Reflection

The Urban Frames

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Introduction

This document is a reflection of my graduation project conducted at the TU Delft. It should be understood as a supplement to the research report of my graduation project in both Architecture and Urbanism. This reflection contains notes and observations regarding the research and design in relation to the theme of the studio, the relationship between research and design, the chosen methodical line and the wider social context.

The relationship between the theme of the studio and the subject/case study chosen by the student within this framework (location/object)

The project is conducted within a graduation studio dedicated to the theme 'Renewal of the urban renewal', which is related to a larger Dutch research project on this subject. It aims at exploring the possibilities of the use of neighbourhood services and city institutions as an instrument for urban regeneration in Dutch 'problem neighbourhoods'. Thereby it addresses the idea that a strategy for urban regeneration could be linked to the urban agenda of that city. Questioned is what role architecture could fulfil within this context. The individual graduation project should be understood as a product of the more comprehensive research project.

The study area in Amsterdam, preselected by the studio, is located in between the historical centre and the polder Watergraafsemeer. Transvaal, a 'problem neighbourhood' within this area, is enclosed by a railway embankment and the ring-canal of the Watergraafsmeer. (fig.1) The few existing physical connections with neighbouring urban areas fail in establishing relationships of any local significance. Besides this, Transvaal lacks attractive programmatic relevance for citizens from elsewhere. The project focussed on the physical isolated position of the Transvaal neighbourhood within this area and connects its spatial issues with the fragmented condition of the larger Amsterdam East region.

Considering this situation the project investigated in which way an architectural approach for intervening in the existing urban environment could be a significant renewal regarding the renewal of the city. Thereby I focussed specifically on reading infrastructural barriers as spatial elements that can be manipulated by architectural means.

Two locations were selected for proposing a design. Both located at an infrastructural spatial element which encloses Transvaal; the railway embankment and the ring-canal with its dike. Whereas both structures are important for the use and inhabitation of the city, they form man-made physical barriers within the city as well. Based on this reading of infrastructural barriers, the two locations were selected for proposing designs with the goal to investigate specific architectural solutions for these two locations, while at the same time putting forward a general approach for dealing with similar locations. In line with the aim of the studio the proposed designs are small scale architectural interventions at a strategic location.

The two locations are positioned on opposite sides of Transvaal, whereby the proposed interventions form the missing links of a route, connecting the Transvaal neighbourhood with the Oosterpark in the north and Park Frankendael in the south. (fig.2) The selection of these locations should be understood in relation to the intention to change the isolated condition of Transvaal, while safeguarding its spatial character as a *city within the city*.

The first motive for determining the design assignment was the idea of providing a passage at both selected locations in order to accomplish the new route. Next to this, from the beginning on there was the idea that both locations could be treated as entrances to Transvaal. However, since the locations are positioned at the edges of Transvaal, they could not only function as entrances, but also as transition zones between Transvaal and its surrounding neighbourhoods.

This led to the idea of creating a possibility to house a suitable public programme at both locations, whereby they could become places for human interaction, in fact, rather than entrances, functioning as meeting points in the middle of two neighbourhoods.

This is why, instead of simply proposing a bridge over the ring-canal and a tunnel through the railway embankment – relating only to circulation issues – the project examines the possibility of a pair of gate buildings.

One could argue that a similar spatial model, based on two buildings on the edges of an enclosed urban area, has been used before in Amsterdam. In an historic analytical research I conducted, I pointed out that in two earlier periods this model was successful in generating new spatial relationships between the enclosed urban area and surrounding parts of the city.

The Waag on the Nieuwmarkt and the first Amsterdam exchange by architect Hendrick de Keyser at the beginning of 17th century, as well as the Central Station and the Rijksmuseum by Pierre Cuypers at the end of the 19th century, functioned in such a way. Striking is that they are all positioned at urban border locations, they all provide a passage and they all house a programme which deals with interaction and exchange of people, money, goods, knowledge or information. (fig.3)

Translating this historical analysis to today's context was also useful for determining the programmes that needed to be housed in the proposed designs. The studio's aim to use city institutions and neighbourhood services, could be perfectly matched in relation to the historical analysis by proposing two different public functions, each on one side of Transvaal. Especially for a society which is depending so much on knowledge and information as today's society, a programme related to these themes was thought to be legitimate. Proposing such a programme would not only give the possibility to continue the tradition, but it would also give the opportunity to add significant complementary programme to this area.

And as a matter of fact a suitable location for a recently closed neighbourhood library in this area of Amsterdam needs to be find. Besides this, recently a local knowledge and innovation platform dealing with water issues has been founded. This platform called WATERgraafsmeer lacks a physical accommodation. This is why was proposed to house the knowledge and innovation platform on the location of the ring-canal and the library on the location of the railway embankment.
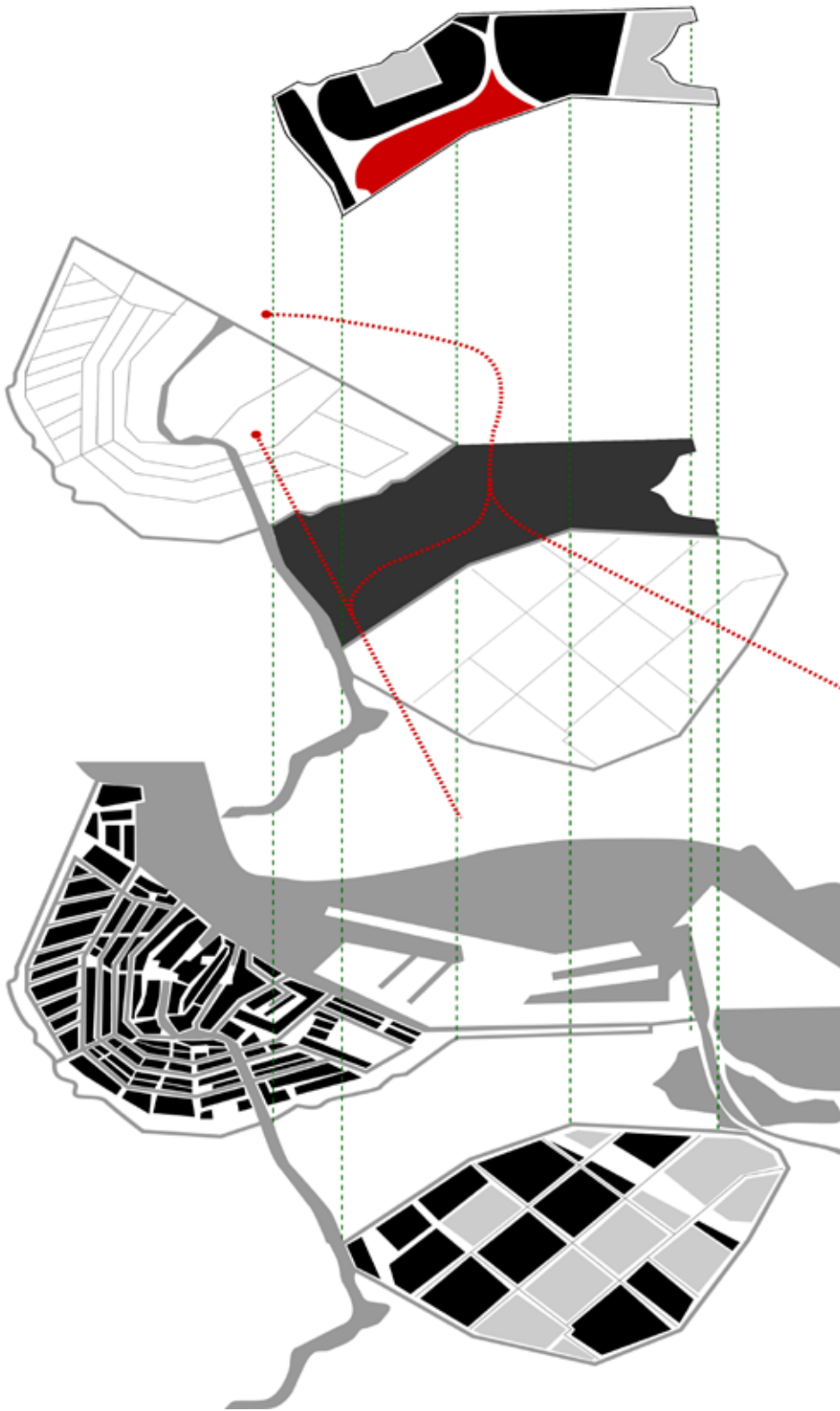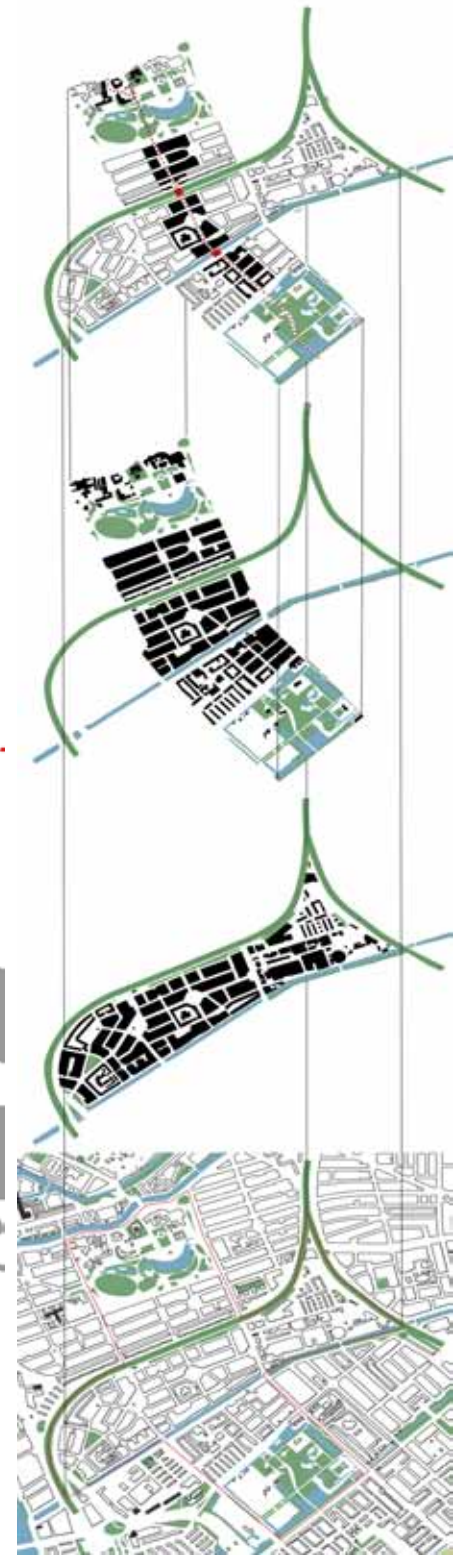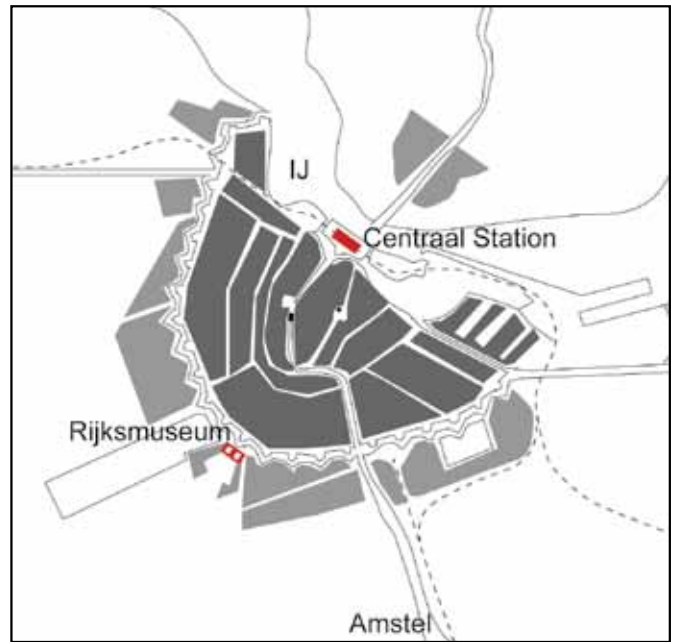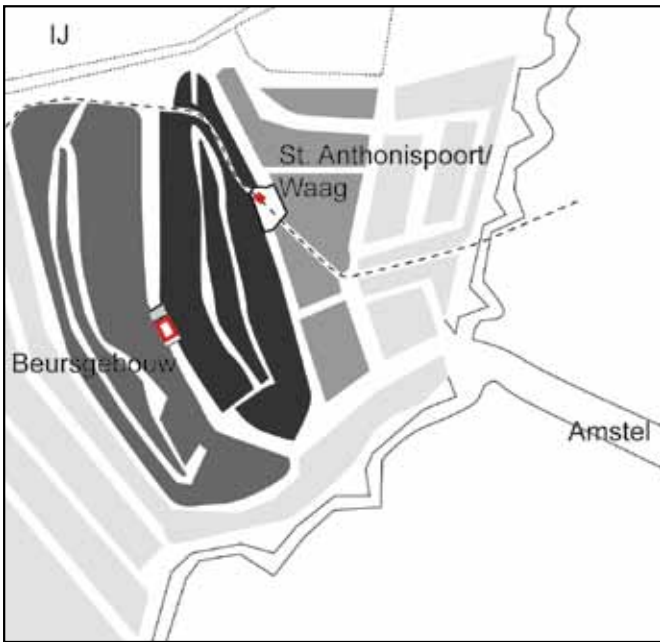
Fig. 1 - Explode view showing the studie area in between the historic centre and the Watergraafs-meer, in which the Transvaal neighbourhood is enclosed by the railwayt racks and the ring-cannal.

Afb. 2 - Locations of the interventions, needed to establish a new route.

Afb. 3 - Maps showing the positions of two pairs of buildings in different stages of the development of Amsterdam.
Left: Amsterdam around 1625. Indicated are the locations of the exchange building (Beursgebouw) and the Waag.
Right: Amsterdam around 1885. Indicated are the locations of the Rijksmuseum and the Central Station.
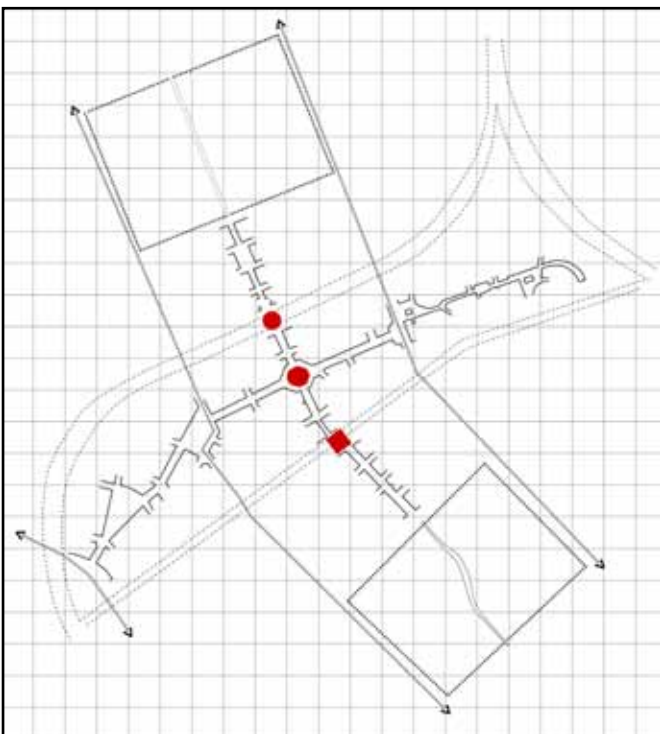
Afb. 4 - Sequence of spaces based on elementary geometrical forms.
The existing octagonal Steve Biko square forms the centre of this
arrangement: circle – octagon – square.

The relationship between research and design

When evaluating the relation between research and design I would state that developing the design was in fact a form of doing research. The research focussed on the question how in architectural terms form could be given to the formulated design assignment.

This approach could be called *research by design*. However, this term has always been rather vague to me. During the graduation process I have come to understand that an approach based on a *formal theme* can be best used to explain the relationship between research and design.

Considering architecture as a discipline with its own body of knowledge and its own field of research, there needs to be a way to do research and to make progress. When doing architectural research one needs a task to work on in order to generate knowledge about it. I believe architecture could generate knowledge when it focusses on clearly formulated *formal themes*.

In relating the term to conventional academic research, I believe it could be best compared with the term *hypothesis*, while similarly a design assignment could be compared to a research question. When formulating a hypothesis, one not states this as the final outcome of the research, but as a plausible and acceptable possible answer on the research question. Afterwards, one starts investigating by testing its value. Can it persist, or can it be rejected and needs to be adjusted.

In this sense one can understand a *formal theme* as a guiding force for architectural research. In dealing with an assignment, the *formal theme* provides focus for developing a design. It is helpful in framing the assignment to a possible solution, which can be investigated, but also rejected or adjusted. Through the act of designing formal architectural knowledge can be generated regarding the *formal theme*.

Afterwards should be concluded if the theme was helpful in generating design solutions and if the developed design meets the requirements of the assignment.

Regarding the graduation project a *formal theme* has been used, which I have formulated as *the frame as link*. Both designs are the result of an exercise based on this stating point. The two could be understood as counterparts within a sequence of spaces based on elementary geometrical forms. The existing octagonal Steve Biko square forms the centre of this arrangement: circle – octagon – square. (fig.4) Taking the two outermost forms as starting point for a series of formal modifications, which were partly executed for both designs and partly specifically for one of the two, led to two totally different designs however clearly based on a common idea. Furthermore the designs show that the chosen formal theme was useful of generating solutions which can be adapted to location specific requirements and conditions.

In this case the architectural research lead to the design of two buildings which only are what they do: marking their location, allowing a passage and framing a space which could house a program. Radically clear and almost simple.

When evaluating *the frame as link* as chosen *formal theme*, can be concluded that it enabled me as the designer to develop architectural knowledge related to the formulated assignment. Pointing out that the generated knowledge was applicable to different locations for which a similar assignment was formulated, shows that *the frame as link* is a valuable *formal theme* for the architectural discipline in dealing with infrastructural spatial barriers.

The relationship between the methodical line of approach of the studio and the method chosen by the student in this framework

The role of architecture in relation to the city is a central theme in the studios of Hybrid Buildings. As part of the chair of Building Typology, a lot of attention is given to the historical development of cities in relation to the influence and appearance of buildings.

The actual designs for my graduation project are developed after an extensive analyses of the urban situation as well as an analysis of a number of relevant historical precedents.

The intentions of the project needed to be formulated in an early stage, based on the analytical work. This method was followed. However the use of a *formal theme* was not explicit a methodical line of approach, this way of working fits well in the framework of the studio.

Besides, the graduation studio dedicated to the 'Renewal of the urban renewal' aims at exploring approaches for architecture to deal with the contemporary conditions of the city. Thereby it focusses on the possibilities of an small scale intervention by means of a singular architectural project. This should be understood as an alternative for the current approach regarding the renewal of the city which is based on the use of masterplans.

Especially in the current situation of economical decline this proposed alternative should seriously be considered, since investments could be lower and more specific dedicated to a well defined project which in a relatively short period could be executed.

In line with this way of thinking I developed my graduation project. Although my proposal consists out of two interventions, this should be understood as a singular project. Instead of developing an extensive plan for a long term period for the whole area, the project puts the attention on the possibility of only intervening at two strategic locations.

The relationship between the project and the wider social context

Whereas the studio focussed on areas which are 'problem neighbourhoods', the developed project clearly needs to be understand in a wider social context. However the architectural designs are highly influenced by the internal discourse of the discipline, they are in fact the result of an approach which is rooted a social awareness of everyday reality.

The intention of proposing these designs on exactly these locations should be understood as a critique on the current tendency of the concentration of urban programmes. The proposed project in fact introduces a model of deconcentration, whereby urban institutions and neighbourhood services are spread over the whole city. The intention is to safeguard equal access for all citizens to public facilities in each neighbourhood, by positioning these programmes on strategic locations. The studio proposed to use such urban programmes as a tool for urban regeneration.

In relation to this, the project shows that the role of architecture could be understood in a even broader context, when focussing on all abilities of architecture. In this case infrastructural barriers are manipulated in terms of architectural interventions, which also led to possibilities of creating new routes and networks in the city.

The ability of architecture to frame and define space in relation to the proposed programmes should also be understood in counterbalance to a tendency in which our awareness of place becomes less and less significant. As the rise of the network society, fast technological developments and feelings of always being in transit have led to this situation, the designs offer spaces for human interaction and places to simply be.

Public Frames, Amsterdam
A dialectic unity

"Architecture is representation of itself as construction responding to a purpose."
(Schelling, F.W.J., Die Philosophie der Kunst, 1802. The Philosophy of Art, 1988)

This project focuses on the Transvaal neighbourhood in Amsterdam and it proposes two architectural interventions. Small, precise and clearly recognizable.

The intention is to change the isolated condition of the neighbourhood, while safeguarding its character as *a city within the city*. Enclosed by a railway embankment and the ring-canal of the Watergraafsmeerpolder, one could read Transvaal as a sort of walled town within an urbanised landscape. The few existing physical connections with neighbouring urban areas fail in establishing relationships of any local significance. Besides this, Transvaal lacks attractive programmatic relevance for citizens from elsewhere.

This led to the idea of proposing a pair of gate buildings; framing the neighbourhood as an spatial entity, while providing new connections with the surroundings. In fact, the designs form the missing links of a new route; connecting Transvaal with two city parks – Oosterpark in the north and Park Frankendael in the south. Furthermore, both buildings would offer the possibility of housing a suitable public programme.

The project is based on a reading of infrastructural barriers as spatial elements, which can be manipulated by architectural means. Erecting a barrier could be understood as a pure architectural matter, but creating an opening should be too. In that sense, this project is dedicated to the most fundamental architectural acts, starting from architecture's ability to create new domains by framing space through the use of material.

The *formal theme*: 'the frame as link' was used as a basis for both designs in order to develop the two as one project. The result is a dialectic unity. Each design responds to its site specific conditions, but clearly there are similarities between them, starting by the fact that they have the exact same diameter length, 38.5 m.

The two could be understood as counterparts within a sequence of spaces, based on elementary geometrical forms. An existing octagonal square forms the center of the arrangement:
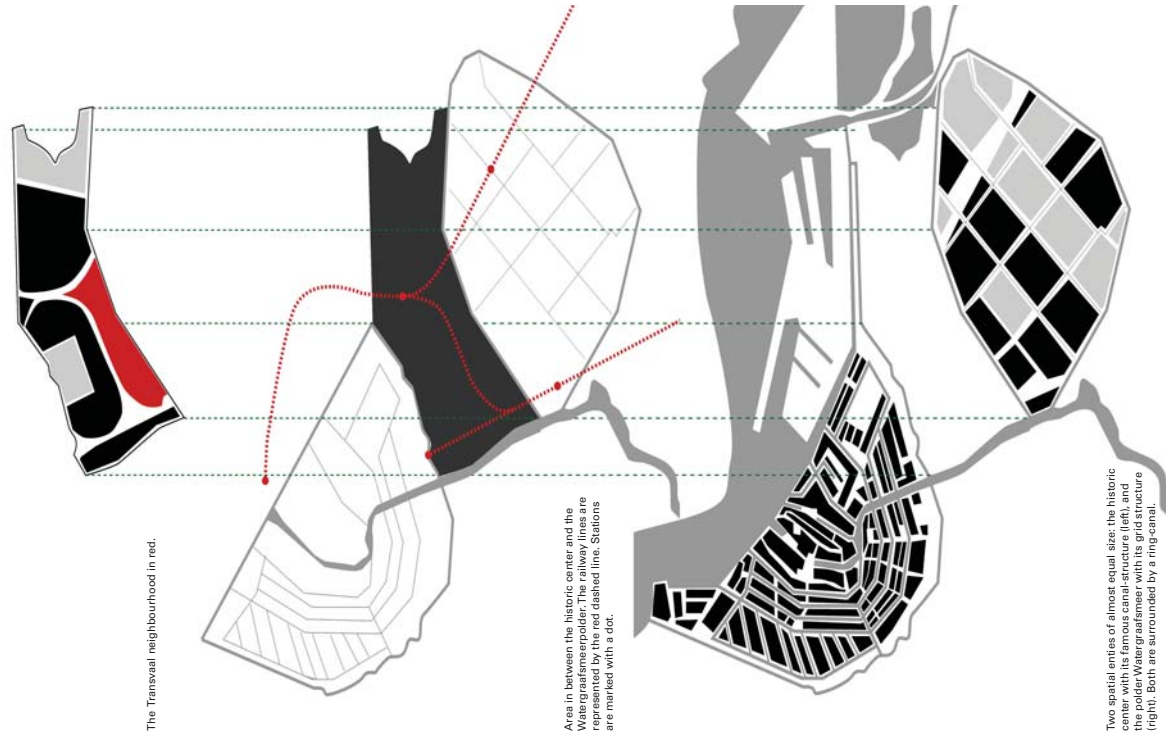circle – octagon – square.

The two outermost forms were taken as starting point for a series of formal modifications, which led to an architecture which only is what it does: marking its location, allowing a passage and framing a space which could house a program.
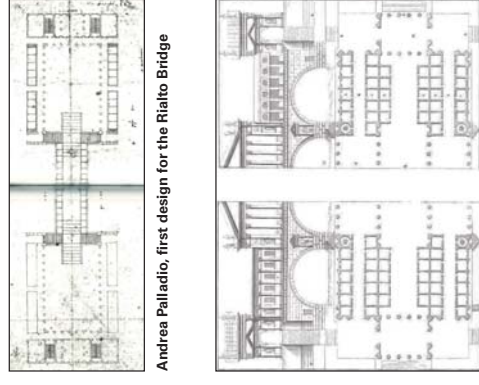
Radically clear and almost simple.

A microcosm as connection

"By moving the theme of the city square from the entrances to the center of the span, Palladio transformed the bridge into a forum, a microcosm dialectically linked to the city by virtue of its radical autonomy as a city within the city."
(Aureli, P.V., The possibility of an absolute architecture, 2011)

The idea for using 'the frame as link' as a *formal theme* for the presented project is derived from Palladio's Rialto Bridge project in Venice. Palladio developed two designs for the bridge. A shift in his approach towards the assignment lead him from a first proposal to a second one. The conceptual essence behind this shift formed the basis for the idea of 'the frame as link'.

The Transvaal neighbourhood in red.

Area in between the historic center and the Watergraafsmeerpolder. The railway lines are represented by the red dashed line. Stations are marked with a dot.

Two spatial entities of almost equal size: the historic center with its famous canal-structure (left), and the polder Watergraafsmeer with its grid structure (right). Both are surrounded by a ring-canal.

Exploded view, showing the position of the Transvaal neighbourhood in Amsterdam.

Andrea Palladio, first design for the Rialto Bridge

Andrea Palladio, second design for the Rialto Bridge

Formal theme: 'the frame as link'

Transvaal as an uraban island, enclosed by infrastructural barriers on all sides.

Internal organisation of Transvaal as sequence of public spaces in east-west direction.
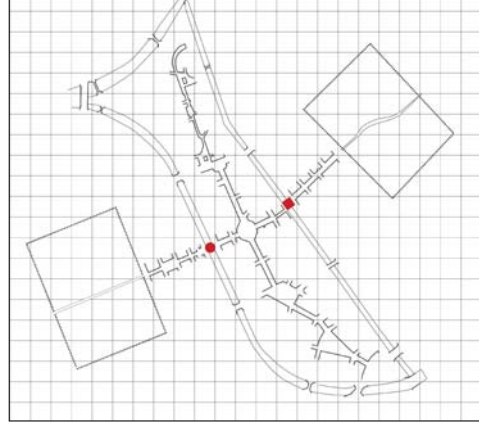
Sequence of spaces. The existing east-west direction is complemented with a route in north-south direction, connecting Transvaal with two parks.
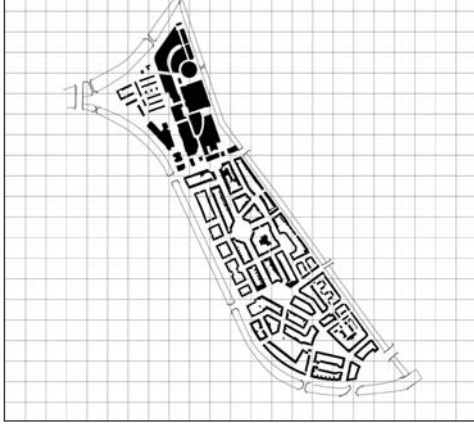

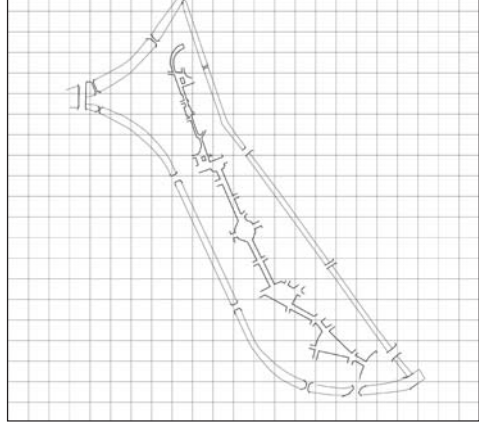Photo of the site for a proposed intervention. Facing the railway embankment.

Bird's eye view of the focus area. Both sites for the proposed interventions are marked. The figure of Transvaal and the two parks are cleary recognizable.


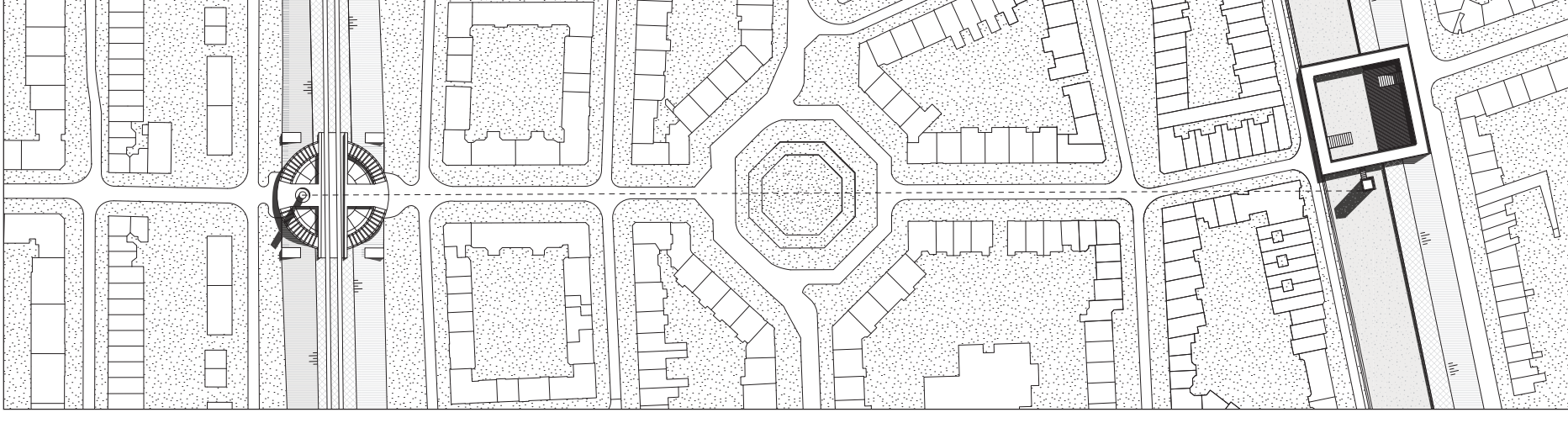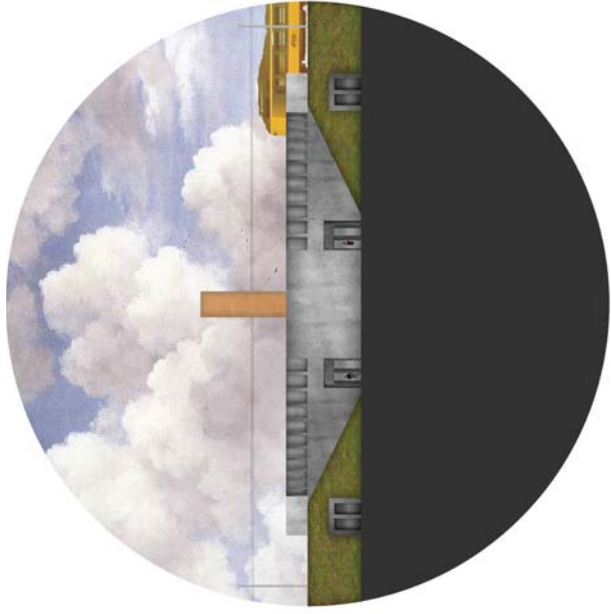Photo of the site for a proposed intervention. Taken from the dike of the ring-canal, looking over the water.

Public Frames positioned within the urban context.

Public Frames, Amsterdam
A dialectic unity

Side facade

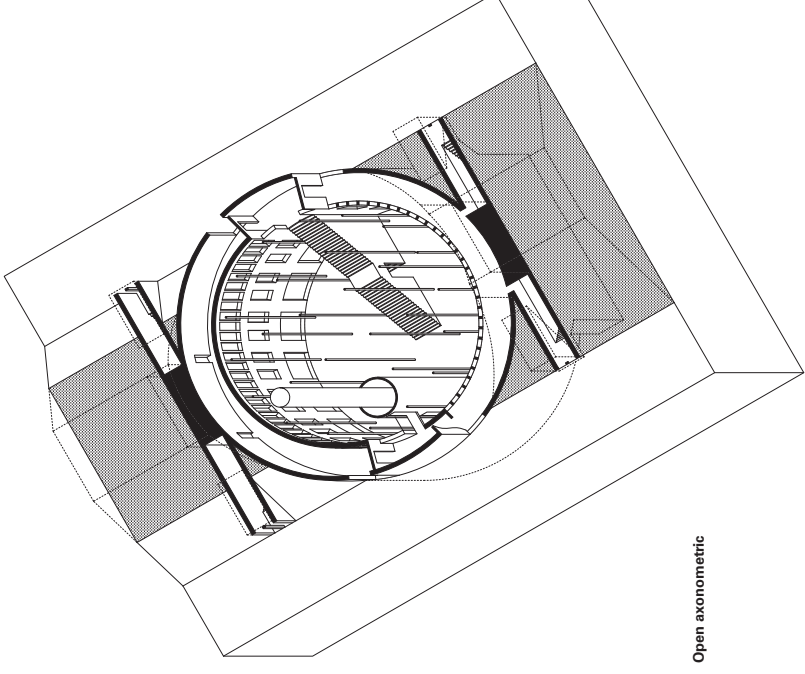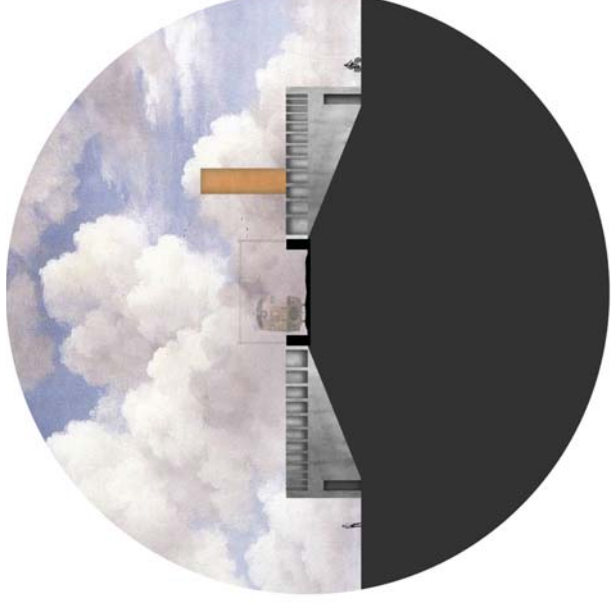**Open axonometric**

Axonometric

Front facade

A building within the railway embankment.
Circular as a tube, though not placed horizontal like a tunnel,
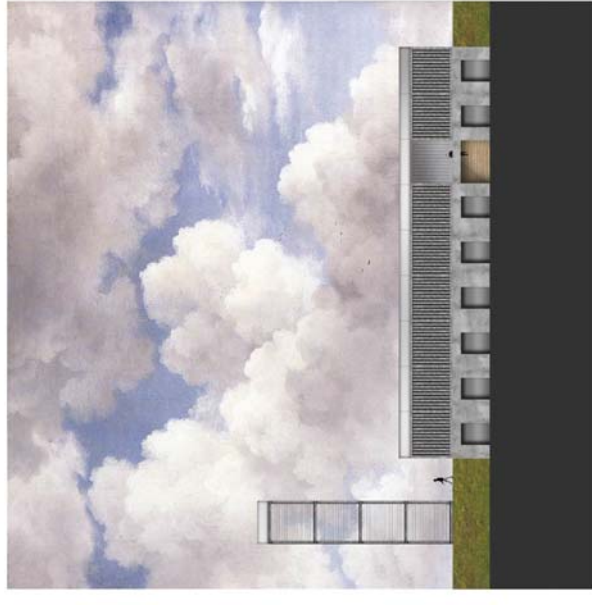but vertical - framing a space for a purpose.
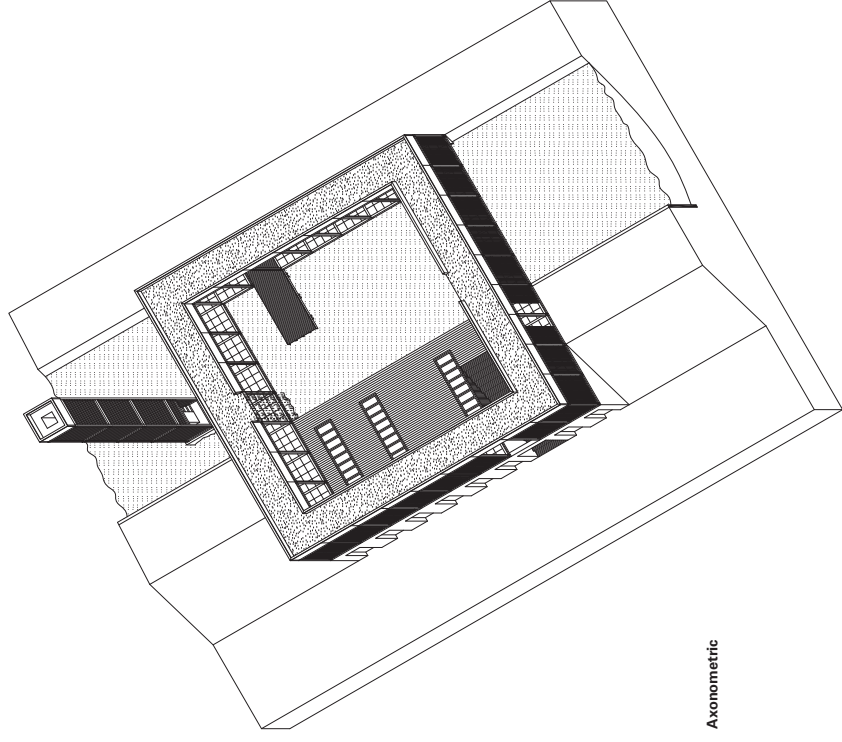Perhaps a public library.

Side facade

Worm's eye axonometric
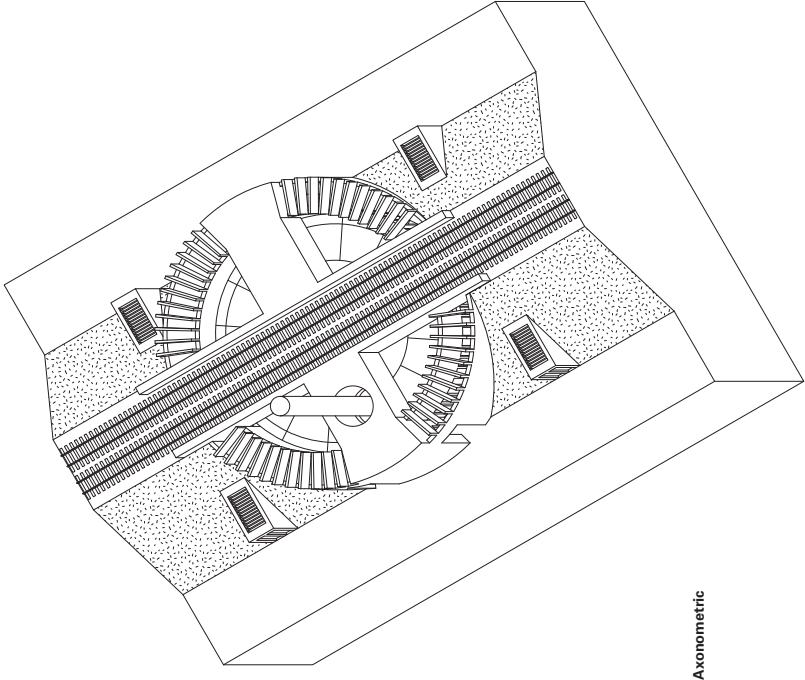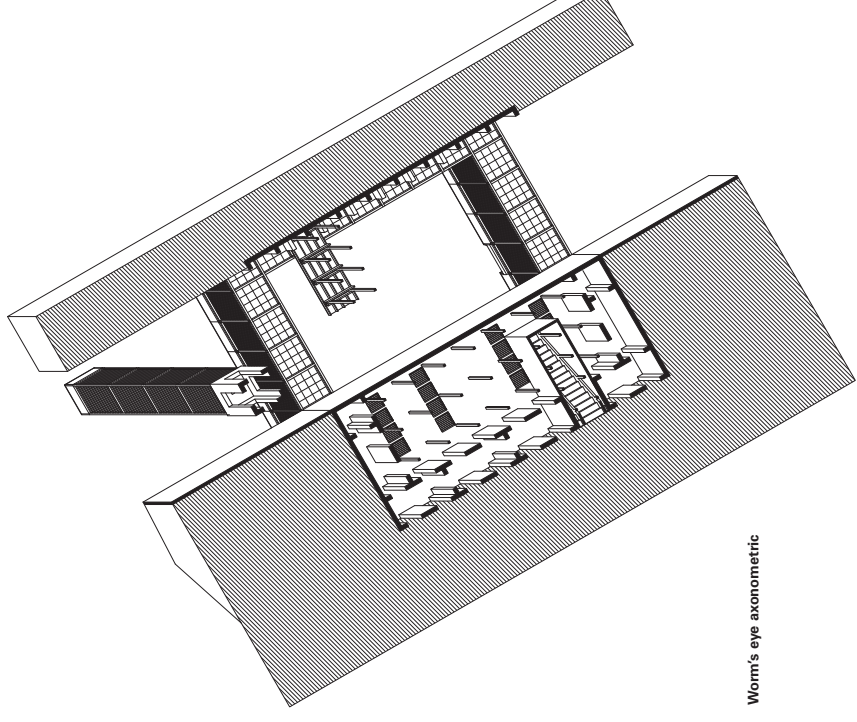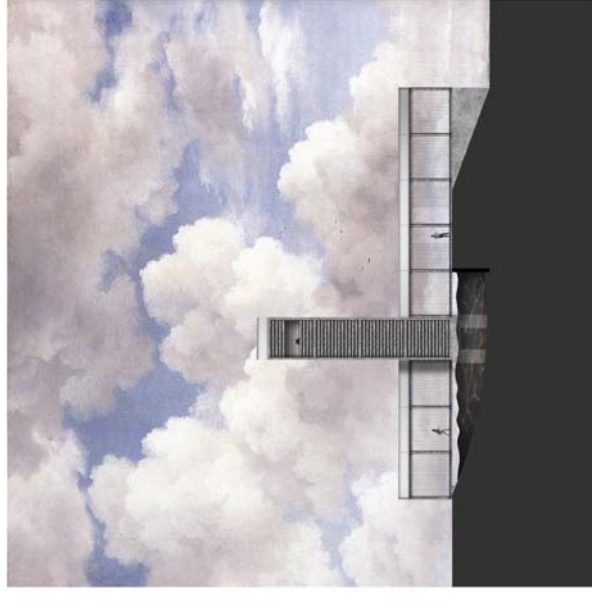

Axonometric

Front facade

A building over the ring-cannel.
A sqaure framing land and water in one space. In fact,
two bridges which span the cannal and a collection of
spaces within the dike, to house programme.
Perhaps a community center.