Research plan

Juxtaposition of notions Adaptable housing through circular transformation

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TU Delft 2020 12 18 "By the end of the 1960s, most urban planners and civil engineers realised that the future was difficult to predict. This led to a less biased standpoint regarding the "make-ability" of society in the sense of social engineering, and a greater doubt about the guiding role of urban planning" (Martien de Vletter, 43p.)

1.Introduction

1.1 Choice of the theme

The site of Bijlmerplein was chosen for research as an example of created identity through different notions. In the context 70s and 80s heritage, Bijlmerplein is significant example of ideological interplay between different ideas and ways of design of built environment in one city block. Bijlmerplein was designed as a remediation and a response to failed modernist utopia -"City of the future" of Bijlmer together with other clusters of Heesterveld, Hoptille and Haardstee. The final goal intended to create new identity for an area which would be relevant to Amsterdam city and could give sense of belonging to society in contrast of alienated and futuristic Bijlmer urban setting. Bijlmerplein boundaries had been shaped by infrastructure (elevated streets, parking lots and separated traffic) which is consequence of CIAM ideas. The area has anthroposophical concepts which are embedded into NMB head office in Amsterdam by Alberts & Van Huut and cluster 5 which was also designed by A. Alberts. Cluster 4 was designed by Van den BroekBakema architects who were looking for national Dutch identity in the architecture and developed the "total" space concept inspired by idea of neo-plasticism (Evelien van Es, 59p). Also, the marks of 1970-1980 era in rediscovery of architecture and city are significant and visible in street layout, composition and shape of buildings, façade aesthetics (1.) Also, one of the strongest drivers of the area was commercial shopping function, which soon became hot spot of the entire Bijlmer (Frank Wassenberg, 64p). This combination gives collage picture of the neighborhood and it is opposite for Bijlmer homogeneous urban setting.

1.2 Hypothesis

In the context of Bijlmermeer, the city block of Bijlmerplein showed its resilience and adaptation for public needs differently from Hoptille and Heesterveld which were overwhelmed by negative social nature of Bijlmer and failed to improve the area (Pi de Bruijn group interview). The hypothesis argues that resilience of the Bijlmerplein block was achieved by diversity in functions, use, spatial qualities, and architectural design notions. This was antipode for uniform, identical outside spaces, identical apartments, and anonymity of Bijlmer.

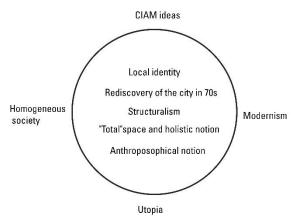


Figure 1. Bijlmerplein as a collage picture shaped by notions

1.3 Definition of utopia

Bijllmer – "The city of the future" was based CIAM ideas for better life, for better society. It was a utopia which failed. A utopia – an imaginary place for ideal community which has perfect qualities for living (Oxford dictionary). The term was in 1516 introduced by Sir Thomas in his book "Utopia". The comparison of social and economic conditions between imaginary island and Europe was envisioned. The perfect state was called "Utopia" referring to Greek words "ou" which means "no" and "topos" which means "place". Since then, the notion of "social dreaming" (Danilo Palazzo 2012, 12p.) was provided to western society. A century after, in 1700 Europe was divided in many kingdoms, states, empires. The war, conflicts between nations and religions were common and societies were in desire for "better place" (Danilo Palazzo 2012, 34p.). In the context of imperial expansion of new colonies, the continent of America was envisioned as a place of a better world with vast spaces for new communities and societies." Utopia" term is often used to envision equalities in social justice, health of society, ideal economics, and government. The structure of utopia is often based on ideology (Giroux 2003, 45p.) However, the society is not homogeneous and different groups within have conflicting desires and visions of perfect life, so nature of utopia always contradicts with its main idea for creating ideal world for everyone (Lyman Tower Sargent). Bijlmer is interesting example of failed utopia where the ideology was the main driver while society desires had minimal impact. H-buurt and especially Bijlmerplein shows opposite position and reaction to this failure where traditional city planning concepts were introduced and lead to Popper's theory, that tradition and traditional thinking is indispensable and relates to structural social environment (Colin Rowe 2003, 21p.). Collage city also talks about complexity of ideas and gives a notion of "collage city" and argues that it is a solution for modern urban planning. The author of the book also brings the issue of utopian thinking which abandons traditional thinking which is opposing to it. This gives arguments, that Bijlmerplein has features of complexity which helped to resist and overcome inevitable changes

2.Problem statement

"Van den Broek juxtaposed the modernist architects' search for 'pure forms to fulfil pure needs' with the doctrine-based and hermetic aesthetics and morphology of the traditionalists." (*Evelien van Es, 18p.*)

Problem statement is addressed in three sub statements which are related to each other showing its coexistence.

2.1 Involvement of society

Bijlmer was an outcome of industrialization and institutionalization of mass housing sector which became automated process when architect's role was weakened, and public engagement neglected (Frank Wassenberg, 45p). The outcome was alienated neighbourhoods without collective identity and totally unfamiliar living environment for Dutch society. It led to vacancy of the area, homogeneous neighbourhoods, abandoned public spaces, crimes, unemployment, segregation of communities. Frank Wassenberg (group interview) also mentioned that in H-buurt

neighbourhood was a new shift to community engagement in design process. Designing Hoptille local community was involved and the result was single family houses which are more desirable today. What is more, Bijlmer is excellent example of split between both poles: public and "makers"; and modernists and traditionalist. About these conflicts Robert Woods Kennedy writes in his book "The House and The Art of its Design", where architects are described as peculiar subjects for public and "Conflicts over what should be matter of strict professional standards are fought out within profession and public rather than in between them, as is generally true". Bijlmer was erected by belief of form-orientated planning which led to vast spaces to provide air, light, and open space whereas in Bijlmerplein more traditional city planning concepts were embedded. Despite the good intentions, it was lacking understanding of residents' desires, habits, way of living (Pi de Bruijn, group interview). This theme of collision between "makers" and "users" was also addressed by Aldo van Eyck in his Otterlo circles. Aldo van Eyck was strong antagonist of modernism movement and proposed more traditional city planning concepts. He highlighted a clash between residents and builders when one country was addressing notions of classical harmony, individual concept, tradition, whereas other country (residents) was keen on notions of human nature, individuality, and collectiveness (Harm Lammers, 23p). This brings to conclusion, that involvement of communities and residents are crucial to create resilient living environment and relevant today in the context of densification of existing residential areas such as Bijlmerplein

2.2 Identity

As mentioned before, Bijlmerplein was designed as a district with "identity link" to Amsterdam. This is a contrast and another antipode for unfamiliar and alienated spaces of Bijlmer. Narrow streets, public squares, elevated green decks, holistic atmosphere, variation in façade aesthetics, diversity in functions and communities, intimate spaces provided more familiar atmosphere of Amsterdam. It was done not intentionally, but rather unconsciously as land parcels were given to different developers and architects studios which implemented their visions in build environment (Pi de Bruijn, group interview). What is more, in the aesthetics of the buildings it is noticeable that post-modernism ideas were discovered and implemented. However, the identity of the area could change because of vacancy of shopping function and new developments in neighbourhood, which leads to the issue, how to densify the area by preserving created unique identity through different notions.

2.3 Densification

Densification process is already visible in Bijlmerplein, where new residential housing has been planned on north east side of the block and "Sandcastle" transformation to residential housing had been planned. However, addressing an urgent need of affordable housing in the Netherlands, Bijlmerplein has huge potential. 1 M homes initiative could sound as another utopia when the goal is to provide 1 million affordable and sustainable homes before 2030. I the context of failed utopias and mass housing in 1960s, densification is relevant topic to address and explore, where by densifying areas not only the need of housing could be achieved. Densification could address issues such as public involvement and local identity described above.

3.Relevance

H-buurt (H neighbourhood) is a small part of Bijlmermeer utopian city plan. Bijlmerplein, Hoptille and Heestervel were designed as neighbourhoods with desire to improve Bijlmermeer and implement more traditional way of living and introduce traditional city planning concepts (Pi de Bruijn group interview). These three neighbourhoods had to be an antipode for existing Bijlmer. Colin Rowe (Collage city 2003, 30p.) shows this modern and traditional city collision's relevance by arguing that one is alternative to another. That the inverse picture of modern city plan represents traditional city plan and vice versa. However, the author leads to the idea: instead of utopian thinking of a single notion, to multivalent — collage like concept of city with different visions in synthesis. Pi de Bruijn also mentioned in group interview, that for Bijlmerplein area an architect Aldo van Eyck was invited to design few blocks of housing, but he refused as he was strong antagonist of modernism and didn't want to have his name be related to Bijlmer at all. This fact shows, the strong tension between two ideologies at that time. Although H-buurt had opposite features and ideas to Bijlmer embedded into design, it was overwhelmed and neglected during the years. It became hot spot of segregation, unemployment, degeneration, residents with low status and low income, criminality, and vacancy.

However, H-buurt area is seen with many possibilities to extend because of good link with Amsterdam centre and growing Amstel III business area. Also, possibility of redevelopment is seen, as the desire of housing is rising in Amsterdam. Although demand of housing is getting more intense, the future is not certain as world is facing with challenges such as pandemic, climate change, refugee crises. Affordable and sustainable, climate neutral housing, solving mentioned challenges sounds like another utopia. What is more, an architecture from 70s and 80s is not seen as coherent style and evaluability of this period of architecture is discussable in these neighbourhoods (Martien de Vletter, 181p). This research tries to find values of Bijlmerplein neighbourhood and through revitalization and re-use strengthen these values. Despite the fact of encoded failure in the utopian thinking - one solution for all problems, the desire of better world is still relevant and new-old contemporary ideas are being envisioned such as "green city", "affordable housing for everyone", "mycelium city", "cradle to cradle", "flexible housing" etc. While the new concepts are created, it is important to understand why some ideas failed and others survived through the years and changes of society.

4. Contribution to knowledge

The research addresses the issues of housing stock from 1980s, which has little exploration and is not seen as valuable from cultural and historical significance by society. However, it has huge potential to be redeveloped for present and future residents' needs as it has little restrictions from heritage preservation perspective. However, Bijlmerplein in particular is seen as outstanding example of interplay of different notions and better understanding and knowledge is needed. The research aims to find create a strategy or tool to enhance existing valuable features of Bijlmerplein through densifying it using "Open building" principles.

5. Annotated bibliography

Annotated bibliography tries to support the ideas of superimposition of notions in Bijlmerplein and its impact for resilience

Martien de Vletter

The Critical Seventies, Architecture and Urban Planning in the Netherlands

The book talks about architecture and urban planning design concepts in the period of 1970-1980 in the Netherlands. The author considers topics such as "new Dutch" immigrants, public involvement, degradation of cities, variation, and experimentation in design. Several themes, relevant to the project were argued such as designing shift toward elevation of the building. It is highlighted that horizontal articulation was crucial. Also, the book gives arguments how human scale importance was brought back into 70-80s residential developments. It is extremely relevant in the context of Bijlmer "micro-cosmic" spaces. Finally, the author argues, that in 70s architects tried to implement traditional city concepts and "urbanity" reconsidering Paris and Rome cities planning concepts. The book gave useful examples of residential housing such as Hoptille, Marktgracht in Almere Haven centre, De Werven Housing Project also in Almere Haven. The case of Marktgracht is interesting comparison to Bijlmerplein as it was consciously designed following Amsterdam layout concepts. Mix-use of residential and commercial functions are combined which could be compared "Amsterdam poort" urban composition. The book gave understanding of the period of context and ideological significance where "social engineering" was one of the main drivers.

Colin Rowe and Fred Koetter
Collage city

The book talks about transformation of the cities after WWII in the context of economic depression. The main topics are social diversity, vitality which brought many issues for western world. This book is relevant as it argues on urban utopia and notion of modern architecture. The book not only argue how architectural design relates with society but also practical examples and were given to achieve resilience of the city. As it was mentioned in the beginning, Bijlmerplein is seen as a city block shaped by different notions. Collage city also talks about complexity of ideas and gives a notion of "collage city" and argues that it is a solution for modern urban planning. The author of the book also brings the issue of utopian thinking which abandons traditional thinking which is opposing to it. This is extremely relevant in Bijlmerplein which was designed using traditional planning concepts and Amsterdam layout principles were implemented in the contrast to Bijlmer. Finally, the book refers to a evolution of society through social structure which co-exists between diverse groups of people. As the main values, the author highlights openness and freedom of communities living together.

Evelien van Es

Van den Broek and Bakema, Vigorous protagonists of a functionalist architecture at the TH Delft

This booklet talks about J.B. Bakema and J.H. van den Broek teaching programs and their perception and understanding of architecture. It gives arguments of their ideology in the context of Dutch functionalism and modernism movement. Also, the paper argues, that these two personalities were strong protagonists of ideals, pragmatism, and philosophy. The booklet shows their professional activity in time frame of post-war reconstruction under the notion of manufactured mass housing and belief of pre-war architectural tradition. This paper is significant in the context of Bijlmerplein, where cluster 4 was designed by Broekbakema architects and that juxtaposition between modernism and post-modernism is noticeable in the composition of building blocks and front-back facades articulation. In the context of notions, Bakema had a holistic view of the architectural world. He argued that architecture has always lead to primary concepts of "home", "church", "workplace", "school". What is more, Bakema was inspired by neo-plastic concept of "De Stijl" and it was his primary inspiration for all embracing "total" space. This text helps to understand the aesthetic and spatial language of the cluster 4 block, which is outstanding with its exposed tectonic aesthetic from other blocks in Bijlmerplein.

N..John Habraken Supports

After WII the Netherlands experienced housing shortage and as a quick and efficient solution mass housing was introduced as a permanent solution. In this book Habraken gives his arguments and critical perspective of this repetitive, alienated, homogenous architectural strategy to full fill housing shortage. As a contradiction to that Habraken proposes the notion of "house as a process". He argues that the house and a dweller has natural relation which is constantly changing, adapting in case of dweller needs, desires, life style. This book shows the importance of architecture adaptability for unknown future. Also, in the context of Bijlmer, there mass housing is remained and Bijlmerplein, where residential block experience vacancy of pandemic situation, the book give understanding of "open design" and the nature of systems which could be changed or transformed independently. This idea leads toward to more resilient city for unpredictable future.

Frank Wassenberg

Large housing estates: ideas, rise, fall and recovery

This PhD study addresses several issues at Bijlmer such as mass housing, housing estates activities and relation with residents, the origin of development and conflict between future housing and people's needs of today. The PhD study tries to find out, why mass housing estates become so problematic through the time and what can be done and what has been done to improve existing condition. This paper gives understanding, that Bijlmer is the consequence of ideological driver, technological developments, housing shortage, demographic increase and social-cultural diversity and development. What is more, Frank Wassenberg gives reasons of outstanding problems. First of all the lack of residents was the main issue. Modernistic idea of urban plan neighbourhood failed to create desire for people to live in Bijlmer. People were

unfamiliar with new modernistic living trends imposed in Bijlmer. Secondly Bijlmer was lacking of quality such as safety, ownership, public, semi-public spaces. As an example, anti-Bijlmer project of Hoptille was described as another failure of social issues and vacancy of dwellings. What is more, Frank Wassenberg states, that community involvement should be consider as a tool to reach better understanding of dwellers and their needs. Finally, this PhDstudy shows, that Bijlmerplein was one of solutions solving homogeneous nature of Bijlmer and its isolation from other functions. Commercial function was one of the main drivers of converting the area to hot spot. It gave more diversity in functionality of the block and more independence having living, Woking and shopping facilities.

Egbert Koster

NMB head office in Amsterdam by Alberts & Van Huut

The article introduces "Sandcastle" as an outstanding example of "organic architecture". The notion of anthroposophical idea is described as an idea of not imitating nature but rather giving more meaning to building spaces rather then purely functional. The author argues about relation between architecture in form and shape could be more inviting, softer, and smooth. This helps to bring harmony between a building and user. Interestingly, the author gives a description how Alberts understanding of functionality conflicts with principles of Steiner. For Albert functionality is not maximum light, air, and space. It is not a maximum efficiency and maximum use of space. For him it is more about addressing natural needs of man in regards of living and working. However, all designed decisions are based on functional and pragmatic goals such as inner street, atrium space, narrow core providing daylight for workers, geometrical shape of the building which helps to outstand the wind loads. In Bijlmerplein NMB head office stands as remarkable landmark providing various sequences of spaces on ground level. Regarding users and residents opinion, "Sandcastle" was highly appreciated.

Kevin Lynch
The image of the city

The image of the city is a book of five-year observation of Boston, Jersey and Los Angeles which summarise research into mental maps. He argues that mental map in people's understanding of the city is embedded in five general features: paths, edges, nodes, landmarks, districts. In the context of Bijlmerplein, this book is perfect example helping to understand the spatial nature of the area and its qualities. The book address challenges such as city vividity, imageability and how built form affects people who live there. It is extremely relevant to Bijlmer area, where mass housing (based of modernist ideology) was deeply believed, that built form can shape the society.

The book argues the issues related to public realm and open public spaces. It addresses the desires of public and gives guiding principles. The book describes and gives more emphasis for spaces which are formed by buildings. It is claimed that this dimension is crucial for social interaction and human behaviour. In the context of Bijlmer, public realm was not designed or finished because of the rush and lack of finances. The consequences are evident even today. This book helps to understand the importance of gradual transformations aiming sustainable and resilient city. Also, Jan Gehl talks about involvement of society and flexibility in design process while giving time for adjusting lifestyle of society. This could be also relevant as Bijlmerplein is facing inevitable changes of densification and vacancy of shopping function.

6.The outline of the research theme

6.1 The context of ideological clash between modernists and traditionalists is interpretated as antipodes and leads to the main thesis narrative. The area of Bijlmerplein is seen as a result of this ideological interplay. Bijlmerplein was designed as antipode to Bijlmer area and separated two atmospheres of neighbourhoods. It is visible in spatial qualities (back and front side of residential blocks), volume of the building (mid-rise buildings), detailing (brick and concrete materials). What is more, Bijlmerplein is also seen as puzzle as different parcels were designed by different architects with their own vision: Atelier Pro (traditional concept of urbanity), Broekbakema (holistic vision), Ton Alberts and Max van Huut (organic architecture). This superimposition (collage overlay of notions) is a significant feature of Bijlmerplein.

Today Bijlmerplein area needs to be revitalized for uncertain future. The notion of antipode comes back and is re-used trying to improve the area. It can again be interpretated as interplay between 80s remediation architecture and new vision for flexible housing which is another utopia introduced by N. John Habraken. It could be interpretated as interplay between "supports" and "infills"- between permanent and flexible housing. "We should not forecast what will happen but try to make provisions for the unforeseen" (Habraken). *Juxtaposition* of notions is created. The aim is to explore and research by design "Open building" concepts in the context of existing notions in Beijlmerplein. The goal is not to adapt this idea as final solution, but rather test and synthesize it with existing notions.

6.2 Research Question

Looking back to the past, "Utopian cities" were proposed and designed to create perfect society but many of them failed, became neglected and could not adapt to new realities. The tension between "professionals" and society also was obvious by creating new cities on the "blank page" without much consideration of true society needs. Antipodes — makers and users — another confrontation. H-buurt become consequence of two ideologies and could not adapt to new changes. Interplay between antipodes is obvious from detail to urban scale. For research question three themes are the base: involvement of public, created identity and densification.

How Bijlmerplein can be densified using "Open building" concept by creating harmony with existing notions (juxtaposition).

- What could be a set of solutions? Disassembling housing, portable housing, open plan buildings, collective living, portable houses, mobile houses, expandable home, divisible home.
- How existing clusters can be re-designed to achieve more flexibility in their structure, plan layout, maintenance, social coherence.
- How densification can enhance local identity?
- How Bijlmerplein identity which relates to Amsterdam city could be enhanced and strengthened?
- How multicultural atmosphere can be enhanced (flexible housing ideas letting residents to express themselves and their culture and lifestyle?). This could involve into closer relation between makers and users whereas using flexible housing ideas (changeable facades for example) users could create unique living environment.

7.Research methods

7.1 FaceBook groups and observation of comments of the pictures

From the pilot project process and results, research method of observation of FaceBook group posts was seen as having potential. There are several groups of Amsterdam Poort where people share images of local activities, events, and old pictures. People often tend to comment and express their appreciation of things they see in pictures. Especially it is important to understand relation between makers and users and pointing that some pictures posted in FB groups are made by Ton Alberts which shows how the designer depicted the space and users expression is delivered by commenting the photo. This method can help to understand what people value in their neighbourhood, especially in public spaces.

7.2 Pilot research of Almere Haven and its relevance for personal research

Bijlmerplein was created as a neighbourhood with strong intension to create collective link and identity to Amsterdam city and created sense of belonging for society (Pi de Bruijn from group interview). This desire also was relevant to Almere Haven, where urban plan followed Amsterdam city layout and template (Martien de Vletter,192p). In the context of "created identity" Almere haven pilot research tries to identify, what people value in their neighbourhoods using different methods. The results of pilot research will be used for comparison between Almere Haven and Bijlmerplein to find similarities and differences how local identity was created and what people value in their neighbourhood.

7.3 Almere-Haven Results

The pilot research in Almere Haven is used as an experiment, before diving into the research in the H-buurt. During this experiment, the goal is to test and adapt the research methods and to

extract the attributes and values from the opinions of residents. The pilot research consists of two approaches, a media one and an onsite one. Both methods explore residents' experiences, memories, opinions and perceptions, as well as opinions on social media. After this pilot research, the methods were discussed, and the best methods are used in the H_buurt research. Both approaches are further explained.

On site

The second approach was on site. This involved street interviews of different kinds and several site visits. In total four different methods were used for the interviews, open conversation, drawings, pictures, and questionnaire. Each method had its own goal and specifics.

Method A was used during the first site visit. The method is open and based on a conversation. Its goal was to gain a variety of information about the interviewees and their experiences, without leading them into specific directions. It was a suitable method to get a first impression of Almere-Haven. However, it also resulted in unusable data.

The pilot research of Almere Haven helped to understand how residents and users could be engaged asking directly and indirectly what they value and appreciate in their living environment.

7.4 Translation to H-buurt

In order to learn from the Almere-Haven research, the group reflected on all methods used.

For the media group, there were a few methods that worked quite well for gaining quantitative data. The sources Facebook, Instagram and Flickr, were most useful for the research. The hotspot and tag maps show where photos were being taken and which tags were used. This combination resulted in a quantitative study with a qualitative map as well.

The on site group decided on a top four of the tested methods and a list of recommendations. For each method, the main goal was established. Each method has its own reflection. This reflection was not just focused on the execution of the method but also on the documentation and the first analysis of the data.

Both groups combined their research into small booklets and presented them to each other to share the gained knowledge. This was focused on the methods used and their (dis) advantages.

The research method tested in Almere created a frame of reference for H-buurt. For H-buurt, there will be more time and multiple stakeholders. This will influence the methods used. In addition to this, the users of H-buurt might react differently to the tested methods than the users of Almere-Haven.

7.5 Interviews with "makers" and "users"

Another method used in thesis was interviews with "makers" (Pi de Bruijn, Hans van Beek, Sjoerd Soeters, Khoi Tran) and users (street interviews and observation of social media). This is one of the main drivers for chosen theme. The research aimed to find out both opinions of two sides. How "makers" envisioned living environment and values. How users see their living environment and what they value. This is also a theme of dualism and antipodes.

Makers

The *maker/academic* group did research upon the makers and academics according to the table of Howard (2003). Makers were original architects, urban planners and re-designers. Academics

involved specialists from architectural heritage, urban and housing fields. The research was built up in several parts during five weeks to find out what attributes and values could be found from the maker and academic perspective.

The first part consisted of site visiting, studying literature and other secondary resources to get familiar with the architecture and context of the Bijlmer initial idea till now. As a result summarized literature and a timeline provide for a comprehensive overview. The following step was preparing and having interviews with the architects and academics themselves to find out attributes and values of each of them. Therefore a set of pictures was shown to each of the interviewees to react on, followed by more in-depth questions about their project/specialty. By having the same pictures shown to different interviewees, outcomes can be compared and can be for common grounds or conflicts. The in-depth question provided a personal insigh

The outcome of these interviews have been turned into transcripts. These transcripts form the base to find out the values and attributes, hinders and mismatches with the help of qualitative and quantitative coding.

Users (Insiders/Outsiders)

The *users* group focused on the perspective of the people who live or work in the H-buurt or visit the H-buurt for a different reason. The aim is to understand the attributes current users value, so these can be taken into consideration for future designs. For the research three sources were used, which were approached in similar ways. First general research was done, secondly more detailed information was gathered. Furthermore, all this research was coded, and the data interpreted. Finally, conclusions were drawn and overviews of the information were made.

For the first source, interviews, four types of interviews were conducted. In the first week a basic set of questions was used to get a general idea of the opinions about the area. This information was used to create a more detailed set of questions and a collective set of photos, which were used for the online questionnaire in week two as well as the in-depth interviews. This photoset was simultaneously used for the street interviews.

For the second source, social media, information was gathered on Flickr, Instagram, and Facebook. The information consisted of pictures with hashtags and comments.

For the third source, research done by others, information was gathered from scientific sources on the users' perspectives specified to Bijlmerplein, Hoptille and Heesterveld.

All information was coded in separated files which were translated into a heat map, word map and an overview of attributes and values.

7.6 Individual desk study - Retrofuturism of utopian notions

Retrofuturism is a science and movement which shows the depiction of the future in the past. This movement explores the tensions between visions and reality, utopias, and dystopias. Overlapping trends of "seeing the past from the future" and "seeing the future from the past" incorporate in the concept of retrofuturism. In the context of retrofuturism several utopian cities are introduced in the research to explore the notion of utopia in different societies and time frames and lead to failed utopia of Bijlmere.

- Garden city "Tomorrow: A Peaceful Path to Social Reform", Ebenezer Howard, 1898
- Minnesota Experimental City (MXC), USA, 1966-1972. The reference shows the conflict between "makers"- visioners and local community

- Visaginas mono-industrial working-class socialist paradise, Lithuania, 1975 The reference shows
 the concept of socialist workers paradise of mono-industrial city. The city was built under socialist
 ideology for equal society.
- Radiant City ("living machine") modernism utopia by Le Corbusier, 1924 Paris
- Expansion plan Pampus, Amsterdam, 1964-1965 The reference shows the idea of mega structure as a solution for rise in population, increasing affluence, mobility, and desire for better recreacion.
- Bijlmer the city of the Future, Amsterdam, 1968-1970

7.7 Research from architecture perspective

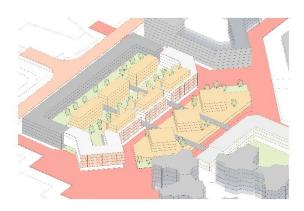
This phase of research will focus on buildings physical nature trying to understand how it was built, organized, what kind of features were chosen to express initial ideas.

- Typological features of the cluster
- Spatial composition of the block.
- Composition of the façade and its tectonics.
- Materialization of the façade and interior.
- Composition of layout.
- Circulation.
- Existing services.
- Orientation
- Character of front and back face, lower and upper parts.

7.8 Research by design

- Few options could be tried for flexible housing: portable housing, mobile housing, dismantlable and pre-fab housing. Also, the assessment of existing clusters flexibility could be done to address redevelopment possibilities.
- Group part proposals within themes densification, economy, identity, safety, social environment, function, biodiversity. Proposals were assessed by value and risk matrix.
- Densification within "Open building" concept addressing themes of identity and existing notions.
- Assessment of the design, How it changes the existing atmosphere, identity, retaliation between public and private.

The aim is to research and investigate what densification can bring to the neighborhood, how "Open building" concepts can affect, enhance existing notions, how local identity could be strengthened (Picture 2).



Picture 2 shows first tryout of the cluster 4 addressing private real issues

Research by design focus on few key approaches:

Design of urban spaces – private/public, transition, and circulation routs.

- Redesign of public space of cluster 4
- Redesign of private space -elevated deck for resident's needs.
- Creating a passage route through the block
- Add skybridges to connect different clusters

Re-design of cluster 4 (mapping of the façade elements and unit types and their relationship)

- Exterior
- Interior
- Outside space spatial qualities
- What to preserve and what to tear down

7.9 Assessment

After proposals are made, research will try to assess the possible impact of interventions considering themes of:

Local identity,

Social coherence,

Cultural and historical significance in the context of existing notions

8. Analysis of sustainable adaptive re-use references

8.1 Adaptive re-use references

- 7 St. Thomas by Hariri Pontarini Architects, Toronto, Canada 2018
- Empire Stores by STUDIO V Architecture, Brooklyn, New York, NY, United States 2018
- Jobsveem Rotterdam
- Fenix Lofts & Fenix Docks Rotterdan
- BoO1, City of Tomorrow, Western Harbour
- Twin Silos into Gemini Residences on Copenhagen's Waterfront
- Gasometer Building Vienna

8.2 Flexible housing

- Flexible Micro-Housing in Seoul Is a Communal Micro-Neighborhood
- Habitat 67 It was the unconventional experiment in prefab, stacked town lodging, is that the city's most picturesque engineered inheritance from that exciting time
- Diagoon homes jazzman Hertzberger.

 The units as unreal within the original program are aligned on four major axes, the repetitive sequence of the module, that consists by 2 reflected living units, is typically broken by a modification within the rhythm and within the orientation of the homes or the various aggregation of the smaller modules.
- Capsule tower
 Nakagin Capsule Tower in 1972, it was the primary capsule design style. The module
 was created with the intention of housing traveling people that worked in
 central Tokyo during the week. It is an epitome for design of property and recycle ability,
 as every module is fitted in to the central core and replaced or changed once necessary.
 - 8.3 Open building cases
- Patch22 by Frantzen et al
- De Hoofden by Marc Koehler Architects (initiative, architecture), de Architekten Cie., Architectuurcentrale Thijs Asselbergs, Hootsmans architectuurbureau (technical design), de Architekten Cie., Marc Koehler Architects, Space Encounters
- Juf Nienke by SeARCH, RAU, DS Landscape Architects

Ethics

The research was combined from different methods which in my opinion not always were precise. Street interviews with people were difficult to proceed because of Covid situation, language barrier and their own interests in the topic. This often lead to short, not comprehensive answers. Also, streets interviews showed, that people often has completely different opinions for the same question due to many factors such as personal background, age, ethnicity.

What is more, the number of people interview could be much bigger, but due to strict time frame and pandemic situation conclusions were made of quite average amount of data. There was a lot of space for interpretation and speculation evaluating people answers. For example, it was often answered that there is "lack of greenery" in Bijlmere whereas it is opposite having in mind that existing greener is enormous but not adapted to resident's needs.

Interviews with academics and makers also brought a dilemma, how to extract information as some answers were very personal and subjective and some very general. During interviews, some interviewees more open and talked without interruption whereas others were quite short in their answers and needed more engaging from us. This also brought to some speculation, why one picture was described more and other more,

We used another method of social media, especially FaceBook posts, where people comment on some old pictures. This could show nostalgic appreciation of the past and show importance of some attributes. It was also leading to some discussions, where consideration of values should be related what people like directly or not directly.

Observation of shops in Bijlmerplein shops showed that there are a lot of vacancy and closed business. However, does it mean, that it was a problem even before the pandemic or it became like this naturally. It is hard to assesses and predict if the shops will recover or it needs some interventions or significant changes.

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Pictures

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Self-assessment

In the beginning of the process, I was lost by many ideas and themes. It was confusing where I wanted to start and what kind of problems to address. From my personal background I was intrigued by densification and urban sprawl issues because I used to work in Toronto, Canada where high-rise developments are still the main strategy to achieve density in city core, which is outlined by municipal government. The practice in architecture office showed me, that the main attention is given to efficiency, functionality and building code and often the question of the development feasibility is the key to its success in terms of realization. The perception of densification in the Netherlands is different, but discussion about high-rise developments as a solution was relevant in 1970s as well. Frank Wassenberg addresses this topic in Large housing estates: ideas, rise, fall and recovery in chapter "Toronto, city of towers" and "The high-rise wave". "High-rise housing can be considered the apogee of the modernistic planning of post-war large housing estates: the climax of mass housing. However, the climax did not last very long" (Frank Wassenberg). So, in the beginning I was intrigued by Bijlmer as failed high-rise development, which had nothing in common with traditional Dutch housing approach.

Later, after understanding the context of Bijlmer and its utopian ideology, I was intrigued also by the theme of failed utopias. Last semester I was researching other utopian city Visaginas build in eastern Europe in the same period (1975) which was based on socialist concepts. It was erected as a satellite city for nuclear power plant and was called "paradise for working class". The idea of the city was idealized and utopian, providing the city without cars, with a lot of greenery, public spaces, communal services, luxurious apartments. However, after closing the nuclear power plant, the city faced enormous emigration, vacancy and showed absence of adaptability for present and future needs. I found it interesting in comparison with Bijlmer, that "The city of the future" and "Socialist workers' paradise" were built as mass housing districts, urban planned and erected in empty field, built far away from other cities, without existing identity and communities living there were homogeneous These two different contexts brought me to the theme and question to discover and research why had it failed? How city resilience is achieved? What is the essence of adaptability?

With a group I was involved in "makers" stakeholder research and had several interviews with architects who had significant input designing H-Buurt. It helped me to understand, that at that time the collision between different ideologies and groups "makers" and "users" were the main dilemma for post war society. Interview with Pi de Bruijn was comprehensive and gave

insights why Heesterveld and Hoptille failed as remediation of Bijlmer whereas Bijlmerplein "survived and showed its resilience". The theme of antipodes and juxtaposition of notions came to discussion. I discovered, that Bijlmerplen could be seen as collage like picture compiled from different notions.

At the end, I decided to discover another notion of "Open building" which is based of N.John Habraken ideas of flexible housing. I think that it brings all issues together addressing densification using different flexible housing strategies. Also, the idea of "Open building" is seen as live process where involvement of the user is crucial. Finally, it addresses the issue of uncertain future helping to solve vacancy and identity issues.

This was the sequence of the themes and points discovering the main research question. For me personally all parts of the studio were useful as it helped first of all to understand the context and problematic in general. Also, for me it was extremely important to work in different groups, because it gave me different perspectives of different topics. Research plan was seen not as a "plan", what I am going to research later, but rather research process itself, which of course was constantly evolving. What is more, I found it interesting, that from heritage perspective in the studio we discussed not that much about cultural and historical significance of the researching buildings, which is understandable. However, this fact forced me to do deeper research in literature and find peculiar, special fact or information about period, context, ideology at that time and extract possibility important values interpretating myself.

Transitioning between research part to design phase I found, that giving us time to research and explore was extremely useful, as we together in different groups discussed many topics and issues which gave solid background to start individual design.