

# ARCHITECT. USER. STATE.

**Alternatives to mass housing**

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## INTRODUCTION

The scale of post second world war destruction in many European countries was immense: the casualties reached 60 millions of people and those who survived experienced extreme brutality. European economy collapsed, the industrial infrastructure was destroyed, many cities were burnt to the ground, all possible goods - plundered. Aftermath of the war was severe and clearly visible in European townscapes.

The shortage of housing across the continent was severe: the existing ones were often considered to be inadequate. Unprecedented housing deficit led to design and construction of enormous government-financed housing projects. Modernist architects were faced with enormous challenge: mass housing.

However, great quantity did not always go with great quality. Prefabricated, using cheaper construction technique mass towers did not always reflect the idea of "sun, space, greenery". The anonymous atmosphere was causing many social issues, the buildings needed constant maintenance and renovation, the need for individuality was out of the question.

Proclaimed by some as a failure of Modernist architecture, it inspired many architects to search for

alternatives to mass housing and ask very important, profound questions: how well-functioning residential architecture should be designed? What are the qualities that make a house a home? What are the most important factors for users?

The 1970s and 1980s brought a certain rebellion against standardised mass housing. New visions of more liveable, user- or human-oriented residential architecture were emerging.

The following work will attempt to analyse three different housing design approaches:

- Mass housing as an answer to housing shortage, strongly affected by socio-economical situation, where the main driver was the state/ municipality.
- An answer to de-personalised, standardised housing, where the main driver was the architect's idealistic vision of new standards of the housing,
- An alternative to both mentioned above, where the main driver was the user and design was an effect of an user-architect collaboration.

All of the mentioned case studies largely influenced later realizations.



## DEFINITIONS

### **Architect**

[ *abr-ki-tekt* ] *noun*

metaphorical project driver aiming for unconventional, often idealistic or experimental solutions through which the life of the future project inhabitants will be improved.

### **User**

[ *yoo-zer* ] *noun*

metaphorical project driver personifying increase of importance of the future users of the project and treating them as main decisive factor.

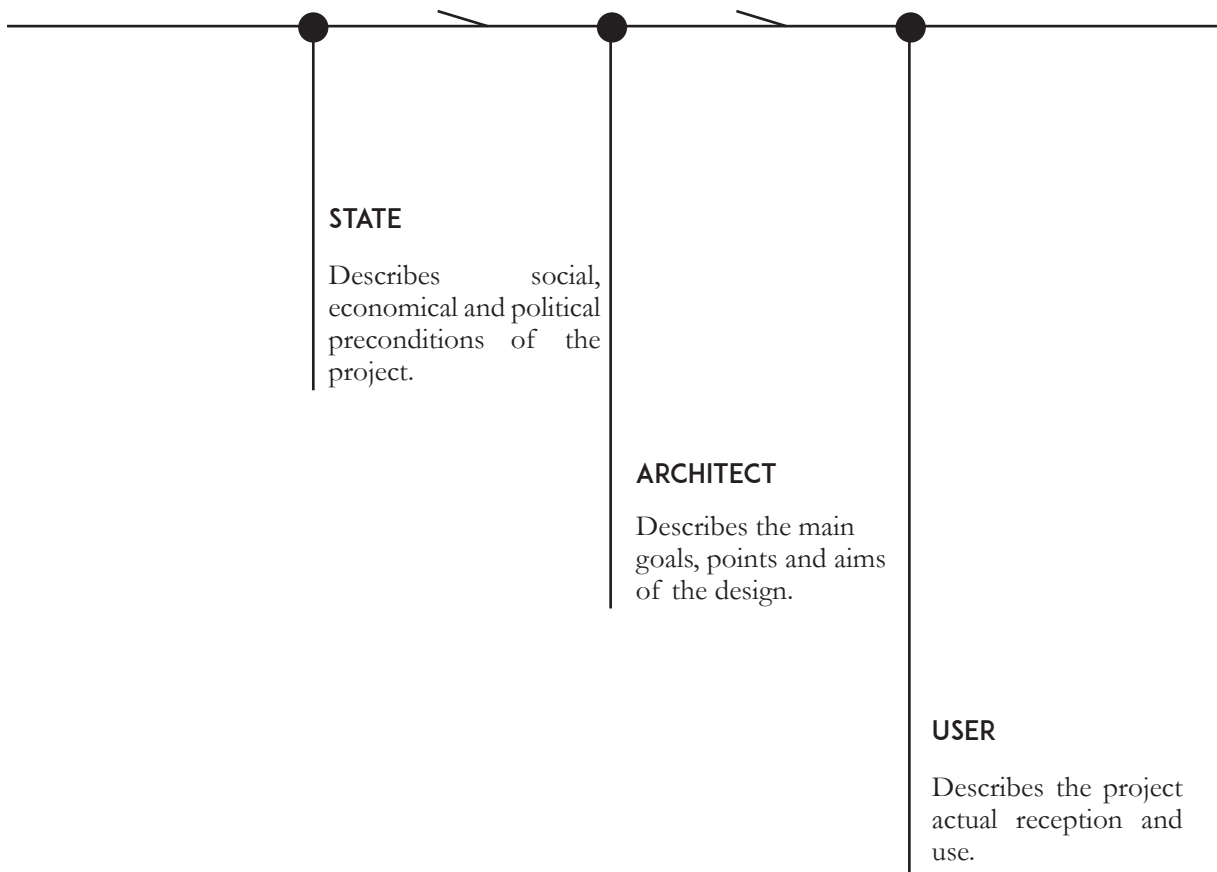
### **State**

[ *steyt* ] *noun*

metaphorical project driver embodying striving for practical solutions, often required by political or economical situation, valuing density, modularity and restraint.



# TIMELINE

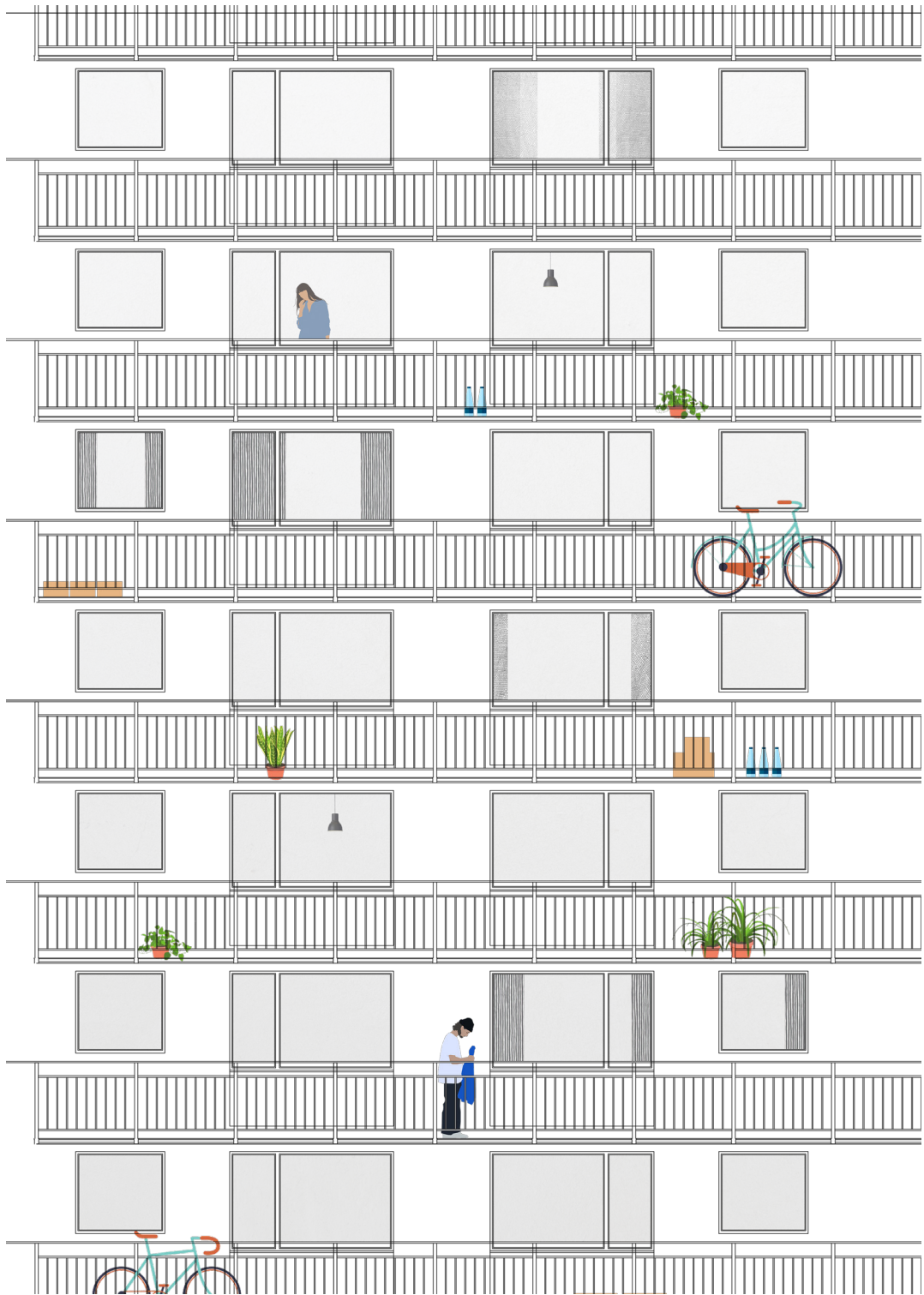




## CASE STUDIES







DENSITY



## 01. LES GOUJONS, ANDERLECHT, BRUSSELS

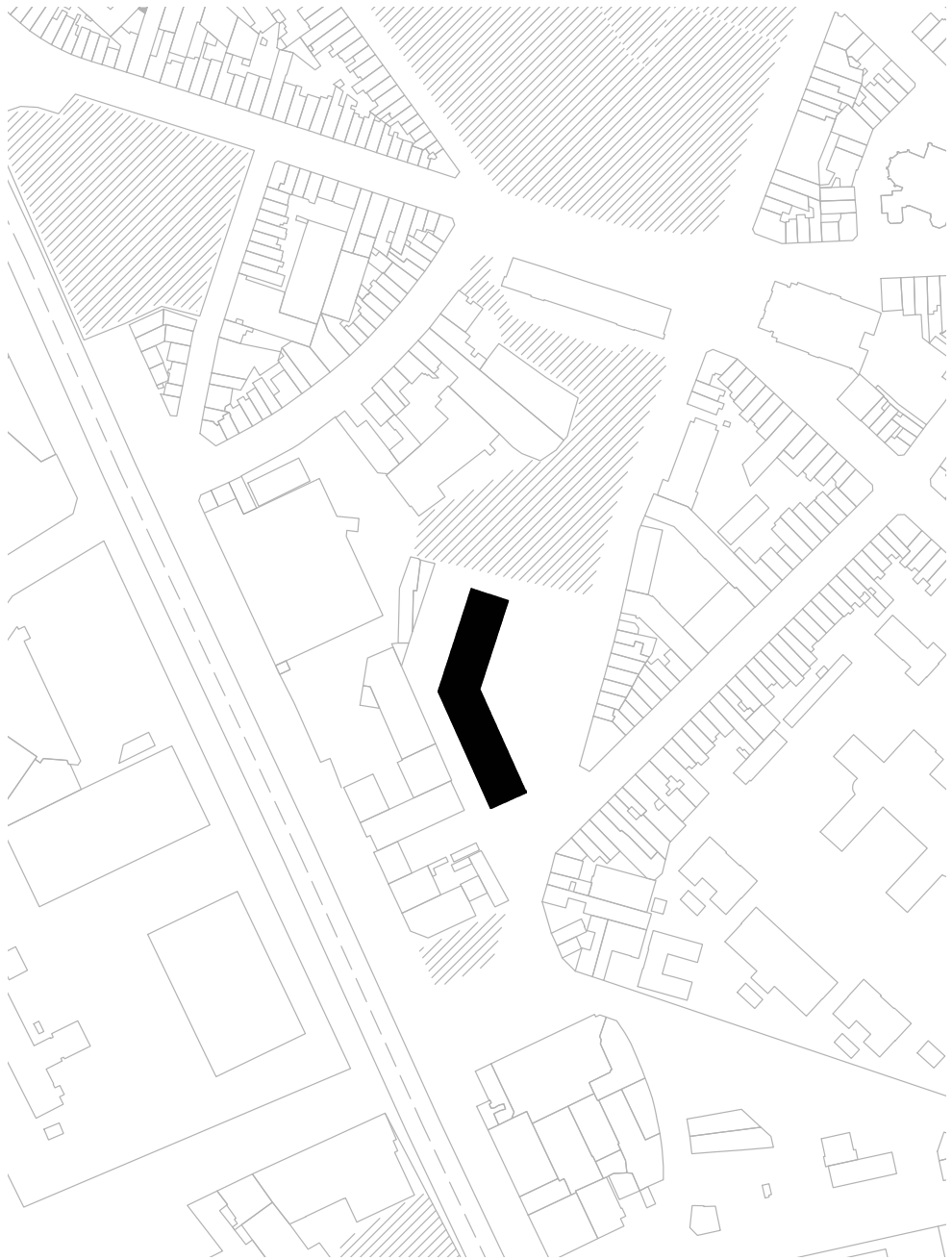
Les Goujons is a mass social housing building, located in Anderlecht, one of the 19 municipalities of Brussels. It differentiates itself with its architecture from more typical Brussels urban city tissue present in the closest environment. Its monumental geometry, well visible from considerable distance, dominates the neighbourhood. It weighs down on all surrounding public places, influencing their spatial geometry.

Being a home to over 900 people, Les Goujons is a complicated building. Hounded by social and technical issues, it has influenced its surroundings in many different ways.

And Les Goujons isn't the only mass social housing in Brussels. Located on the outskirts of the city, those project face often similar issues.



- Location -



- Location -



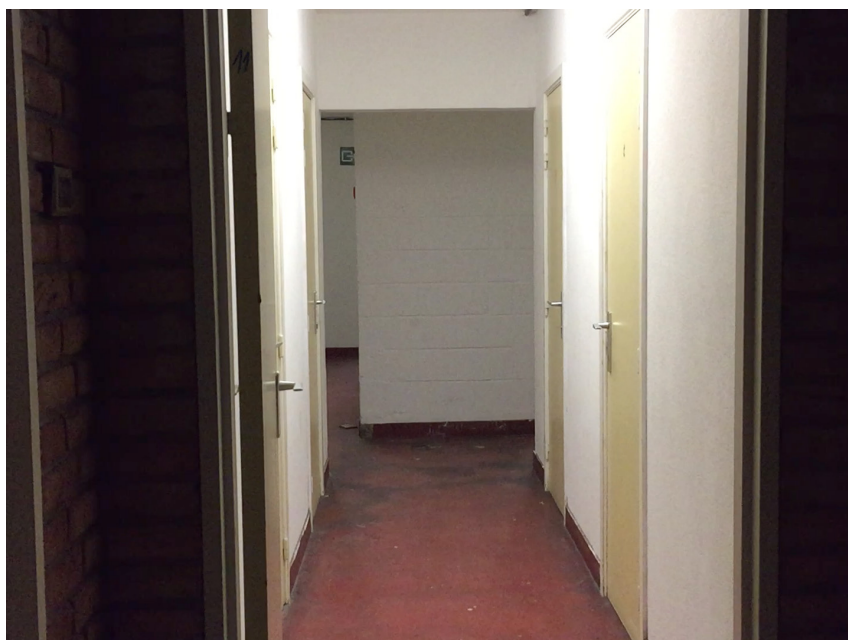


- Exterior -





- Exterior -



- Interior - common spaces -





- Interior - apartment -



## STATE

Built in 1970s as a solution to housing crisis, Les Goujons social housing complex is now in a state of decay and deterioration. It is a massive project, housing over 900 inhabitants, with 382 apartments spreading over 18 floors.

Initially the vision for the area suggested more than one building of that type, however that was never realised.

With main objective being providing large amount of apartments with limited economical means, the designed building focused more on density rather than quality.

30 years later many projects were proposed to improve its current state - ranging from renovation to designing adjoining restaurant as a community meeting place.



## ARCHITECT

The project focuses on density. Like in many cases of social housing, the economical aspect was of a great importance, therefore the building form strives to be efficient when it comes to apartment planning. Spreaded across 18 identical floors, the apartments are designed in a rational, yet not spacious enough manner.

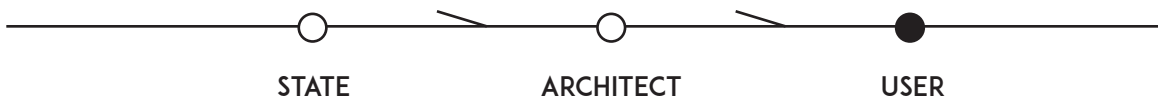
The repeatable floors are well visible in the facades as well. Identical windows, underlined by long balconies create a monotonous rhythm. The balconies seem to be a semi-private space: they offer an impressive view over the surroundings, while at the same time they remain quite anonymous due to their sheer amount.

The entrance hallways, despite being half-enclosed with glazing, are rather dark. The colourful wall paintings are supposed to brighten it up. They lead up to very rationally designed circulation system: three lifts are usually used by the inhabitants, while really small staircase is for left for emergencies only.

The narrow and long corridors, leading from the elevators to apartments, run along the whole length of the building and cut it in half. They do not encourage casual meetings or exchange of any forms of communications. The repeatable doors create a clear rhythm. Throughout the corridors materiality of different sections changes (brick and plaster are used), but they stay consistent in their narrow proportions and lack of access to daylight.

The apartments range for 37 to 60 sqm and usually are used by more people than they were designed for. Their inhabitants appreciate the views the apartments offer, but almost unanimously agree that they should be much more spacious.

The technical condition of the buildings leaves a lot to be desired: the building is not energy-efficient (poor termic isolation), acoustic isolation is not existant, and has serious safety issues (unstable facade elements).



## USER

Lacking any human-scale, directed at one social group, designed without any consideration of fostering community or allowing socialization, with age Les Goujons has gained a not-so-pleasant recognition.

The building does not offer any opportunities for socialisation. Social initiatives such as homework school “Arc en Ciel”, French language classes, or community canteen are still being organised by the residents, but not always within the building. The temporary feeling of the social housing accomodation results in negative appropriation. Perhaps

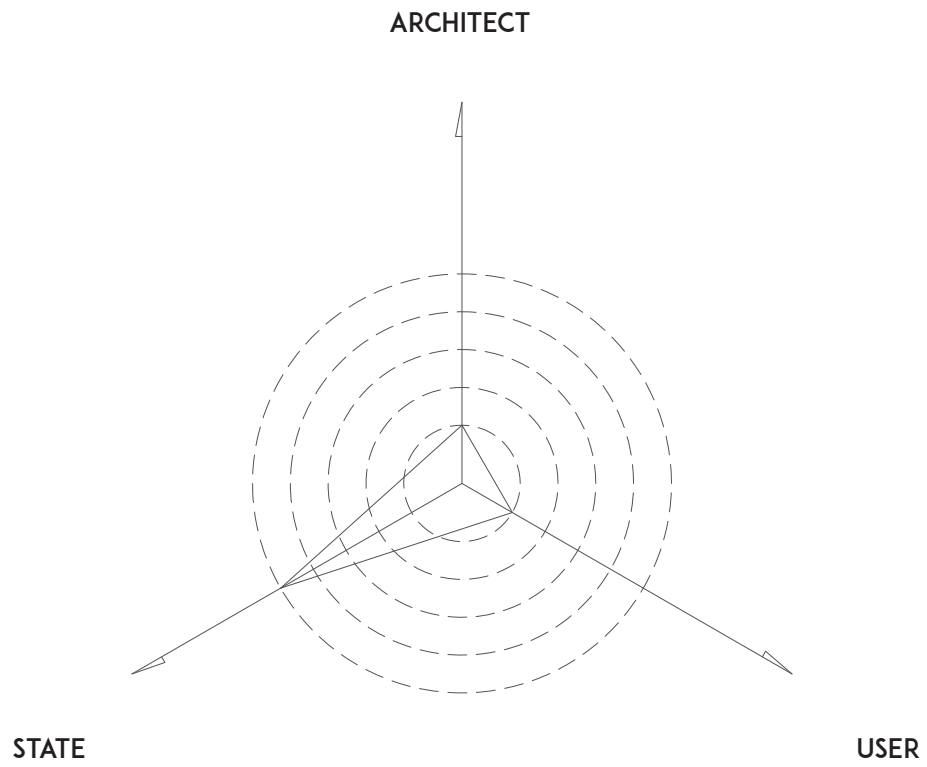
resulting from frustration, the surroundings of the building are often vandalised.

Other even more serious social issues occur as well, such as bulglaries and multiple arsons. The building was even a site of a shooting.

The experiences of living in the closest area vary: some people perceive LG residents as a close-knit community and appreciate its location, others are concerned about safety issues and technical condition of the building.



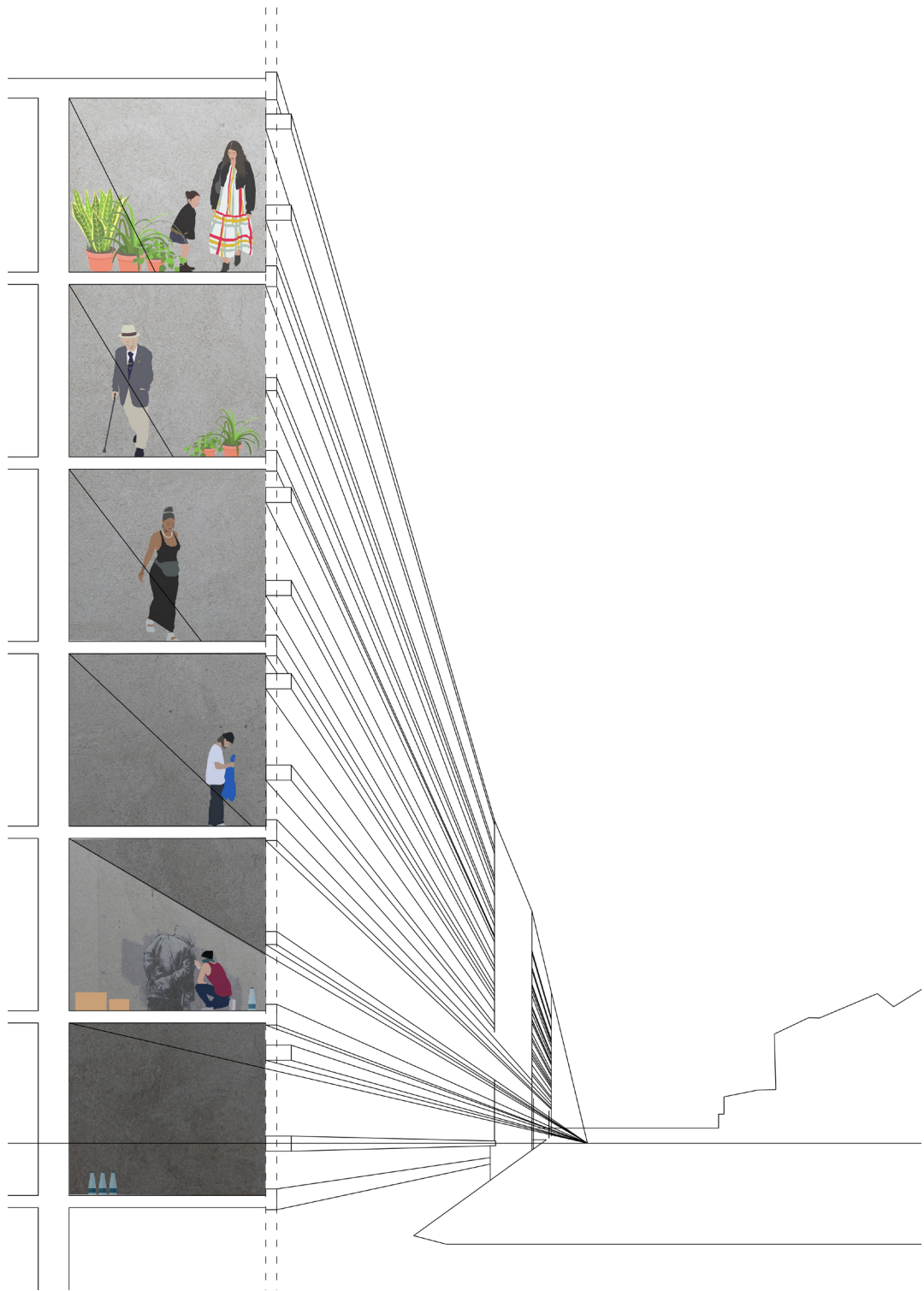




## LES GOUJONS, ANDERLECHT, BRUSSELS

- Conclusions diagram -





**STREETS IN THE SKY**



## 02. ROBIN HOOD GARDENS, LONDON

Robin Hood Gardens was a council housing estate designed by Alison and Peter Smithson in 1972. Built as a symbol of after-war progress,

The complex consisted of two blocks placed opposite each other: one 7-storey high and one 10-storey high. In total they offered 213 apartments, both single and two-storey.

Due to multiple issues, one of the blocks have been already destroyed, while the second one awaits for the same fate. A part of it was rescued by Victoria & Albert Museum as a substantial example of the British brutalism.

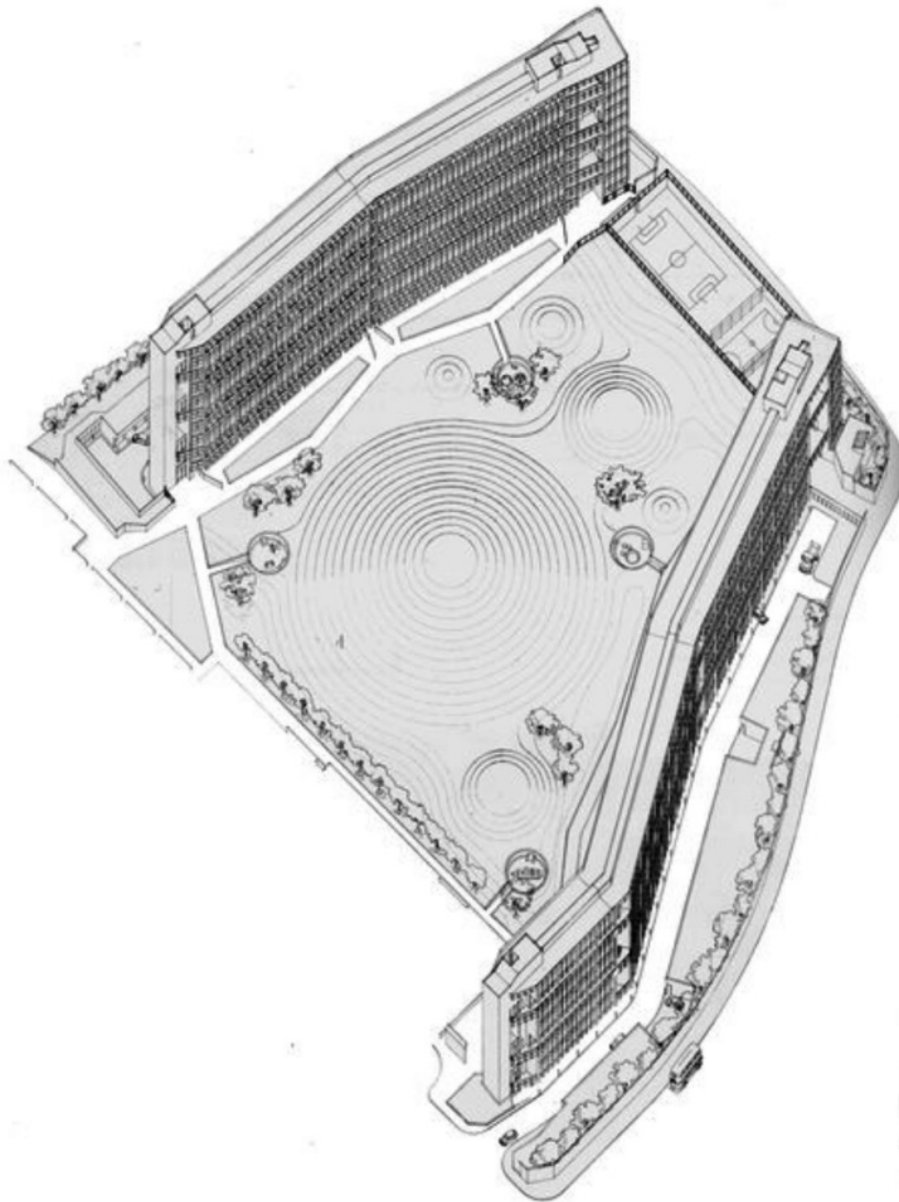


- Location -



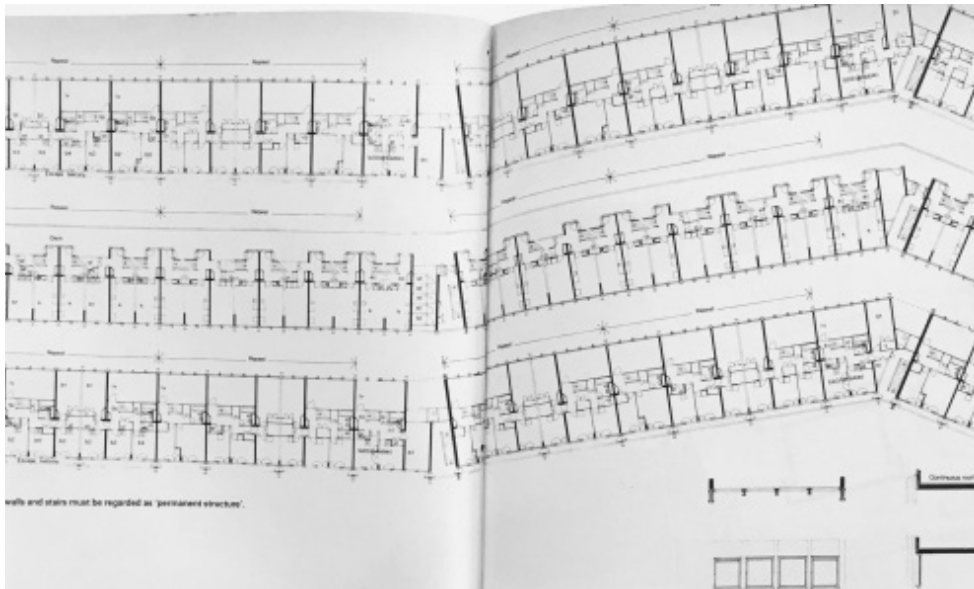
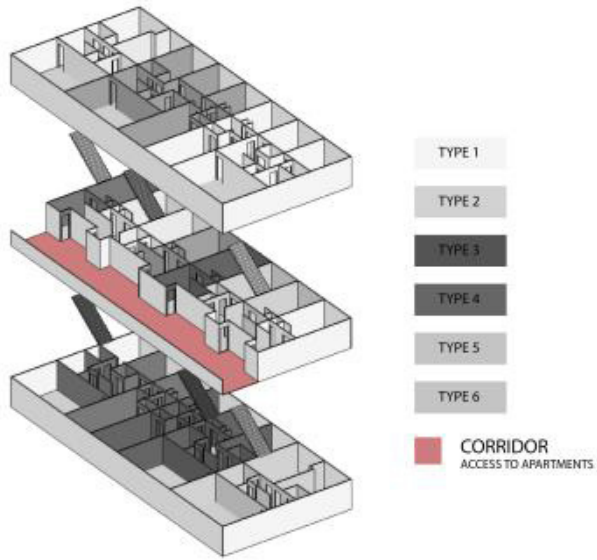


- The “streets in the sky” concept -



- Location -





- The “streets in the sky” concept -



- Before demolition -





- Proposed project -



## STATE

Sponsored by the Greater London Council, the project was finished in 1972. It was the only residential estate designed by the Smithsons. They believed that the building was “a demonstration of a more enjoyable way of living ... a model, an exemplar, of a new mode of urban organisation”, however that was largely commented on.<sup>1</sup>

In later document, the Smithsons commented: “We still feel under an obligation to give, to provide the best possible quality irrespective of what people expect and what treatment it is going to get. Nethertheless, it’s very depressing for the contractors, builders, and the subcontractors and the architect to feel that all of the effort they are going to put in it is going to be smashed up”.<sup>2</sup>

<sup>1</sup> - Victoria and Albert Museum. (n.d.). V&A · Robin Hood Gardens. [online] Available at: <https://www.vam.ac.uk/articles/robin-hood-gardens> [Accessed 2 Feb. 2020].

<sup>2</sup> - The Smithsons on Housing. (1970). [video] Directed by B. Johnson. BBC.



## ARCHITECT

Two buildings of the complex were placed framing the open space in between them, an enclosed area, a “stress-free zone”. Very horizontally-inclined, they bent slightly inwards in their plan.

The hill in-between the buildings was placed in order to prevent people from playing football, with a special sport court placed on the side of the site.

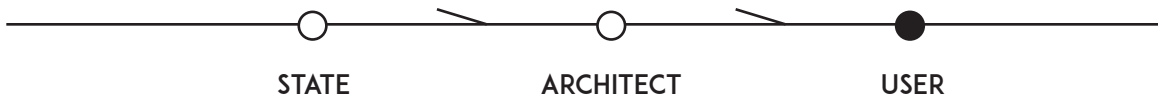
Providing 213 new apartments spread over 7 and 10 floors, the buildings were executed in prefab concrete slab blocks. They offer 2- to 6-bedrooms units.

One of the main concepts of the design were the “streets in the sky”

- long galleries giving access to the apartments. The idea was to extend the ground floor qualities, providing almost-street-like frontage to each of the apartments. It was, however, deemed unsuccessful. Long, not-very wide galleries were dark, and dead-ended. The enclosed staircases provided dark corners, blind spots and sparked some unrest.

Acoustic walls which were meant to block noise from the traffic turn to block more than that, enclosing the complex. Vertical facade elements were meant to protect from noise as well, however that was not entirely successful.

<sup>2</sup> - The Smithsons on Housing. (1970). [video] Directed by B. Johnson. BBC.





## USER

The project use was a tumultuous one. Crime and vandalism were blamed on the architecture, especially on the dead-end corners and galleries positioning. However, the maintenance of the building also left plenty to be desired. The materials did not age well and “the streets in the sky” were not used for much more as for quick passing by.

The architects blamed social issues rather than architectural: “In other places you see doors painted and pot plants outside houses, the minor arts

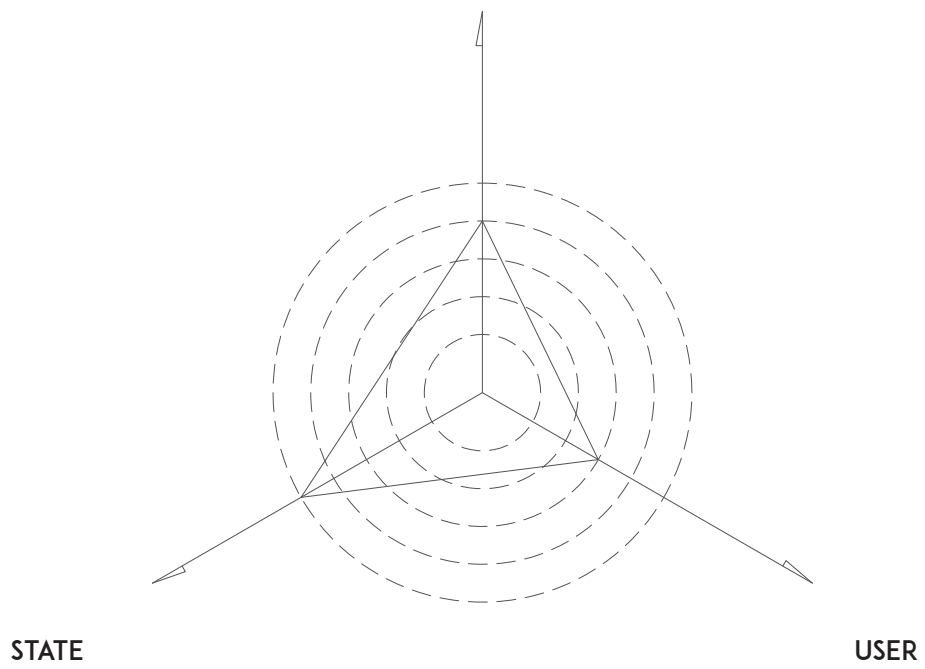
of occupation, which keep the place alive. In Robin Hood you don’t see this because if someone were to put anything out it people will break it.”<sup>1</sup>

As previously mentioned a new redevelopment plan is being executed for the area. One of the buildings was already destroyed, while second will soon follow. Architectural office of CF Moller designed an alternative proposal.

<sup>1</sup> - The Smithsons on Housing. (1970). [video] Directed by B. Johnson. BBC.



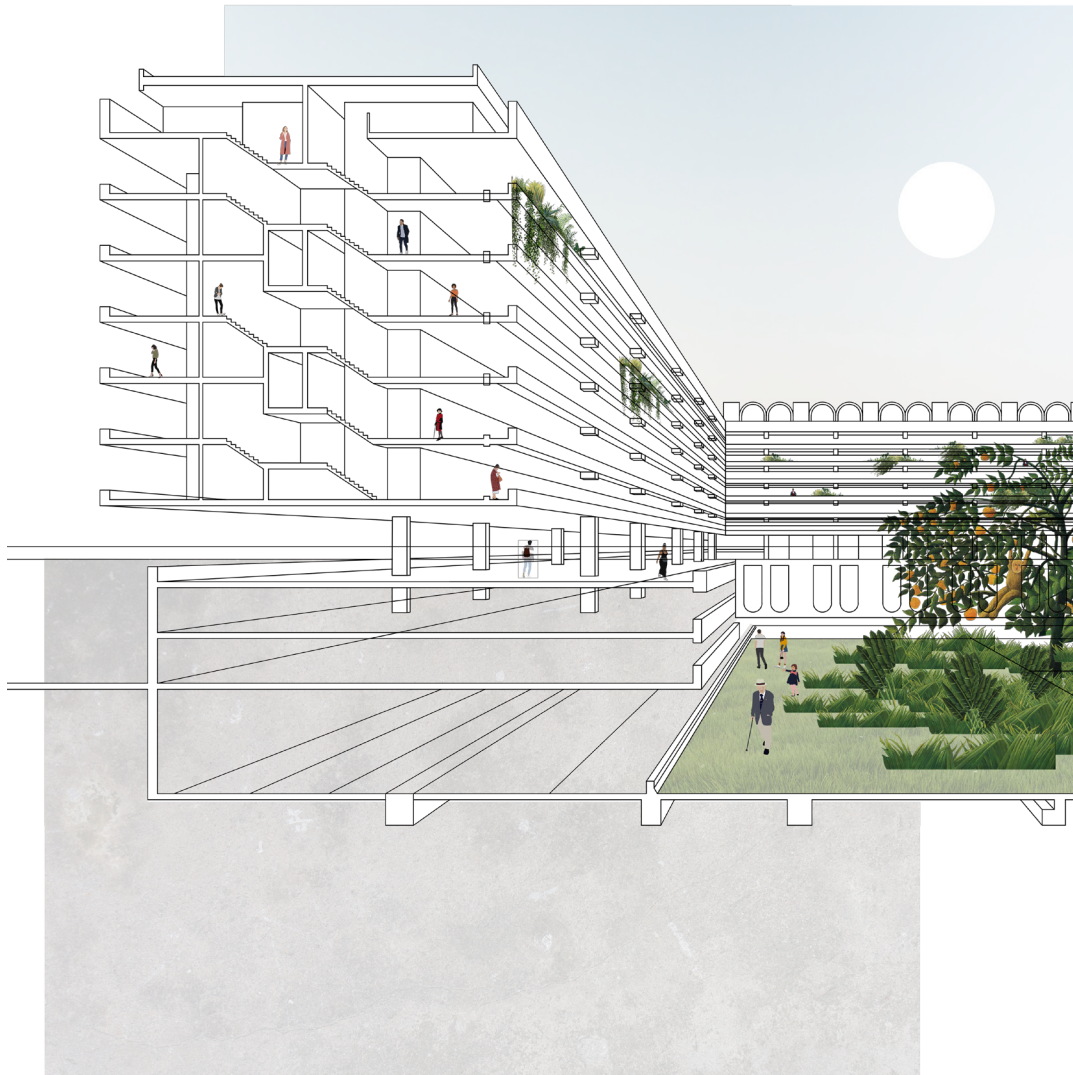
ARCHITECT



## ROBIN HOOD GARDENS, LONDON

- Conclusions diagram -





ENCLOSURE



### 03. THE BARBICAN ESTATE, LONDON

Designed in 1950s by Chamberlin, Powell and Bon, this massive complex is a prime example of British Brutalism.

It was meant to provide an answer to the post-war housing crisis.

A massive undertaking, consisting of numerous buildings enclosed the inner courtyard provided over 4 000 apartments. The complex consisted

not only from residential units, but integrated other public functions and cultural institutions, all connected by elevated walkways.

The whole complex has rather defensive nature, recalling a bit fortress architecture. The introverted courtyards seem very private, and therefore - very calm.



- Location -





- Aerial walkways -



- Brutalism -





- Livability -



## STATE

The development was built on the grounds destroyed during Second World War. It was not designed strictly as a council housing, but still owned and managed by City of London. Directed at middle class, the complex attracted its future residents with varied cultural programme.

“With the Corporation of London as a client, the project was intended to create a mixed society of residents,

but the change in politics brought in during Margaret Thatcher’s term as Britain’s prime minister inevitably led to the majority of homes being sold to private owners and landlords. These days the address is highly sought after, with properties selling for as much as £4 million.”<sup>1</sup>

<sup>1</sup> - Frearson, A. (2014). Brutalist buildings: Barbican Estate by Chamberlin, Powell and Bon. [online] Dezeen. Available at: <https://www.dezeen.com/2014/09/13/brutalist-buildings-barbican-estate-chamberlin-powell-bon/> [Accessed 2 Feb. 2020].



## ARCHITECT

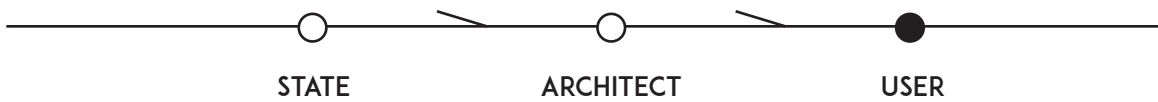
Apart from successfully mixing the functions and allocating the massings of the buildings smartly, the project also proposed creation of inter-connected series of open spaces, well-designed and managed when it comes to landscape design.

Furthermore, the attention to detail such as references to old city wall, running to though the site, half-circle shape as a recurring motive and decorative elements, resembling medieval fortress, result in an atmosphere of enclosed, safe and private residential estate.<sup>1</sup>

100 different apartments were designed, ranging from 1-bedroom, to 4-bedrooms apartments. With the advance of their careers and position on social ladder, the residents could have upgraded their apartments as well. They were distributed between three 43-storey towers – known as Shakespeare, Cromwell and Lauderdale – and a series of 13 seven-storey blocks.<sup>2</sup>

<sup>1</sup> - YouTube. (n.d.). The Barbican: A Middle Class Council Estate. [online] Available at: [https://www.youtube.com/watch?v=FFDpqRxym\\_A](https://www.youtube.com/watch?v=FFDpqRxym_A) [Accessed 12 Feb. 2020].

<sup>2</sup> - Frearson, A. (2014). Brutalist buildings: Barbican Estate by Chamberlin, Powell and Bon. [online] Dezeen. Available at: <https://www.dezeen.com/2014/09/13/brutalist-buildings-barbican-estate-chamberlin-powell-bon/> [Accessed 2 Feb. 2020].





## USER

This mass housing project, or residential estate as some prefer to call it, was never really meant as a social housing (or council housing). And despite being designed for middle class, nowadays the project is mostly accessible to the more economically privileged part of the society.

Perhaps, this is partly why it still functions so well today - it high maintenance costs of energy consumption and security.

Beloved by some for its complexity

and theatrical form, proclaimed “The Ugliest Building of The Year” by others, the Barbicane Estate still raises mixed opinions.<sup>1</sup>

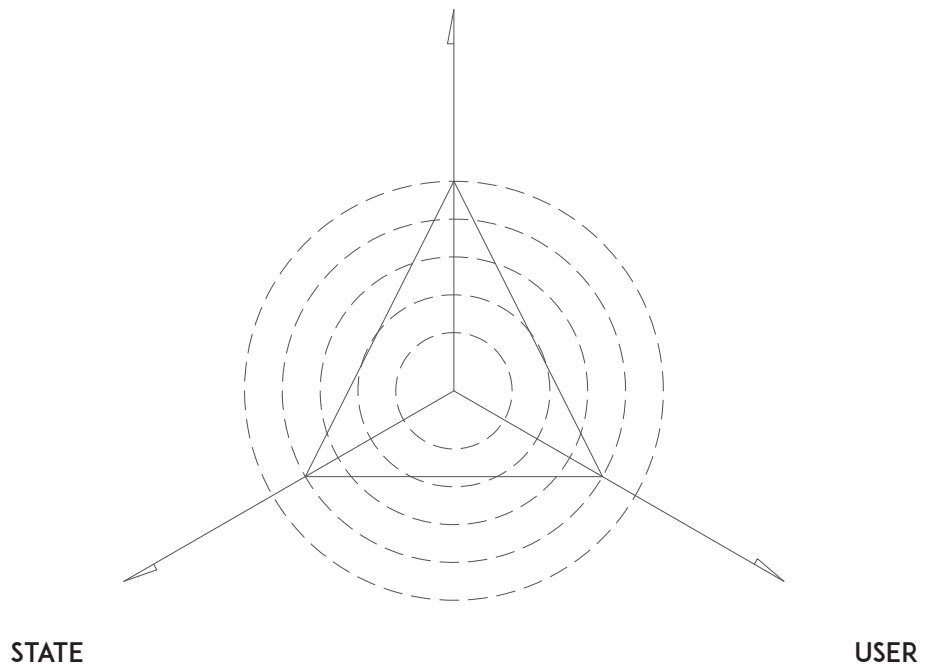
However different those opinion might be, the current users value quality of the materials used, the range of available apartments, height of the room (higher than average) and of course, the central location.

“The simple reason the Barbican has succeeded where most “concrete estates” have failed is money.”<sup>2</sup>

<sup>2</sup> - Bloomfield, R. (2019). What it's like to live at the brutalist Barbican Estate 50 years on. [online] Homes and Property. Available at: <https://www.homesandproperty.co.uk/property-news/the-barbican-estate-at-50-why-londons-brutalist-concrete-housing-estate-and-grade-iilisted-landmark-a131876.html> [Accessed 3 Feb. 2020].



ARCHITECT



## THE BARBICAN ESTATE, LONDON

- Conclusions diagram -





**DYSTOPIA**



## 04. L'ESPACE DE ABRAXAS, NOISY-LE-GRAND, PARIS

The monumental complex of surprising form is located in Noisy-Le-Grand, in the suburbs of Paris. Envisioned by Ricardo Bofill in 1983, it was designed to be a landmark, a building of impact, an alternative to post-war mass housing.

Atypical in scale and form, the complex differentiate itself from the surroundings.

Created in parts as a social housing, it consists of nearly 600 dwellings. However, despite great intentions, the project is currently facing many problems, partially resulting from the design, not so different from the complexes it was supposed to be an alternative to.



- Location -





- Monumental form -



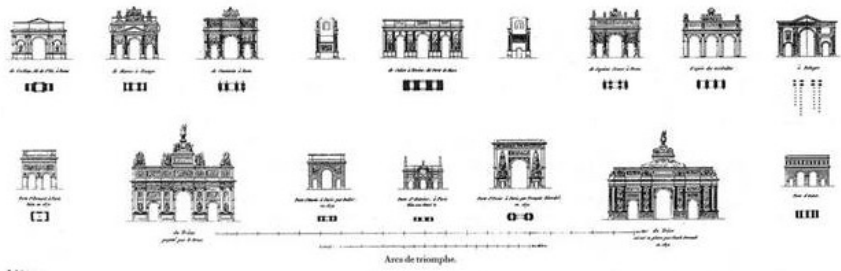


- Monumentalism of form -



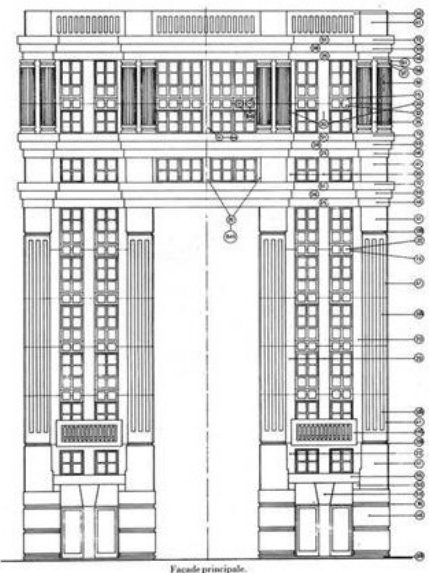
- Monumentalism of form -



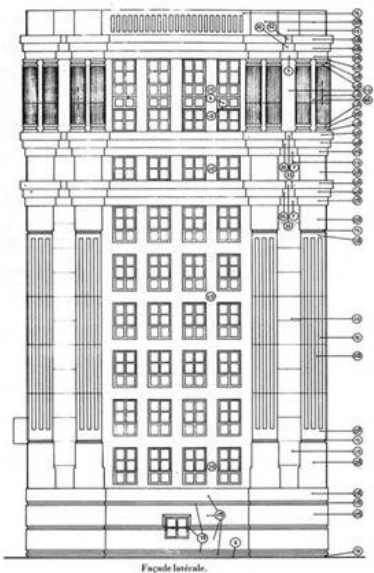


Arce de triomphe.

L'Arc.  
The Arc.  
L'Arc.



Façade principale.



Façade latérale.



Jardin du Peyrou, Montpellier.



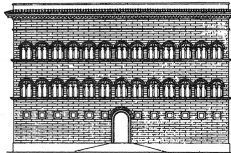
Arce pour "les Halles".



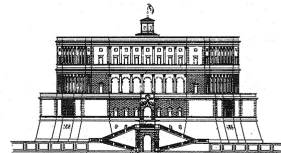
Leques, 14 Juillet 1790.



Arce di Meire 1795.

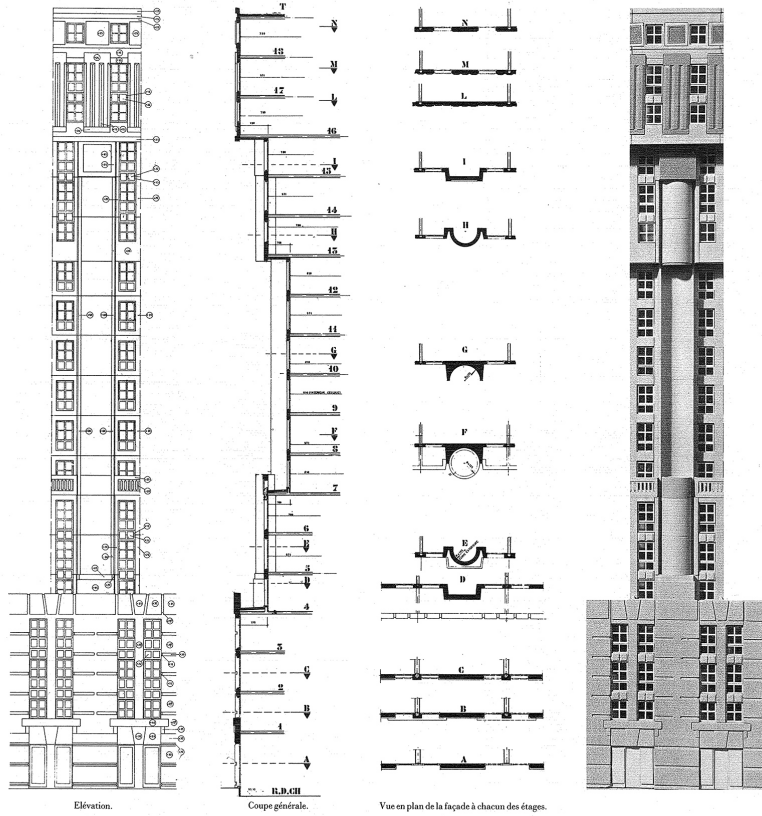


Alberti, Palazzo Strozzi, Firenze.



Vignola, la Caprarola.

Détail façade rue.  
Detail, street façade.  
Particolare della facciata verso la strada.



- Ornament -



## STATE

Designed as a monument, the complex was meant to be a new beginning for a newly-formed neighbourhood.

In 1960s, a regional planning (“La politique des villes nouvelles françaises”) was implemented. One of the towns created based on that policy was Marne la Vallée, consisting of 26 communes, including Noisy-Le-Grand, where Les Espaces d’Abraxas is located. Aimed not to become a dormitory suburb, the plan envisioned a fully autonomous neighbourhood.

Conceived with idealistic visions of the architect, the project was

meant to improve the everyday life existence of its residents, however in the current state it is haunted by many different issues.

Asked after 30 years to comment on the project, Ricardo Bofill answered: “Je n’ai pas réussi à changer la ville”<sup>1</sup> (eng: “I did not manage to change the city”).

The subject of demolishing the whole complex was regularly brought up, however currently the architect was asked not only to help with refurbishing the old complex, but also to design a new one in a close proximity, called “Les Jardins d’Abraxas”.

<sup>1</sup> - Camus, E. (2014). Ricardo Bofill : « Je n’ai pas réussi à changer la ville ». [online] Le Monde.fr. Available at: [https://www.lemonde.fr/societe/article/2014/02/08/ricardo-bofill-je-n-ai-pas-reussi-a-changer-la-ville\\_4359887\\_3224.html](https://www.lemonde.fr/societe/article/2014/02/08/ricardo-bofill-je-n-ai-pas-reussi-a-changer-la-ville_4359887_3224.html) [Accessed 27 Jan. 2020].





## ARCHITECT

The complex consists of three main buildings: “Le Palacio”, “Le Théâtre”, and “L’Arc”, which were supposed to create a stage composition.

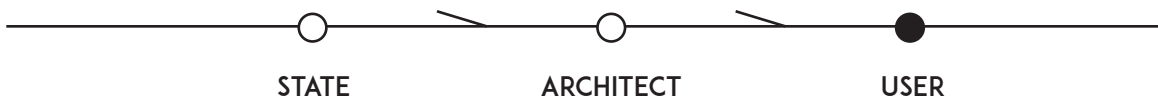
A semi-circular form of “The Theatre” encloses inner courtyard from one side, while “The Palace” is supposed to form a backstage. In the centre the smallest “The Arch” building is positioned, subdividing the complex and providing the focal point of the complex.

The whole complex provides over 500 dwellings (20 in “The Arch”, 130

in “The Theatre” and 441 in “The Palace”). The apartments consists of 2 to 5 rooms and are designed as a single-storey apartment or duplexes.

Designed in a post-modern style, all buildings are heavily decorated with various ornaments making references to ancient architecture, as well as French and Spanish architectural heritage.

All those were designed as a complex prefabricated concrete elements, assembled on site with no visible joints.



## USER

The project was designed as a “celebration of everyday life”. Grand in its form and rich in ornaments, the complex, however, did not facilitate the anticipated change.

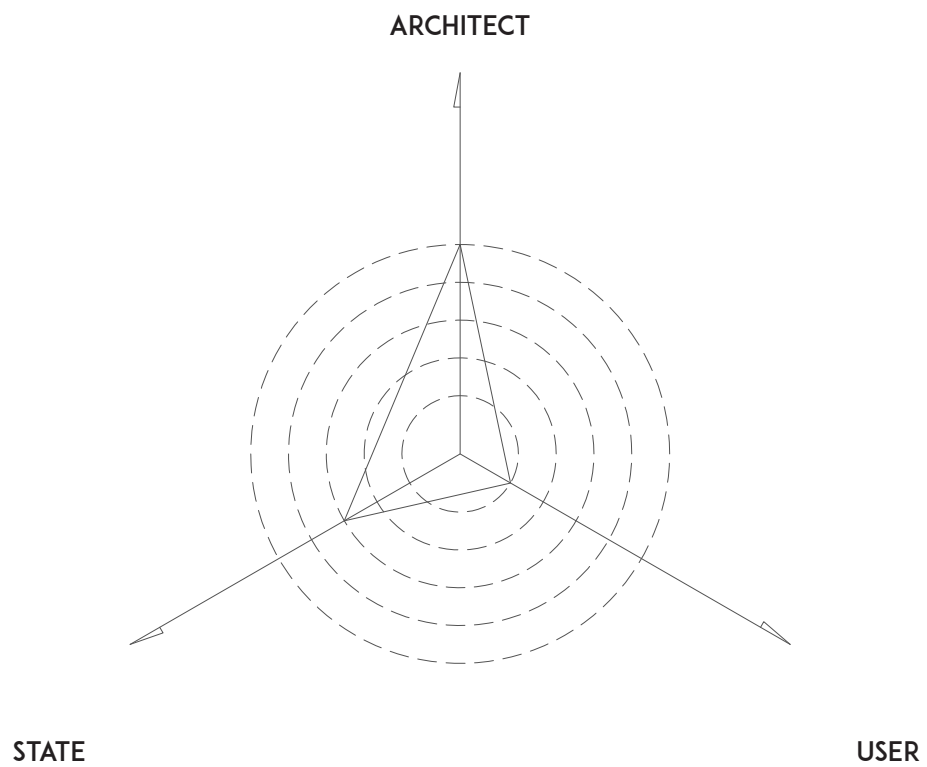
Its scale, complexity of form providing unsafe areas, overwhelming presence of concrete, uninviting landscape design and unaccessible green roofs did not create a homely environment.

Contrary, the complex has been haunted by many problems and regularly visited by police.

The complex is very much introverted and does not make many connections to the outside. It also does not provide any other functions other than residential - the retail and leisure functions are lacking, and so are the community spaces. Currently, the complex offers more to the visitors than to its residents.

The project is soon to be refurbished, and the lacking social/leisure functions are supposed to be found in a new, adjoining complex.





## L'ESPACE DE ABRAXAS, NOISY-LE-GRAND, PARIS

- Conclusions diagram -





## PARTICIPATION





## 05. MÉMÉ (MAISON DES MÉDECINS), SINT-LAMBRECHTS-WOLUWE, BRUSSELS

Considered a prime example of participatory architecture, Maison Médicale, or Mémé, is a student dormitory located in Sint-Lambrechts-Woluwe, one of the municipalities of Brussels-Capital region.

Proclaimed a democratic architecture icon, it was a result of a two-years long cooperation between the architect, Lucien Kroll, and medical students of the Université catholique de Louvain.

Due to conflicts, not whole project was executed.

The designed was guided by Kroll's idea that "Uniformity cannot be inhabited, and that people can only live in disorder"<sup>2</sup>.

According to L. Kroll: "Repetition is a crime! Industrialized production can only be tolerated if it does not reduce the number of elements, if all exceptions to the rules are accepted, and if the shape and texture of the architecture are not determined. The windows that we chose are different in size and consist of many materials; the structures are very heterogeneous."<sup>3</sup>

<sup>2</sup> - Van Gerrewey, C. (2016). Wonen in vrijheid na 1968: Charles Vandenhove versus Lucien Kroll – Archined. [online] Archined. Available at: <https://www.archined.nl/2016/09/wonen-in-vrijheid-na-1968-charles-vandenhove-versus-lucien-kroll/> [Accessed 16 Feb. 2020].

<sup>3</sup> - Ibidem



- Location -



- An exception in Viennese facade -





- Organic form approach in facade - greenery and form -



- Organic approach in interior - undulating floor -

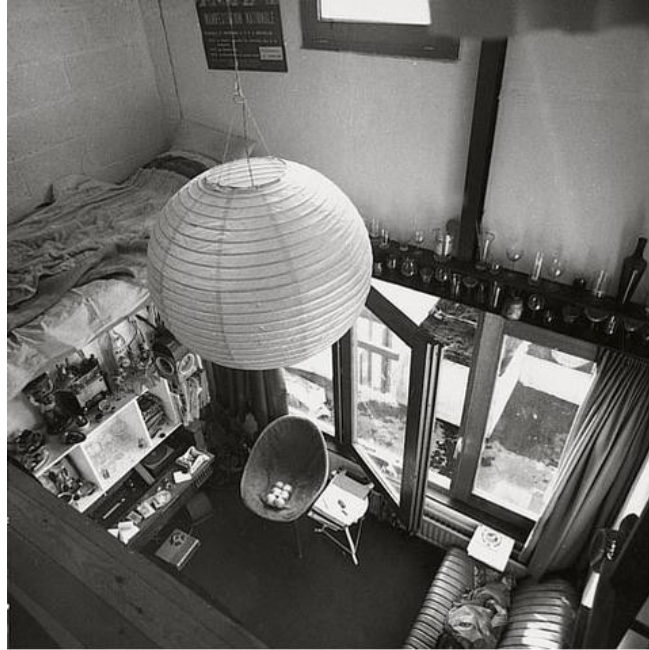


- La Maison Médicale (Mémé), Lucien Kroll -





- Résidence Lucien Brull by Charles Vandenhove, with whom Lucien Kroll have worked -



- Interior -





- Interior -



## STATE

The project was an effect of a two-year long collaboration between the architect and the students of the and medical students of the Université catholique de Louvain.

After clearly stating their objections to the previous, functionalist plans, the students were invited to be a part of the design process, especially in the light of the events of May '68. They rejected all architects from list

provided by the university and after some consultations they have chosen Lucien Kroll to carry out the project.<sup>2</sup>

The university authorities did not participate in the project consultations. They did, however, briefly fire Kroll, and asked him to re-join the project some time later.

<sup>3</sup> - Van Gerrewey, C. (2016). Wonen in vrijheid na 1968: Charles Vandenhove versus Lucien Kroll – Archined. [online] Archined. Available at: <https://www.archined.nl/2016/09/wonen-in-vrijheid-na-1968-charles-vandenhove-versus-lucien-kroll/> [Accessed 16 Feb. 2020].

<sup>3</sup> - Blundell Jones, P. and Canniffe, E. (2007). Modern architecture through case studies, 1945-1990 (9780750663748) MPE-0162. Elsevier.



## ARCHITECT

Kroll's work was described by Bekaert as architecture that "has something direct, something folk. She no longer wants to be architecture. She is afraid of being architecture. Not entirely wrong, we think. (...) There is, however, a risk that architecture will then become something coincidental and that it will not have its proper function, in particular to be a structure of and for life,"<sup>4</sup>

In his project of Maison des Médecins, he celebrated choice: "There are twenty-seven windows in the catalogue [...] Most architects choose two or three. Why not use all twenty-seven?"<sup>4</sup>

The final effect of the project was a result of long consultation with the students of the university. Subjects of everyday routines, activities and interactions between users were discussed in detail.

The relation between common spaces were talked over with use of simple functional models.

In later stages, personal preferences of the students reflected the later design of their private dorm spaces.<sup>4</sup> Some students request standard rooms, others have special wishes e.g. when it comes to the height of the room (one student, particularly tall, requested a 7-meter-high room; that room apparently has been especially popular with later students) The rooms are separated with temporary wooden walls, so they can be connected if needed<sup>6</sup>

Although irregular in characted, the rooms were based around orthogonal and regular grid. That did not though result in monotnous facades: balconies and insets were often used, and many different cladding materials of various colours were applied.<sup>7</sup>

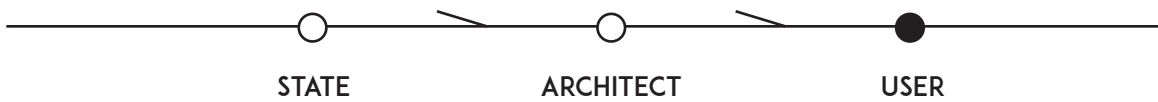
<sup>3</sup> - Van Gerrewey, C. (2016). Wonen in vrijheid na 1968: Charles Vandenhove versus Lucien Kroll – Archined. [online] Archined. Available at: <https://www.archined.nl/2016/09/wonen-in-vrijheid-na-1968-charles-vandenhove-versus-lucien-kroll/> [Accessed 16 Feb. 2020].

<sup>4</sup> - Blundell Jones, P. and Canniffe, E. (2007). Modern architecture through case studies, 1945-1990 (9780750663748) MPE-0162. Elsevier.

<sup>5</sup> - Ibidem

<sup>6</sup> - Van Gerrewey, C. (2016). Wonen in vrijheid na 1968: Charles Vandenhove versus Lucien Kroll – Archined. [online] Archined. Available at: <https://www.archined.nl/2016/09/wonen-in-vrijheid-na-1968-charles-vandenhove-versus-lucien-kroll/> [Accessed 16 Feb. 2020].

<sup>7</sup> - Blundell Jones, P. and Canniffe, E. (2007). Modern architecture through case studies, 1945-1990 (9780750663748) MPE-0162. Elsevier.



## USER

During the project students were involved throughout all design stages. Their opinions were influencing design not only of their private rooms, but also common spaces. Some of the private rooms were designed in more standard way, some were heavily personalised. Surprisingly, apparently those rooms are the most popular amongst

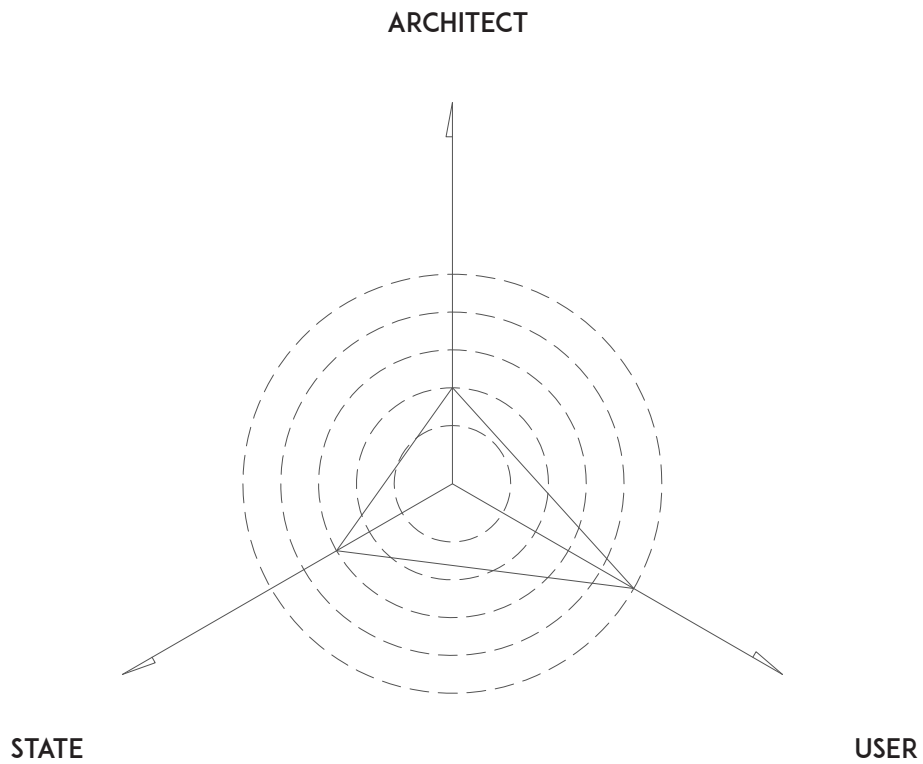
newcomers - with competitions being organised for the winners to take the weirdest room of all.<sup>7</sup>

The maintenance of the complex for many years left a lot to be desired.

<sup>7</sup> - Blundell Jones, P. and Canniffe, E. (2007). Modern architecture through case studies, 1945-1990 (9780750663748) MPE-0162. Elsevier.



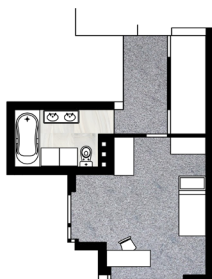
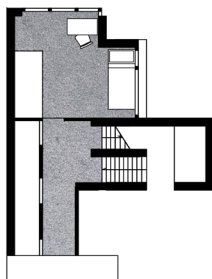
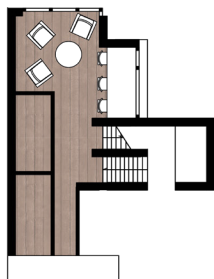
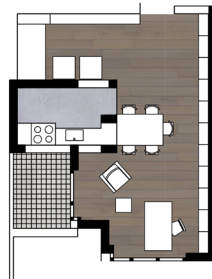
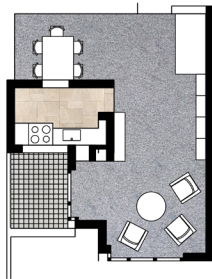
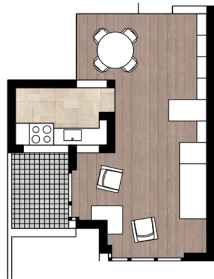
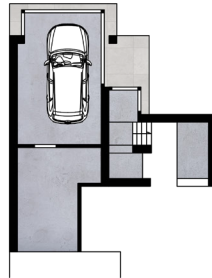
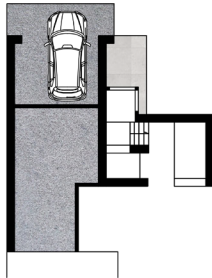




## MÉMÉ, MAISON DES MÉDECINS, BRUSSELS

- Conclusions diagram -





CHOICE



## 06. DIAGOONWONING, DELFT

The project was realized between 1970 and 1971. Originally planned as a 324-unit development in Vaassen, near Apeldoorn, the idea was in the end firstly used in an experimental 8 houses development in Delft. Herman Hertzberger's idea was to give the users freedom of choice by offering them various possibilities:

“What is suggested here is to try to make prototypes of homes that offer substantially more room for individual differences in housing and living style and provide residents the opportunity to think for themselves and to discover what is usually forced upon them. Based on these prototypes it will be possible to

ascertain what people expect from their homes, and what each one will do in its own way, when they are given wider opportunities. From evaluation of this experiment one can begin to see what is essential for the residents”<sup>1</sup>

The houses were grouped in clusters: a three-dwelling and five-dwelling with a passage in between them. The 8 houses were prototypes, however the clusters, as an urban element, could be repeated. The street and the houses were treated as a “carcass” and were open to extending or finishing by the inhabitants themselves.<sup>2</sup>

<sup>1</sup>- von der Nahmer, R. (n.d.). Diagoonwoning Delft - Robert von der Nahmer. [online] Diagoon Woning. Available at: <https://www.diagoonwoningdelft.nl/> [Accessed 28 Jan. 2020].

<sup>2</sup> - Ibidem

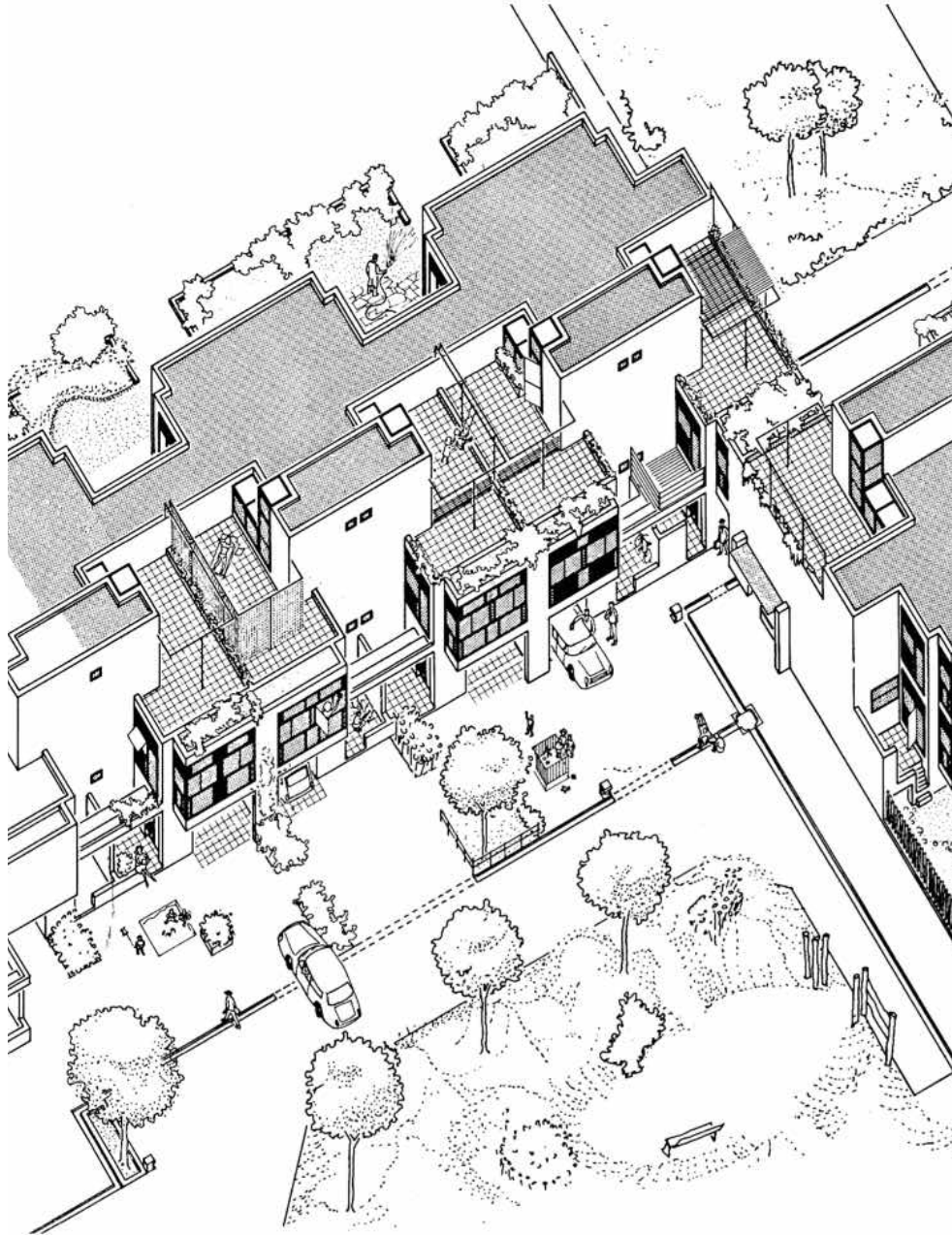
## 09. DIAGOONWONING, DELFT



- Location -

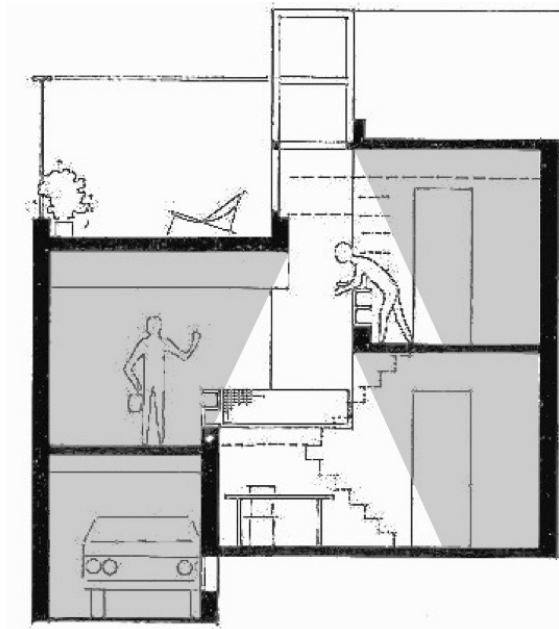
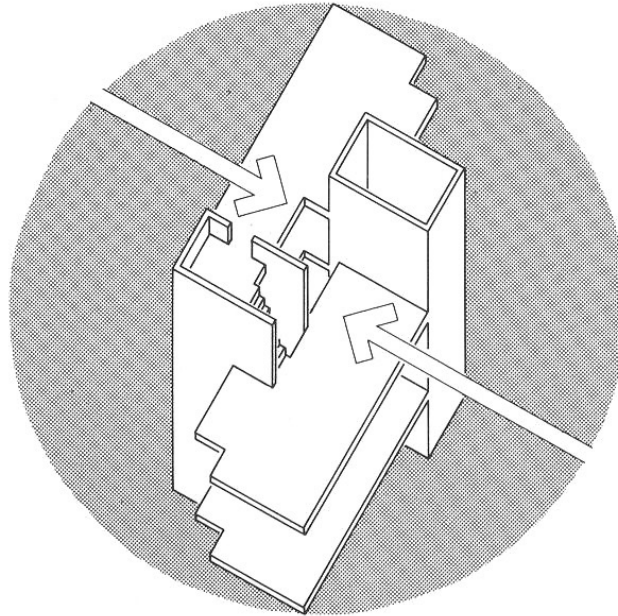


## 09. DIAGOONWONING, DELFT



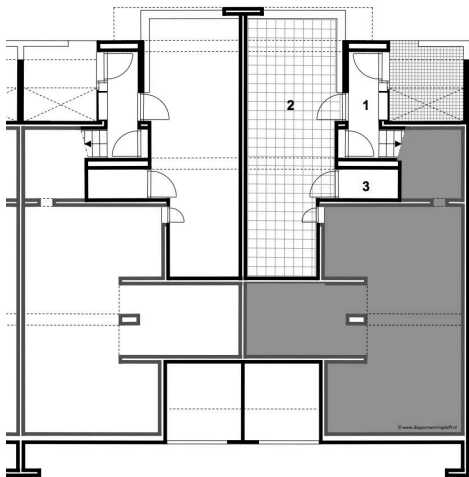
- Urban plan -

## 09. DIAGOONWONING, DELFT

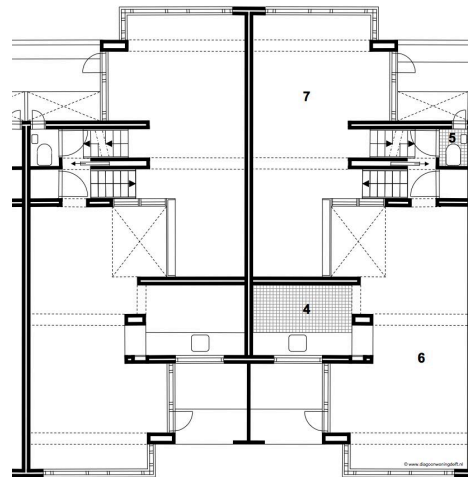


- Building geometry design - the skylight-lit core in the centre -

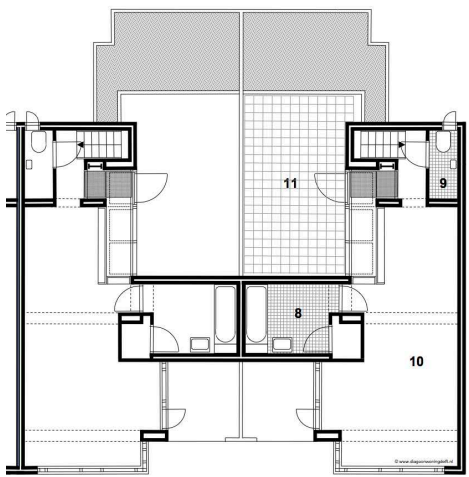
# 09. DIAGOONWONING, DELFT



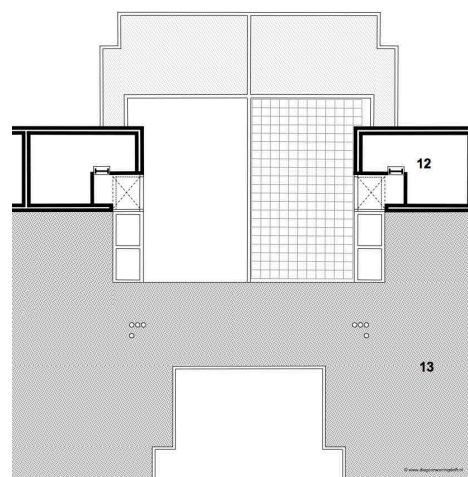
**Level 0**  
 1 entrance  
 2 carport  
 3 closet



**Level 1 & 2**  
 4 kitchen  
 5 toilet  
 6 floor 1410'  
 7 floor 2820'



**Level 3 & 4**  
 8 bathroom  
 9 toilet or closet  
 10 floor 4230'  
 11 floor 5640' / roof



**Level 5**  
 12 tower room  
 13 roof 7050'

- Example floor plans -



## 09. DIAGOONWONING, DELFT



-Exterior -

## 09. DIAGOONWONING, DELFT



- Exterior -



## 09. DIAGOONWONING, DELFT



-Interior -

## 09. DIAGOONWONING, DELFT



- Interior -





## STATE

The project was originally intended for Vaassen near Apeldoorn. However they were built much later in Delft (1970-1971), in the post-war expansion area Buitenhof, as “experimental housing”<sup>1</sup>.

The social aspect of the design was extremely important: “For Hertzberger were living together, the social context of the neighbourhood, and the solidarity of the people, perhaps more important than the way of life of the individual”<sup>2</sup>. The relation between private outdoor space and public outdoor space was meant to be blurred. The sites were not fenced, creating a close relation to the street in order to promote

“accidental meetings”. The backyards and roof terraces could be shared. The passage located between the clusters, in the corner, was designed to allow more comfortable crossing instead of walking around the whole project.

However, not all ideas were kept as the design was contrasted with reality. The passage was closed after a year due to disturbances. The street side gardens were separated with hedges and flower containers, the gardens - with fences and the roof terraces - with man-sized partitions.<sup>3</sup>

<sup>1</sup>- von der Nahmer, R. (n.d.). Diagoonwoning Delft - Robert von der Nahmer. [online] Diagoon Woning. Available at: <https://www.diagoonwoningdelft.nl/> [Accessed 28 Jan. 2020].

<sup>2</sup> - Ibidem

<sup>3</sup> - Ibidem



## ARCHITECT

Architecturally, the idea of John Habraken for supports and infill seemed to be an inspiration for the project. The concept assumed creating a base that can be filled by the inhabitants themselves.

The support consisted of concrete bearing walls, oversized concrete beams and reinforced concrete floors.

The building is designed around spaces. The core of the building is the atrium: the skylight-covered void in the middle of the house connects all open spaces. The spaces are lightened up from different sides and vary in height, area and thus – volume. These varying qualities create completely different atmospheres and make the project unique<sup>4</sup>.

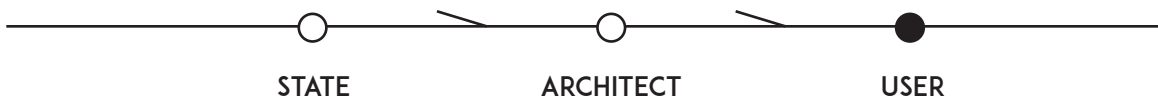
Two “cores” are fixed: the stairs and wet areas. Remaining L-shaped spaces can be arranged to have various functions. As open as the original building seems, it also offers multiple

possibilities of adaptation to needs of the its user. The open spaces can be transformed into closed off rooms with traditional walls or prefabricated cabinet systems. The middle space can be transformed into two rooms. The small first floor terrace, fulfilling the function of entrance roofing, can be extended onto the void. The small ground floor terrace can be built up and the adjacent rooms can be extended.

All the rooms have possibilities of alteration: there is a possibility to create a home for different models of families. For example, for family of 2 it might be more comfortable to leave all the spaces open, use the middle floor as an open office space and retain the function of a garage. However, the 2+2 family might change the middle floor into two kids’ room and transform the garage<sup>5</sup>.

<sup>4</sup>- von der Nahmer, R. (n.d.). Diagoonwoning Delft - Robert von der Nahmer. [online] Diagoon Woning. Available at: <https://www.diagoonwoningdelft.nl/> [Accessed 28 Jan. 2020].

<sup>5</sup> - Ibidem



## USER

Hertzberger's main idea of choice was fulfilled in this development. The users were given multiple possibilities of choosing. In some cases, they have decided to use that possibility and altered their homes to their needs. In others – they have kept the original proposition.

It seems that the users were much more eager to carry out major changes as they were moving in. Being given possibility of altering the window frame colour was not a reason enough for anyone to attempt to do it. It seems that the main motor of change was strong necessity. The users seem to change the building only in substantial manner: if they decide to divide the rooms, they would do it with walls not with prefabricated cabinets. They would decide to extend the house, but not to change the colour of the frames. They seem to be motivated more by need for function change, rather than change of aesthetics or differentiating themselves from others.

According to Robert von der Nahmer, an architect living in one

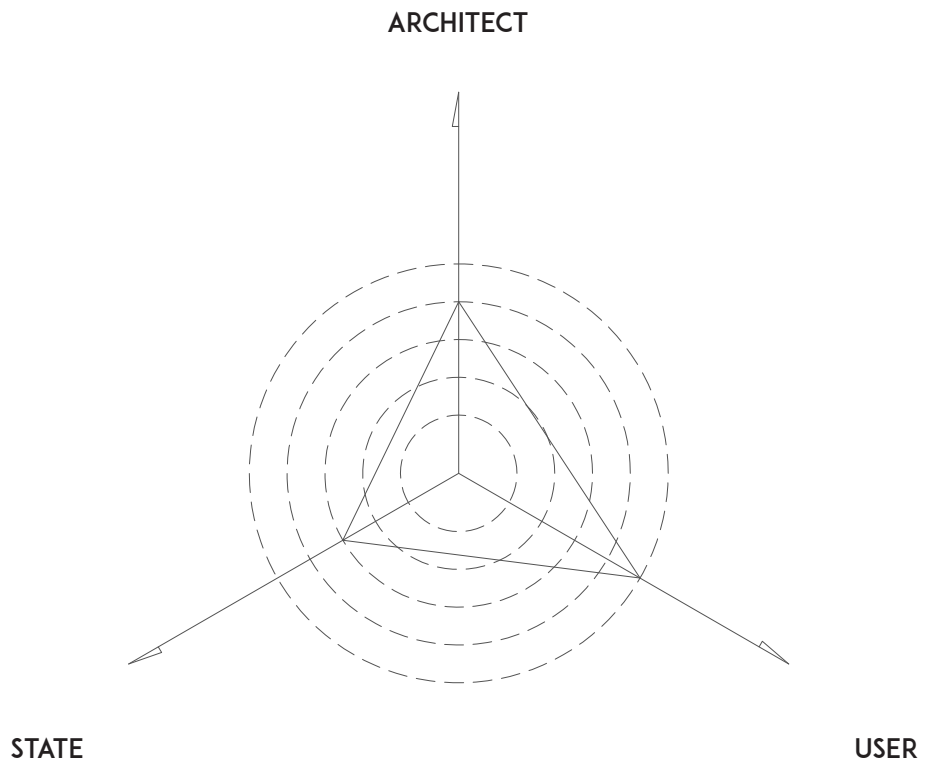
of the houses: "Living in a house is conventional activity. Nobody thinks about it. Everybody is used from their child home to the same way of using a house. And only when people have a lot of money to make their own house that's the first time when they think about ways to change the way they always were used to live in a house. But even then it is quite hard to change the behaviour. [...] People think about living in a house in quite functional way."<sup>6</sup>

What is special about the house is not whether the users decided to change the house, but the fact that the houses offer so many possibilities. The author of the project does not seem to want to negotiate with the human nature and their force of habits, but silently attempt to support them in a change, when they decide to actually pursue it. All of the houses seem to be ready to adapt to different stages of the life: they can be adapted when the new users are moving in, when their family is expanding or when it is reducing.<sup>7</sup>

<sup>6</sup>- von der Nahmer, R. (n.d.). Diagoonwoning Delft - Robert von der Nahmer. [online] Diagoon Woning. Available at: <https://www.diagoonwoningdelft.nl/> [Accessed 28 Jan. 2020].

<sup>7</sup> - Ibidem





## DIAGOONWONING, DELFT

- Conclusions diagram -





## CONCLUSIONS



## CONCLUSIONS

Lacking any human-scale, directed at one social group, designed without any consideration of fostering community or allowing socialization, with age many social housing projects have gained a not-so-pleasant recognition.

Projects similar to Les Goujons were built all over Europe and are often facing the same problems: partial vacancy, neglect and poor safety condition, short life-span of housing and pauperization of its inhabitants.

Due to lack of political support, changing demographics and economics, public housing has become not a temporary solution,

but a solution for chronically poor. Propelling the vicious cycle, the economic situation of the residents makes them even more vulnerable for social difficulties.

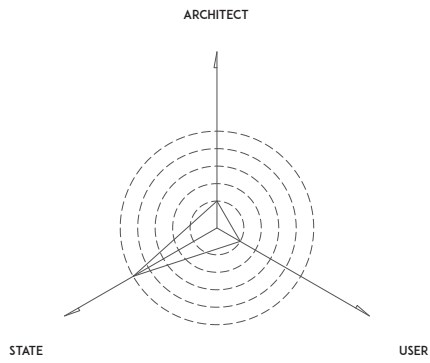
Housing offers more than just a shelter: it provides stability (both in terms of economics and in terms of peace of mind), feeling of security and a sense of belonging.

Current social system does not always foster the situation of those who are in need.

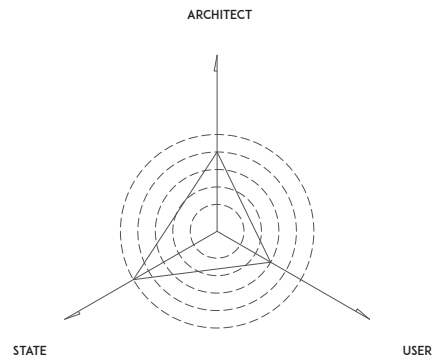
Could social housing be designed in a better way?



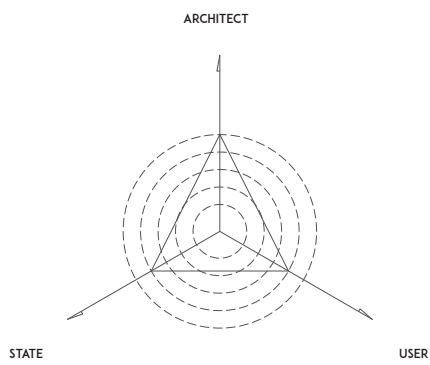
# CONCLUSIONS



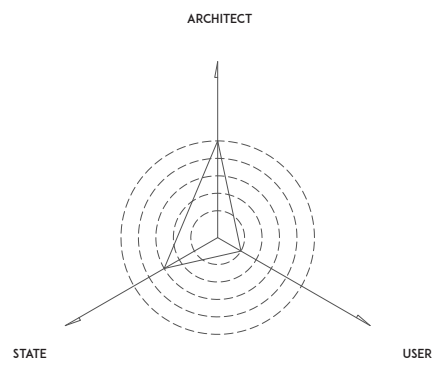
01. LES GOUJONS, ANDERLECHT, BRUSSELS



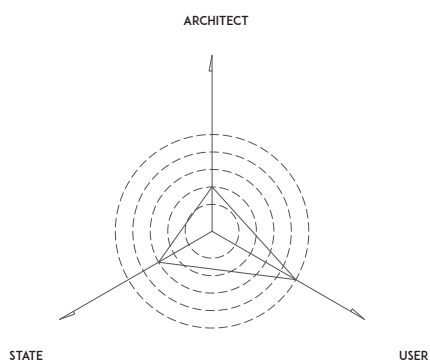
02. ROBIN HOOD GARDENS, LONDON



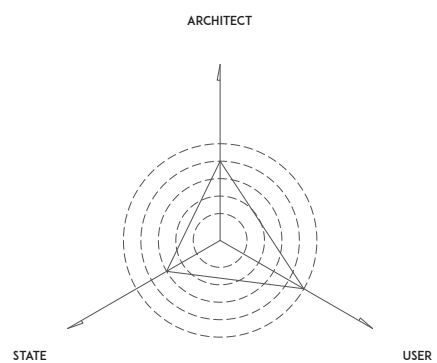
03. THE BARBICAN ESTATE, LONDON



04. L'ESPACE DE ABRAXAS, NOISY-LE-GRAND, PARIS



05. MÉMÉ, SINT-LAMBRECHTS-WOLUWE, BRUSSELS



06. DIAGOONWONING, DELFT

- Conclusions diagram -





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