influences to each other, by actors as the economic growth or more or less demand of the different materials, cultural activity etc.

If culture will be innovative (>) on National(300km), on Neighborhood(300m) level, it will influence the location by a changing context and problems to be solved. The most important issue is, then, that the cultural level will be stabilized, whereas the cultural growth will lay a very important role.

If economy will be growing (+) on District(1km) not on Buildingpart(1m), on Submaterial(<1mm) level, it will influence the location by having different activity of economic growth the economic spiral is being kept alive. When the economy on every level is stabilized, there will be very little changes. By exhaustion of the materials, the price will become higher, so the district level has his advantages. The building parts level in contrary, will face higher prices by making the parts more expensive.

If technique will be internally specializing subfunctions (/) on Global(10000km), on Submaterial(<1mm) level, it will influence the location by having influence on the use of the materials which can be used or can be given.

If mass will be concentrating in space (C) on Global(10000km), on Continental(3000km), on Regional(30km), on District(1km), not on Submaterial(<1mm) level, it will influence the location by exhausting the submaterial level, but enlarging the other concentration. The more the number of inhabitants grow, the more houses and other facilities have to be build etc.

## **2.2 MOTIVATION OR PROGRAMME OF REQUIREMENTS**

With regard to my assumptions about the future context (1.2) and referring to the intended impacts (1.3) as a result of this study it will motivate myself and hopefully others to see that there are possibilities to improve the society with small but very well organized interventions. The most important intention of this case is that there is very much need of a study on how these aims can be reached.

## **2.3 INTENDED RESULTS, CONTRIBUTIONS AND PLANNING**

I expect next products of my study:

- **Urban study** what kind of functions are not available in the neighbourhood and have to be there
- **Research** on the way building parts are made and a critical review in the way the production methods and products can be improved
- **Design** of a building according to the urban study, made out of products which are developed in the research and development department.

It will give a contribution to the research of my faculty by giving a good example of the way in which the different scale levels are joined in one project. It has enough limitations to be realized in half a year.

## **3 ACCOUNTS**

### **3.1 MEETING CRITERIA FOR A STUDY PROPOSAL**

According to Jong and Voordt eds. (2002), page 28 - 31 this study proposal demonstrates:

A Affinity with designing.

Designing seems to be quite simple in first place to outsiders. The difficulty comes, when different aspects and points of departure have to remain. For example must architecture meet several legislations, the project developer's demands etc. In this study many aspects come forward from very differentiating levels, such as the detailed building part or the extended regional aims.

B University latitude.

In order to fulfill all the demands there is need for a very well organized structure within the problem solving.

C Concept formation and transferability.

To make the purposes clear to for example the community the concepts have to be very understandable. This is mainly done by giving the citizens in the beginning some influences on the process, such as functions that have to be inserted in the buildings.

D Retrievability and Accumulating capacity.

During this study I would give the citizens some influence, by researching needs according to them. In this way some citizens will know from the project. During the project, the score-so-far can be exposed in well-known places, such as the supermarket. The citizens keep having influence until the very end of the

project. Finally the results can be presented to higher authorities, who get a product which is based on matters.

E Methodical accountability and depth.

This study proposal is basically referred to other projects which have to stimulate on a large-scale level. By the scale, there is a great importance in studying information which is given through other researches.

Source: T. M. d. Jong and D. J. H. v. d. Voordt Ways to research and study urban, architectural and technical design (Delft) Delft University Press, Chapter 11.2 *Design and research*

F Ability to be criticised and to criticise.

The study is mainly based on criticism of the citizens. By keeping contact with the community, a very well criticized product comes forward. In the case there have already been made studies for the particular project, I will also take a look at their results.

G Convergence and limitations.

A very well organized structure will guide the project to keep convergence in the main role. This will also result in some limitations, which take care of keeping the project's essence intact.

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### **3.3 KEY WORDS**

Future Impact Michel Buijsen 1519298

In this index an expression like  $y(x)$ , object(subject) means 'object y as a working (function, action, output, result, characteristic) of the subject x (independent variable actor, input, condition, cause)'.

planhorizon(2030)

management supposed  
initiating(Global(10000km),National(300km),Regional(30km),Neighbourhood(300m),Submaterial(<1mm))  
culture supposed innovative(National(300km),Neighbourhood(300m))  
economy supposed growing(District(1km)notBuildingpart(1m),Submaterial(<1mm))  
technique supposed specialising(Global(10000km),Submaterial(<1mm))  
mass supposed  
concentrating(Global(10000km),Continental(3000km),Regional(30km),District(1km),notSubmaterial(<1mm))  
frame object(District(1km))  
grain object(Material(1mm))