

**P4 Reflection**

AMS Mid-City Studio  
**Complex Projects**  
Delft University of Technology

Dermot Martin Horgan  
4619676

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Tutor: ir. Steven Steenbruggen





Minervalaan (site)

## Project Description

The central goal of the project was, initially, to understand the existing role of DATA within our current society, how we use data, how we store data, what we know or do not understand about this highly prominent resource.

With this understanding gained in the initial research period it was then possible to attempt to consider how this extremely prominent aspect of our 21st century lives might be used, housed and better understood in the future, considering how one might integrate something considered to be so far removed from the architectural realm into an architecture for Amsterdam 2050.

Polemic against the existing data trends:

The culmination of this research and architectural consideration manifested in two major moves,

one societal and one architectural. Socially I predict and move against mass data storage to a decentralised and highly, socially, integrated system of data storage, access and governance.

Architecturally; I predict this decentralisation to manifest in the creation of a series of spaces from the more practical spaces of the Bank of Data, University space and Data Library to the more symbolic space of the Data temple. These spaces together could be considered to be the future element of our local municipal architecture.



Minervaplein (adjacent site)

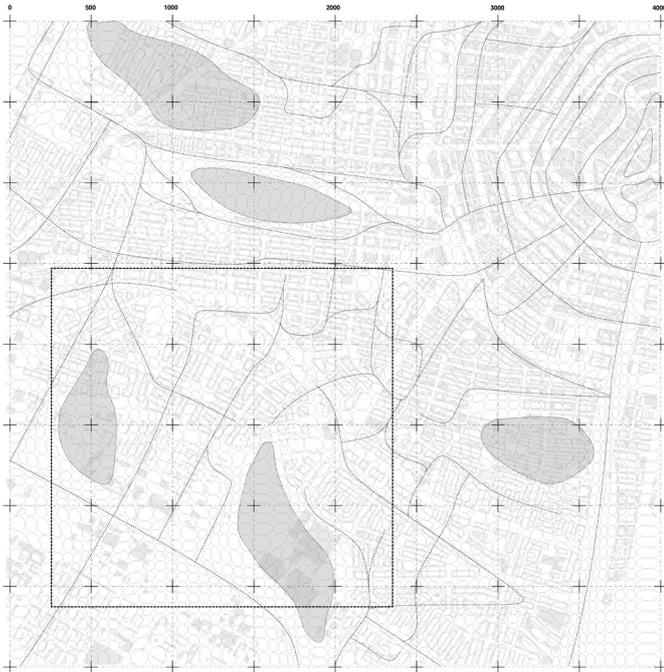
## **DATA** Municipality

The architecture of data acts to facilitate the storage, research and use of public and private data, foreseeing a future in which data concerning the public domain is entirely accessible and never owned or sold by any one person or company. The data bank acts to create a secure space for all personal data transactions while the data library ensures that all public data is entirely accessible to the public.

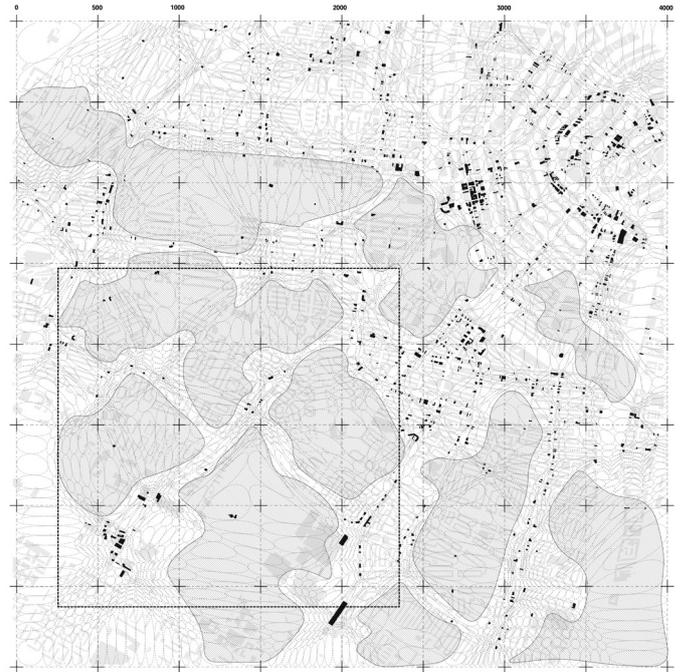
It was important that an architecture for this new data network found its place naturally within the highly defined site of Amsterdam's Oud-Zuid area.

In order for this to occur a grid was formed directly relating to the existing contextual conditions and from this a series of architectural relations can be found within the design that are

directly informed through relations to such a strict existing and transitional context.



4g Data networks mapped



Restaurants mapped

## Research + Design

### Initial research:

My fascination with the idea of Data sprung from an initial interest in the act of mapping the city of Amsterdam not with existing or traditional mapping methods but rather through exploiting the vast quantities of Data available to everyone (open source) online. Lectures through the integrated seminar City of Innovations provided a great source of information on just how much data there is available to the general public about their city of Amsterdam.

The availability of data and its ability to translate to usable and in my case mappable information informed an initial fascination in how we might use data in the future not just for our daily activities but also its relation to architecture.

### Chair method:

The chair of complex projects, working in a primarily typologically or inter-comparable methodology, sets out a series of initial research routes looking at hard, soft, typological and material data as a guiding theme for personal research. Within the soft data research period my fascination with the topic of Data really began (for me) to form real tangible architectural questions.

### Realisations:

The realisation of just how little we as a society know about the storage of our information was particularly important to the formation of a research question. Even as a highly educated society we have both very little information and access to information to the particulars of our data, particularly the questions of:

- What Data of ours is stored?
- How safe is our information?
- Where is our information stored?
- How is our information used?
- How can we access this information?
- What are the alternatives to mass data storage?

### Formation of Research Question:

The formation of these questions, based entirely on information researched, or mostly the lack of information available about this topic informed a series of questions about how we might act now in order to tackle the existing ignorance on the topic of data. Alternatively we will actively participate to a societal realisation that we are both controlled and entirely dependant on private corporations to store and actively secure all our information. Something that should worry us as the current lack of information and governance on the topic of Data storage means that our information is never really 'our' Data but rather a resource that is highly exploitable by private corporations for lucrative gain.

### Research Question:

'Through the restructuring of our existing data network, rejecting the current trajectory of mass data storage, how might we express this new shift in control from private to public through an architecture for the Amsterdam of 2050'



'Controlled by the cloud' P1 collage.

## Project topic + Studio topic

The chair of Complex projects looks at how cities might develop in the future, the urban and societal alterations that may occur and how we might predict or anticipate future architectural typologies that may arise from this development.

*The ambition of the strategic project of studio and seminar is to develop new urban scenarios and investigate architectural typologies for the City of Amsterdam in a time horizon 2050. (initial brief CP)*

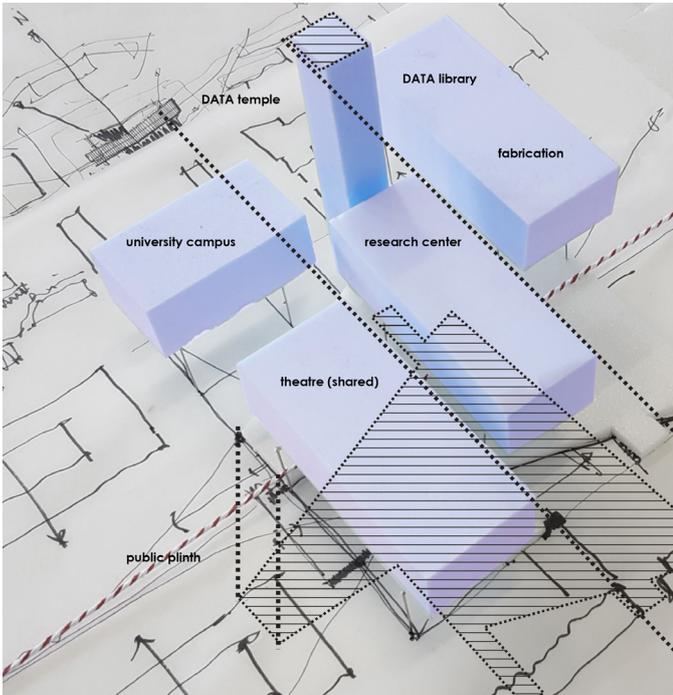
Within these parameters of 2050, the topic of Data as a driving force for this development is considered by the chair to be an important aspect. With this in mind, I choose to consider not just how might the content of the data might effect architecture but the topic of the Data itself as a driving force for a future typological investigation.

*The leading cities will be investigated and compared with Amsterdam aiming to access the urban qualities and understanding the effect of data-driven city developments. Furthermore studio groups will develop different urban scenarios based on assumptions of the implications of technology development (initial brief CP)*

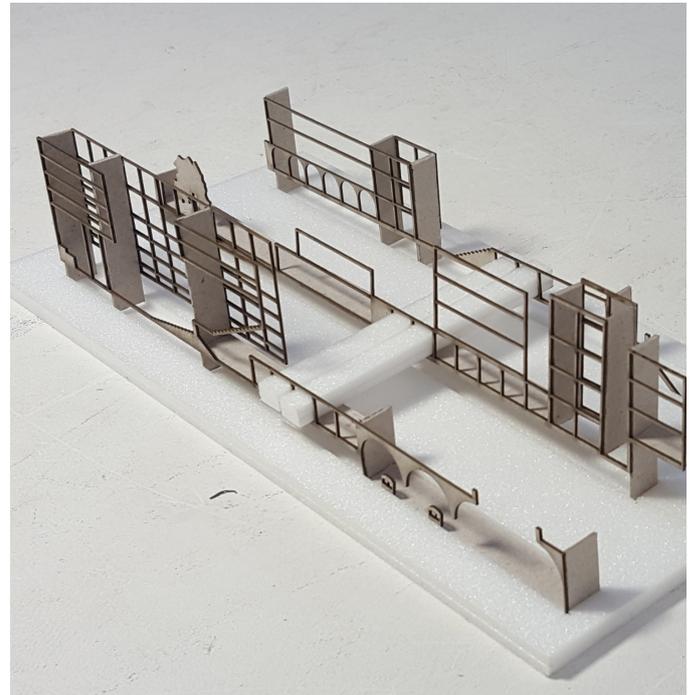
If the aim of the studio is to consider the possibility of future typologies and this approach is substantiated through the inclusion of a 'typology' research phase in the first semester, then I would consider the aims of my project and the aims of the studio to have aligned in the examination of a future typology for a re-

organised data network.

This phase of typological research allowed for the consideration of existing typologies in the most broad sense of the word. I considered not typology as a specific but rather as a theme or guiding concept. As I see the decentralisation of Data as a democratic shift and the prevision of power back to society or people of Amsterdam, I considered the effect of this shift to be in line with the aims of the Chair to 'investigate architectural typologies for the City of Amsterdam in a time horizon 2050.'



Initial Concept models



Developed concept models

## Research Approach + Methodical line of Inquiry

Personally; the realisation of the importance qualitative research plays in the production of my own architectural research placed emphasis on my focus towards the visual praxis of research. How we choose our sources, how we define what is relevant or irrelevant, from experience, in the TU Delft can in many cases be prescribed to us through the chair we choose to take, in the case of complex projects chair this takes the form of the comparative or typological methodology.

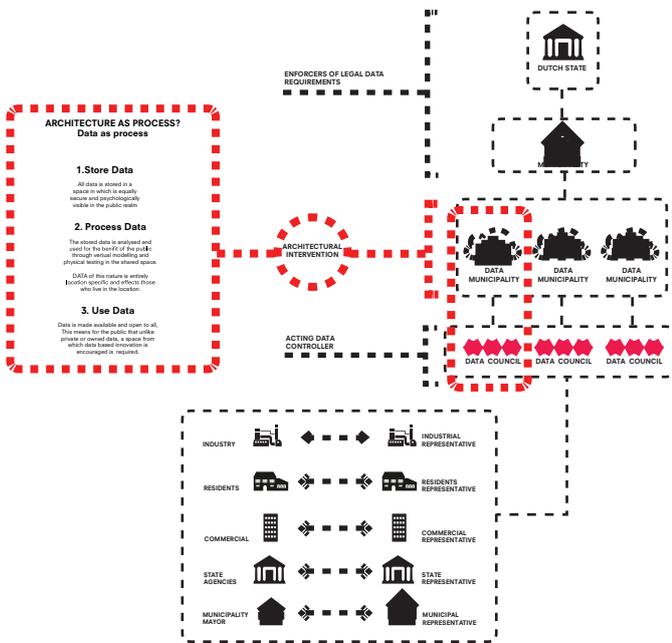
With the chair's typological and comparative approach in mind, it was important for me to consider my own method of approaching a project which is primarily through an active engagement with site and context and the physical or visual acts of photography (recording), sketching and making (both model and collage). The act of making as a method enabled a scientific process of trial and error to occur in the guiding of the project from concept stage to completed design.

For me, publicness and the societal dimension of our works as architects drove the concept of re-organising our Data network to a more democratic and transparent framework, the translation of this into an architecture required a series of test models, as I found within the context of the Berlage plan three major driving elements; the block, the square and the axis. I then explored the context in method of identifying the weakest point or the point in which these underlying elements are least identifiable. In my case this came about at the intersection of the Minervaplein and the

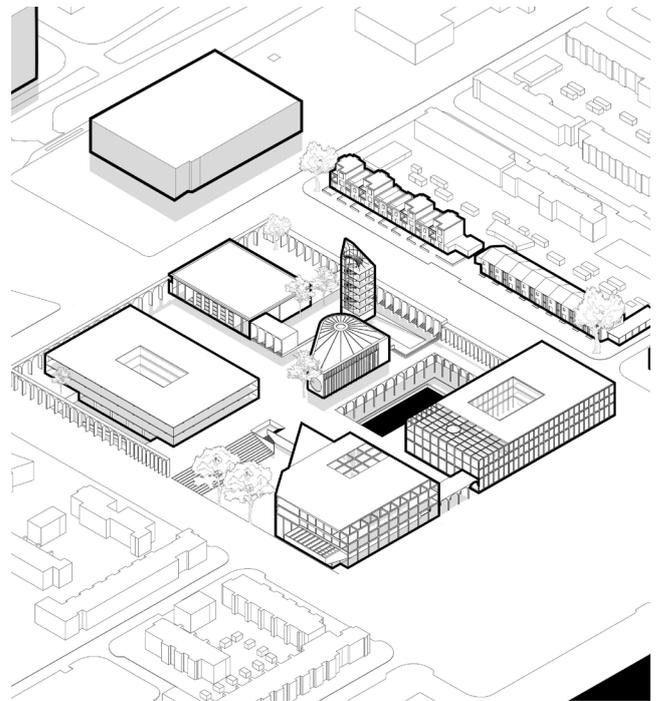
Zuidas at an area called the Minervalaan. It was clear that this transitional site was in no way 'completed' as it was planned to be, in fact the site creates a border condition that seems less likely to connect the two very dissonant locations but rather to act to strengthen the disconnect.

The site acts to work against the initial ideologies of a connective axis of the Berlage plan. Thus the creation of a series of models addressing the connective possibilities of the site were created. The Data municipality has the ability to integrate within the context of both worlds of the adjacent residential and commercial contexts, acting as much as a new local resource, a global data point and a point of a new national data grid. This means that the site not only acts physically to connect and naturally transition between two seemingly dissonant contexts, in doing so breaking down an existing series of borders, but also to created a connection back to central Amsterdam and the wider if not global context in 2050.

My personal method of exploration through model and sketch informed the implementation of a new axis entirely devoted to connective force of Data. This physical demarcation informs a carving to occur across the site both physically and metaphorically aligning elements of the site back to the initial starting point of the city. It could be assumed all Data municipalities within the city would have such a line in the physical connection of site and origin point.



Rearranged Data structure/ governance



Initial design consideration

## Graduation Project + Social context.

The challenge and opportunity of the topic of Data as a thesis project is that something

Fortunately the project has ,mostly by chance, occurred at a time in which major shifts are constantly happening to tackle the issue of Data storage and primarily security in relation to data. Society is becoming aware that their information is not in fact 'their' information but rather something they agree on a daily basis to give away the right to and in turn for others to benefit financially from something that they have very little access to, say, control over.

Data and the storage of data is enormously topical in the world today particularly as the European laws (General data protection regulation (gdpr)) dictate that by 2018 all state information must be stored as a soft copy and all hard-copy data destroyed. The fact that all our information must be stored as a digital entity and no longer a tangible resource places all our information into data centers that we the public know very little about both physically and from a security point of view. We are at the mercy of the state to ensure the security of our information.

In the P2 stage of the research I made a comparative timeline of where data might lead if we do not considered a re-structuring of it now, suggesting that large companies such as Cambridge Analytica can continue to buy or 'mine' our data from storage companies such as google as a method of selling advertising and user specific marketing. Unexpectedly

in March of this year the story of how Cambridge Analytica used private facebook information to market in the Trump presidential campaign. The backlash from this information being made public is a testament to two things; how little we know about our information and just what a large reaction we as a society have when we do find out.

For my thesis project: A re-consideration of this data structure and the physical space as a public/shared/private space at the local scale of the municipality would form the democratic action of 'taking back' control over ones personal data and thus strengthen our status as a democratic state.

The action of making available all public data or data relevant to the public realm from a societal aspect; could inform an entirely new innovative movement as people have the knowledge and access to vast amounts of information. No longer could industry quash innovation for profitable gain but rather the act of innovation and commercial transparency could strengthen our entire democratic society whilst simultaneously informing a new and transparent immaterial data landscape.

It is more important than ever that our profession acts to be part of the movement to deal with Data and not to assume its role in our daily lives, society and profession.



Oud Zuid, Amsterdam.

## Ethics + Relevance

Thus and in conclusion my thesis acts in this way to react and 'home' the series of ever changing conditions of Data. The research gathered has all connected to form a narrative that appears to miss the societal aspect or public consideration of Data storage. The project attempts to answer the initial questions of

How we store data in the future,  
How we use data in the future,  
Who has access to data in the future and  
What role it plays in our lives.

Through speculating on how we might make all public data open source and using an architecture to house this process of storage, research and dissemination I truly believe that this project acts in an ethical manor to consider the public as the most important user and creator of Data; giving back control in a democratic manor to those who inform the creation of Data.

The Architecture of this project also acts in this manor, materially the project attempts to connect and sit within a very 'defined' or almost complete or existing context.

Proportion: The Data Municipality acts to connect two differing scales, that of the residential and commercial border condition, through a consideration of both existing grid configurations. The spaces of the project vary in scale from modest to tall dependent on the function and location on the site. Acting to visually and metaphorically connect tho dissonant contexts.

Materially: the consideration for material was incredibly

important and I believe that this may be the key consideration for many future projects in a context that could be considered to be 'bordering' two seemingly dissonant conditions. I believe the consideration for a transitional material connection allows for a seamless connect between the Minervaplein and Zuidas. The project is designed technically in a way that the brick, concrete and glass buildings are acting in a way to present their true material to the occupant, where materials appear it can be certain that it is acting structurally and in an honest manor. Through researching the archive of the local context it became apparent that for economic reasons the buildings of the context were constructed in steel but clad in brick while it was never the intension for this to occur in the initial plan.

As the primary consideration of the Data Municipality is to inform a contextually linked democratic space it is important that it presents itself in an architecturally honest manor also.

I believe the relevance of such a project to our society, to architectural practice and the academic realm could be very important in the creation of an active dialogue on the direction in which our future takes in relation to the storage and use of our Data. The state has began to realise the important of this human connection to information in the introduction of regulations such as the GDPR but I believe projects such as the Data Municipality that can speculate on a far more drastic and democratic approach to Data storage and use are more important now than ever, before we commit to a particular route from which we cannot return.