

# THE POTENTIAL OF KLUSFLAT STRATEGY FOR AFFORDABLE AND VALUABLE LIVING SPACE FOR YOUNG PROFESSIONALS

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## **ABSTRACT**

*There is a growing need for affordable spaces for young working people. In many big cities of Europe, prices per square meters are rising, what forces young professionals to rent a questionable quality, temporary flats, or push them to outskirts. In this work I will investigate a strategy called Klusflat and prove that this strategy can be used to bring an affordable, quality spaces for young people. In the following paragraphs some Klusflat case studies are researched. First example is Kleiburg, one of the most famous Klusflat example. Second one is Klarenstraat block in Amsterdam, the third is a housing unit in Rotterdam. In a conclusion I compare different approaches observed in my case studies. I also give an answer if this strategy can be adapted to solve a problems of not affordable, and not valuable spaces for young professionals*

**KEYWORDS:** *Affordable housing, Young professionals, Klusflat, , Personalization, DIY*

## **I. INTRODUCTION**

### **1.1. Background**

The lack of affordable and valuable flats for young people is a common problem nowadays. In many well developed countries of Europe such as Netherlands or Poland, young working people suffer of inappropriate, expensive space. Young people have no big choice. Renting a flat is very often the only opportunity. However it does not bring all needed values. Temporary space is often not personalized, while social contacts are limited. The solution of this problem is a real challenge, that deserve some attention. The complexity of this problem is wide and obvious, and it needs interventions on many fields such as appropriate politics, local government strategies, and also a field of city planing and sustainable and involved architecture (Mackey 2016) . In this work a small step in the direction of more valuable spaces for young working people can be made.

### **1.2. Problem statement**

The problem of affordable and valuable flats for young professionals is not a new problem, however the issue seems to increase, and finally became a topic of public debate (Mackey 2016). Due to rapidly growing prices per square meter in big cities, owning a flats seems to be impossible to achieve for young people. The need of own space pushes young professionals to suburbs, out of the city very often or encourage them to rent a space. This situation in both cases unfortunately causes many social and urban issues, that can not be forgotten. First of all, uncontrolled expan-

sion of a city- urban sprawl causes many damages to a well balanced city (Bonenberg 2011). Problems such as traffic jams, decomposition of services in suburbs and evening and morning ghettos are only few of disadvantages. Another aspect of this problem is the value of the space itself. Available flats do not bring a proper living value and comfort. There is a lack of opportunity to personalize those apartments while available flats are generic and inelastic often. This make developing a important physical connection between the tenant and a space more difficult. Lack of that relation can influence a lot of different social problems such as loneliness, This aspect is often marginalized. Renting an apartment also limits the space for personalization as also limits possible social contacts and even fuel a feeling of temporality. All of this creates a bad picture of housing for young professionals.

### **1.3. Opportunities**

The problem explained above has to be solved. There are some possible strategies that can be considered as a response to problems such as lack of affordable housing, loneliness, and lack of personalization. I believe that a strategy called Klusflat can be taken into consideration as one of interesting opportunities. Strategy so called Klusflat is a process developed in Rotterdam 2005 (Boonstra, Lofvers, 2017). The idea is to sell bad maintained houses in unattractive districts for lower than average prices. New owners are obligated to refurbish the flat in an exact period of time. Cost of the modernisation can be reduced significantly by DIY works. Thanks to that, some issues can be solved. Old buildings can be prevent from destroying, the value of a neighbourhood can be improved, cheap affordable housing for people with a lower income can be achieved.

### **1.3. Research question**

In this paper work I will explore different fields of so called Klusflat strategy, and I will examine how this approach can be used as a response to my problem statement.

*Can the strategy of the so called Klusflat be adapted to living spaces for young professionals. Does it help to avoid problems such as lack of personalization, not affordability and loneliness.*

- 1. To what extend does the framework of the building have to be prepared by architects and professionals to bring the most proper starting point for new tenants.*
- 2. How brave and open-minded are people working with their own space in a process of Klusflat renovation, and how skilled are they. To what extend the flats can be designed and rebuild by amateurs in terms of materiality and construction methods.*

## **II. METHODOLOGY**

### **2.1. Methodology of work**

An answer to the research question is given in following paragraphs. Work is based on case study research. Case study research is highly contextual research driven by theoretical knowledge (Wang, Groat 2013). This approach allows to understand the process of Klusflat step by step, and also compare advantages and disadvantage of each case in its context situation. There are few examples of Klusflat that decided to research: Kleiburg in Amsterdam, Klarenstraat in Amsterdam and a row-house in Rotterdam -examples of 169 Klusflat project. With available literature sources, and own observations, I collected and finally compared data. I start my investigation with context of the Klusflat process for each case study as I believe it is important for me to understand the background, and problem statement of each location. Than I focus on Klusflat process itself. With informations from literature I try to answer my sub-questions. I prepare drawings that explain what changes have been done by architects and professional conductors to bring a sufficient layout for tenants. In the next step I focus on the DIY process itself. I research step by step the process of self made renovation to understand how does the process looks like from the per-

spective of tenant. Also what kind of challenges and obstacles have to be overcome Very helpful are interviews from books and blogs of DIY flat owners that I found in internet. As a conclusion I compare different approaches, and answer my research questions directly. Can the strategy be adapted against problems such as lack of affordability, loneliness, and lack of personalization.

### III. RESULTS

#### 3.1. Case study - Kleiburg (Amsterdam)

##### 3.1.1. Background and problem Statement

Kleiburg is one of the buildings of Bijlmermeer development in south Amsterdam. The whole estate was planned in 1968-1969 as a response to a post war housing crisis. There was a burning housing shortage in the capital city of Netherlands at that time because an existing housing offer was badly maintained and far outdated. (T. Wilkinson 2017). It is a modern 10-floor multi family house shaped in a characteristic hexagonal grid. Kleiburg was the last original building, not modernised nor destroyed. Bijlmermeer used to be a challenging area in Amsterdam. The neighbourhood used to be called rather not pleasant and unsafe place. Bijlmermeer's problems has started in 70s already. Although the area was equipped with a metro line and train station, the district quickly gained a reputation for isolation, poverty and crime (T. Wilkinson 2017). Right after the building has been finished the middle class - main tenants group- turned out to be not interested in living in this kind of places any more. As Wilkinson writes in his article, it happened because prices was relatively high, while the neighbourhood not very attractive. In 1974, 30% of the old residents moved out. The house has to be offered in lower price finally, and become interesting to people with lower income. A large proportion of them were immigrants from a former Dutch colony of Surinam. The decomposition of Bijlmermeer was not a rapid process. However, none small modernisation did improve the situation. Main problems such as drug criminality, violence, vandalism and narrow cultural and social diversity only increased.

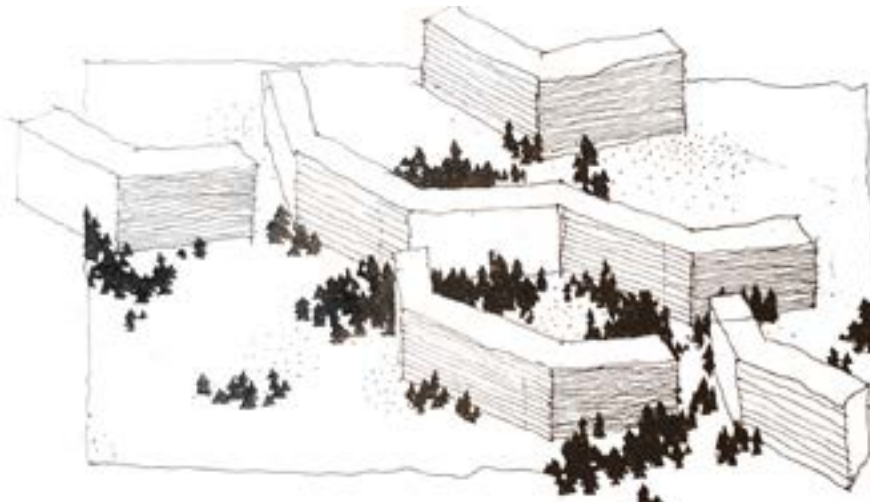


Figure 1: Bijlmermeer and Kleiburg

##### 3.1.2. Klusflat process

In 2009 the building was intended to be demolished. Present tenants started to be relocated to start the process. However protests against demolition of Kleiburg, the last original part of Bijlmermeer, inspired an alternative solution. The building has been sold to a maverick consortium-DeFlat. They were supposed to prepare the plan of renovation of the building and to adapt it to a contemporary market. In a cooperation with architects from NL Architects Klusflat strategy for Kleiburg has been developed. DeFlat was responsible for a general modernisation of the building and its surroundings. This work finally improved the look of neighbourhood and made the offer

more interesting to possible buyers (T. Wilkinson 2017). Flats were sold successfully for very affordable, as in Amsterdam, prices (DeFlat, 2019).

### 3.1.3. General modernisation- DIY framework

The modernisation of the structure and facade have been designed by XVW Architectuur and NL Architects. They were responsible for improving the value and a look of existing structure, and also preparing a framework for future owners' modernisation. In other words, they had to give the building a new good impression to inspire creativity of craftsmen. As a first step, the building has been reintegrated with the surroundings. The upper circulatory system was demolished (7), while the ground floor that used to be entirely storage units has been transformed (6). It was converted into small business spaces, workshops and bike storage spaces. Some of this became living units also increasing the total number of flats. Thanks to that the ground floor become an interesting space, full of people as it was never before. The passage through the building were enlarged to make them safer and brighter what had also a positive impact on the character of ground floor. Also the facade and overall look of a building has been improved (4). Everything has been cleaned, fixed and refreshed (5) to give a contemporary, fashionable look this old building. Other important modernisations have been done inside the building. The main concrete structure of Kleiburg turned out to be in a good condition what saved a lot of work, however some extra values have to be added. New lifts were installed (3) to improve the communication. Corridors and galleries have been closed, and shortened to improve safety and to make them easier to clean and control. The general look of interior has been improved with contemporary details and quality and fashionable materials (2) such as ceramic and concrete. Also more light is coming through big windows now, and. Finally, services pipes and wire installation have been replaced. The exteriors stayed unchanged except for the removal of opaque panels from the rooms facing the access desk, increasing natural light (1). (Blasi Giralt,2017) (T. Wilkinson 2017) (NL Architects 2012)

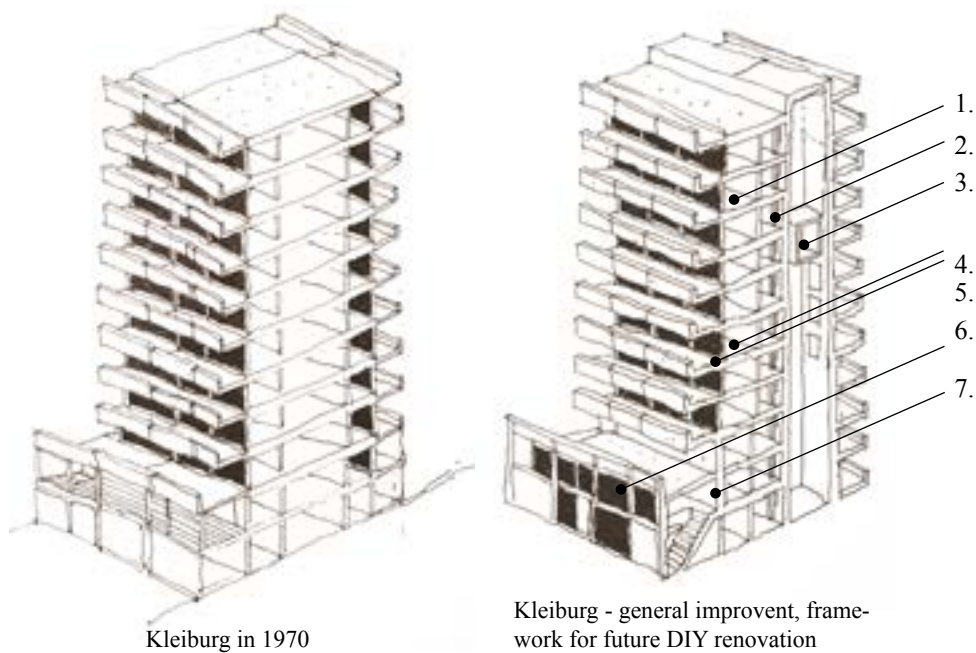


Figure 2: Kleiburg renovation by NL Architects

### 3.1.4. Flats DIY process

Flats in Kleiburg has not been changed during the general modernisation of the structure. New owner were completely free while shaping their own space. An approach to a modernisation was different. Some tenants decided to do all works themselves while other decided to outsource it. Author of a blog *Ipaulvandenbergh*- Paul van den Berg (Berg 2013) takes a balanced position. He

describes on a blog his own process. He started with a architecture project that he paid for. This is something unexpected in terms of cheap DIY flats, however very common. Then with a help of his sons and professional teams he realized the project. As he writes he tried to participate in physical works, however he relied on professionals' experience first. He started with new partition walls and finish of floors and ceilings - a standard order of this kind of works. Most elements - floors and partition walls are new, however there are still some "original" old elements that he decided to keep. He says that old elements bring a "the history of the place" and "authenticity". He also decide to expose few unfinished concrete walls with rugged texture that he prepared himself. Also window and door frames are clean and painted by the author of a blog himself.

He points that during the renovation a local community has been actually created. A positive boost has been given by a feeling of taking part in a important, creative operation. He also puts a lot of attention to helping other tenants and discussing with them different DIY solutions. On his blog he describes a story of carrying heavy tiles together with his neighbour. Tenants in general, as he writes, are tended to visit each other during the renovation process and also exchange unnecessary building materials (gypsum board, wooden planks, powders) or objects such as camping electric stove or simple furniture that are not longer useful after the refurbishment.

### **3.1.5. Social impact**

Bijlmermeer seems to be completely different than it used to be in early 2000. It was possible due to many big and subtle intervention. Nowadays the look is positive. There are cultural spaces like OSCAM, well maintained parks like Nelson Mandelapark. There is also bigger than in the past diversity of housing typologies and inhabitants. People seem to be responsible and proud inhabitants. Blijmermeer is balancing well between positive and negative aspect of gentrification but being not dominated by that (E. Himelfarb 2018).

Kleiburg renovation did not change the Bijlmermeer. It was one of elements of the holistic strategy, however it takes an important role. Kleiburg itself, actually turned out to be attractive for well educated people interested in DIY. Another positive aspect is the pop-cultural impact of Kleiburg renovation. Process that awarded with MiesEU become a good example in modern buildings' issues' discussion.

### **3.1.6. Costs**

The cost of one square meter (1m<sup>2</sup>) in Kleiburg building was around 1150 and depends on a size of a flat. That means the common price for a ready for modernisation, 70 square meter flat was 80 000 Euro. It is important to know because a price for one square meter in 2014 (when first Kleiburg flats has been sold) was above 6000 Euro per square meter close to the in the city centre, and around 1800 Euro per square meter in less popular districts like southern Amsterdam (amsterdam.nl). It means that prices in Kleiburg -almost two times lower could be interesting offer for people with lower income. Of course the price of a flat is just a part of costs of flat in Kleiburg. Renovation costs are also significant. De Flat, estimated costs of refurbishment as 20% of the price of a flat (DeFlat 2019). It is another 250 Euro per one square meter, however this are the costs that can be reduced by creative DIY works.

## **3.2. Case study - Klarenstraat (Amsterdam)**

### **3.2.1. Background and problem statement**

About 75% of all buildings in the world are dated after 1945 (P. Ulzen 2017). A significant part of those are situated in suburbs as mass housing units. There is (often) a common bad image driven by neglect, poverty, among residents and crime. A building on Klarenstraat is not different. The object is located in Nieuw-west Amsterdam. It a new district that consists of three former districts: Geuzenveld-Slotermeer, Osdorp and Slotervaar. A development of Nieuw-West is a product of city expansion planed in 50s. It was a response to a post war housing problem, but also a field

of experiments with new types of modern typology. This solution of buildings surrounded by greenery instead of typical pre war street seemed to be a attractive option, and it turned out to be a popular destination for young families in 60s. However, the situation has changed. The number of old residents decreased significantly in the following years. The void has been fulfilled with new tenants, with a lower income. Some of them were people from former Dutch colonies who came to Amsterdam looking for a better job. This fuelled the creation of a image of cultural “getto”, and unfamiliar and dangerous area. An opinion of the district become doubtful seriously. To prevent that some plans has been developed in early 90s. Nieuw-West was supposed to be restructured completely. The goal was to interest wealthy and educated people in living there. It never happened, while meeting negative reactions, and increasing a tension only. (P. Ulzen 2017). In early 2000 the district is said to be extremely unpopular.

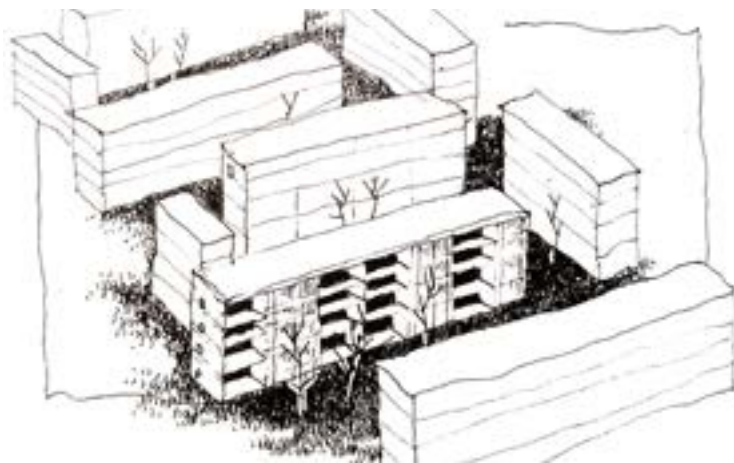


Figure 3: Klarenstraat

### 3.1.2. Klusflat process

The main goals were to attract new resident groups to the Klarenstraat neighbourhood, improve the diversity and finally raise the value of its surroundings. The process was organised through CPO (Collective Private Commissioning) strategy, that was known to be a successful method. To apply that tool, Urbannerdam, the studio from Rotterdam was contracted. In 2012 the concept of the building was finished. Flats were ready to be sold to individuals. The prices were relatively low, however it took longer than predicted to reach a minimal level of sold apartments. Finally the Klusflat process started. New tenants had to invest in a building and realize the plan with a help of Vanshagen studio. Architects have been responsible for general modernisation while flats were built according to tenants’ own wishes.

### 3.1.3. General modernisation- DIY framework

The general modernisation of the structure and facade refurbishment have been prepared by Vanshagen Architects. The building originally by Ernest Grossman has a very rational structure what helped a lot to reorganise it. Typology of flats has been varied in size. To achieve that architects translated the original spatial system into 3d matrix. Flats can be created there, by connecting blocs together into bigger units (2). Another important thing is that, as in Kleiburg, the ground floor has been also replaced by living space (3). This gave the street level more lively appearance (6). Facade of the building has been improved also. The outdated character of modern panels has been replaced with fashionable wide windows with narrow frames. Issues such as poor thermal isolation has been sealed (exposed concrete edges, and floors) and windows were replaced (4). It was an important boost that was supposed to catch attention of possible new tenants. Another important change was to equipped the building with new hanged balconies (5). On the roof there are winter gardens accessible by stairs from top apartments (1). (Ulzen, Vries, Bussink, 2017).

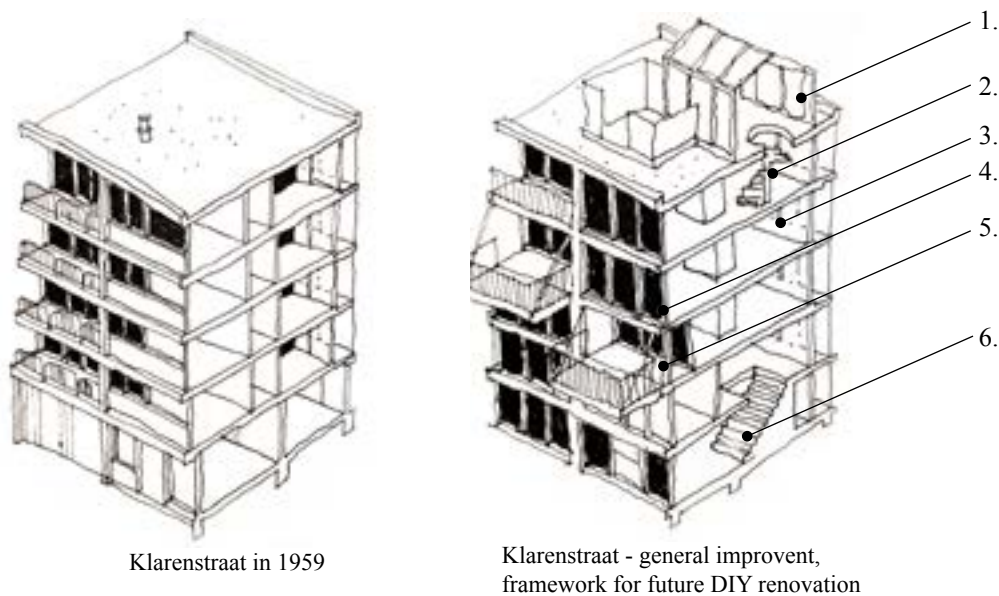


Figure 4: Klarenstraat renovation by NL Architects

### 3.1.3. DIY process

In the building in Klarenstraat the DIY process looked different. It shows that DIY term should not be taken literally in this case. Vincent van Rossem in a book “DIY Klarenstraat” (Ulzen, Vries, Bussink, 2017) describe the DIY of Klarenstraat more as DIY- development and planing process than physical works. What is more many tenants, introduced in the book, had all work done by contractors, while they were only supervisors of that work. DIY process on Klarenstraat started with a consultation period in 2012. It is also described by authors of a book as the most challenging part. It is because in Klarenstraat case owners were also investors and important participants of all discussions among others- financial. They had to take responsibility for the process as a whole, not only their own space They had to work out the best balanced option in terms of spatial planing and finances for all of them. Tenants worked during special meetings where they shared their expectations and ideas by mind maps and references. Meeting have been organised in a shape of open workshops where informations have been collected by simple diagrams and mind experiments that had to be finally discussed with others. Architects and organisers took a position of supervisors. They were responsible for moderating a discussion and best findings.

### 3.1.3. Social impact

Similar to Kleiburg situation, operation in Klarenstraat was intend to be a positive impulse for a neighbourhood. The organizers expect that young and creative, well educated new inhabitants will move in to increase the diversity of the community. This was observed in Rotterdam in first experiments such as WallisBlock and turned out be successful. In Klarenstraat something positive really happened. In the book “DIY Klarenstraat” (Ulzen, Vries, Bussink, 2017), Patrizia van Ulzen describe the process as one with rather good impact on a local environment, however not unequivocal and difficult to clearly explain. Some foundations for local community has been created in a refurbished block. A group of active and positive inhabitants appeared under the name of “Meer sfeer bij de beer”. Their goal is to make the neighbourhood more lively and friendly. However the positive impact on existing environment is hardly noticed, as she writes.

### 3.1.3. Costs

Costs of the DIY on Klarenstraat are summed up by Sander Gelink in a book bout Klarenstraat. (Ulzen, Vries, Bussink, 2017) He writes that cost of space, stripped back structure was 714 Euro , while renovation itself was 768 per square meter. Additional costs were around 100 per square

meter in total. It gives 1582 Euro per unfinished one space meter. Finishing and furnishing was estimated by him around 689 also per one meter, however here differences were significant, and depended on the quality of finish. Total price around 2300 Euro. Building on Klarenstraat is higher than average quality building, so as Gelink writes 2300 Euro per one meter is not a high price. One square meter in this part of Amsterdam in 2012 was around 2000-3000 Euro (amsterdam.nl)

### **3.3. Case study - 169 Klushuisen (Rotterdam)**

#### **3.3.1. Background and problem Statement**

In early 2000 the municipality of Rotterdam concentrate more on challenges of problematic districts. There are 9 areas like that in Rotterdam, called hotspots. People there have suffered from socio-economic problems such as criminality, drugs related problems, illegal occupation and similar (Boonstra, Lofvers, 2017). Hotspots are inhabited by people with a low income. Most of houses are in a bad condition because of lack of maintenance. Some buildings are used for a illegal purposes such as illegal living or drugs. The value of houses is negligible. Municipality of Rotterdam activates the local police to finish problems, however it is not enough. Some other solutions need to be implemented.

#### **3.1.2. Klusflat process**

Willisblok was the first building transformed with an idea of Klusflat strategy. Flats there were given for free, however new tenants were obligated to renovate the space and the building. This idea attracted many attention. People were interested not only because of zero price but also because of uncommon architectural freedom and personalization (Boonstra, Lofvers, 2017). Operation allowed to save the building but also gave a positive boost for future processes. Municipality decided to formalise and extend Klusflat strategy and reuse it. A new project called 169 Klushuisen has been developed. 169 new flats (finally more than that) was supposed to be refurbished. One of these is a row-house on Beukelaarstraat.

#### **3.1.3. General modernisation- DIY framework**

Row houses in a 169 klushuisen project are not modified before selling. Architects' and future owners' responsibilities are different in this case. In a book "169 Klushuisen" (Sour, 2009) there are five owners' experiences introduced. They describe meetings with architects during organisation meetings and discussions. Architect job is to take control over the process and also discuss some solutions if it is needed. Architects help tenants to make the best decisions but also to stimulate DIY- peoples' creativity. Architect takes a position of supervisor of a process.

#### **3.1.4. Flats DIY process - Beukelaarsstraat**

The flat on Beukelaarsstraat has been refurbished by Antal, young architect. The building has been sold in a poor condition. There were a lot of structural and aesthetic issues that had to be solved. Structure wooden elements: floor beams and roof turned out to be a serious problem. . Antal- owner started the project with six different concepts that he prepared himself. Ideas were different, both: brave and personal concepts and more safe and balanced ones. What is interesting, he decided to realize the most balanced one. As he said this one can be adapted easily in a future and will allow him to sell a house easily. The owner started refurbishment with the most problematic structural elements beams (6) and roof (2). Wooden beams were rotten both in floors and in the roof, as he said. Floor beams were surprisingly easy to repair, the new beam seat had to be installed, however roof had to be replaced. The price of a new roof was far above his budget what brought an opportunity to build a rood himself. He writes that this operation was difficult but finally possible for him and allowed him to save a lot of funds (1). Frames of windows and doors were next part of work. Owner decided to save as much as could, cleaning, fixing and painting old wooden elements (3)(7), however some of them were not longer useful. Antal- the owner, bought missing some elements in second hand shops and others right in a factory to not spent too



much. Some discussions concerned old stairs that could be replaced completely, but could also be kept (5). He decided to keep wooden stairs to save an original character of a building. Floors were another problematic element (4). Missing plants had to be cleaned and replaced with new wood, and everything was finally covers with paint. Also here the owner decided to do all works himself. Pipes and other services has been also replaced (8). To sum up, most of works have been done as DIY. Professional team has been contracted once during heavy cleaning jobs such as partitions wall demolition.

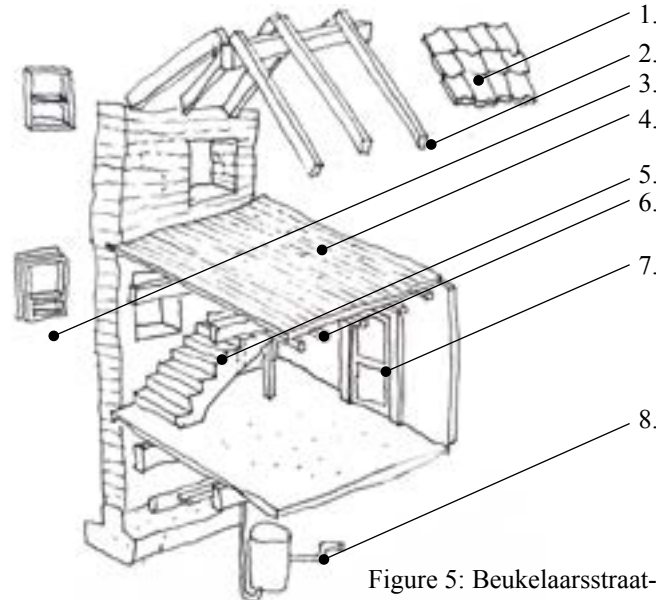


Figure 5: Beukelaarsstraat- DIY works

### .1.5. Costs

Antal has 140.000e for the whole klusflat process. He spent 60.000 on the building itself and 6.000 on necessary taxes. Cost of a handmade roof was only 5.500e instead of 10.000-20.000e. Thanks to buying window frames right in the factory he was able to save 10.000e. Many elements got a second life, the owner was careful with throwing things away. The whole refurbishment was around 85.000.

### 3.1.4. Social impact

Some positive changes in areas in Rotterdam where the DIY strategy has been applied can be noticed. In Spangen, where the first building has been renovated this way, some significant reduction of criminality and violence can be observed. (Municipality of Rotterdam safety Index). Also the spatial quality has been improved a little bit. A bigger cultural and economical diversification of the local community had definitely a positive impact. This was of course not only because of few renovated flats, but it gave a positive boost that was needed. (Boonstra, Lofvers, 2017)

## IV. CONCLUSION

### 4.1. General modernisation- DIY framework - COMPARISON

In this part the three different approaches of the DIY frameworks are discussed. In Kleiburg architects renovated the structure to make the place interesting again. Potential interest and investments is the only option to save the big modern structure. Creating a valuable space, quality and beautiful space are key-factors in this process. Another aspect is to develop a creative DIY environment for future renovations. Spaces have to be prepared to stimulate and open minds of future owners. In Klarenstraat a similar approach was applied but clients were already investors and had discussions with the architects during the modernisation process. But in that case also the architect was responsible for a positive and interesting picture of a new development. In Beukelaarsstraat the architects didn't do anything beforehand, but were only guides and handing guidelines for

the owners.

All cases are different in the moments in which the architect and the owner start to collaborate. A form of this collaboration is strongly dependent on the situation and its context. However there is one thing in common. A work of professionals is always to imagine and develop a safe and stimulating starting point for non-professionals.

#### **4.2 Flats DIY process - COMPARISON**

It is difficult to make a list of DIY things because everyone's creativity is different. However there are some interesting patterns that can be observed. DIY works in Kleiburg were not completely handmade, however a person in my research seems to be very involved in a process. He tries to supervise all works and be as close to it as its possible. He highlights a lot a DIY community created around DeFlat modernisation. On Klarenstraat the situation is similar. Most of owners introduced in a book and my work stay as supervisors trying to be always involved in a refurbishment process. On Klarenstraat tenants were also participant of developing process. At this case they took a position of investors. In Beukelaarsstraat almost all works have been done personally by the owner. The reason for that is in that case the owner bought the whole building and took a full responsibility for it. However he also got a bigger than in different cases freedom. He had to prepare a financial plan but the space for cost reduction was also wider. On Beukelaarsstraat the work seemed to be more serious from the beginning, what was reflected in a character and skills of people interested in an offer.

In general there are few aspects that can be noticed. People have a tendency to keep elements of the original structure. Interesting is that, for some of them it is an extra added value of the building. Another important aspect is that people rather avoid extreme changes, rational thinking takes a main control. In some cases a cooperation in small communities can be observed what proves that social aspect of Klusflat strategy gives positive results. In all cases it is common for tenants to get materials from second hand shops and markets and to exchange materials between each others. Finally, all tenants in my research seemed to enjoy the process of refurbishment trying to be close to the work. It gives a positive perspective of people attracted and involved by their new spaces.

#### **4.3 Research question reflection**

Klusfalt strategy can be adapted to develop a affordable and valuable spaces for young professionals. The strategy and its process brings a lot of opportunities for designer to avoid problems such as lack of personalization, loneliness and non affordable prices. The lack of personalization is solved by creating a relation between person and materiality by having the owner as the craftsman. Affordability is created by having to organise less exterior workers and materials. Loneliness is decreased by a created local community by working together early in the process. After the building process is finished people already know each-other in the neighbourhood. This way social barriers are smaller. All in all the places created have a better social and material belonging and diversity.

In the process, the architects have to create a framework, both materially and immaterially, to open the minds of new owners and to attract them by interesting and stimulating design. Materially in the way that owners see all possibilities they have in personalizing the space. Immaterially in a way that a trusted community is created that can share knowledge and materials.

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