



Architecture

# Shared Urban Futures

## *History and Future of Collaborative Living Concepts*

Edited by Philipp Lionel Molter,  
Oke Hauser









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The History and Future  
of Collaborative Living

Edited by Philipp Lionel Molter, Oke Hauser

# IMPRINT

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# EDITORIAL

In the last few decades, our cities have seen an increase in the numbers of people living alone or in small family households, resulting in highly inefficient and uncomfortable urban living conditions. Globally, more people live in urban areas than in rural areas, with 54 % of the world's population residing in urban areas in 2014; by 2050, 66 % of the world's population is projected to be living in urban environments. Combined with the overall growth of the world's population another 2.5 billion people will likely live in urban areas by 2050. All regions are expected to urbanize further over the coming decades <sup>(1)</sup>. Furthermore, European cities are responsible for about 70 % of our overall primary energy consumption, and this share is expected to increase to 75 % by 2030. In short, urban density and spatial organization are key factors influencing energy consumption <sup>(2)</sup>.

Urbanization in combination with the changing lifestyles of the last century have led to smaller and denser households since rents and real estate prices in big cities are still rising dramatically. Today, urban dwellers are faced with a common metropolitan problem: finding an affordable place to live that also guarantees an adequate quality of life. Worldwide real estate markets have demonstrated that traditional business models as well as the architectural layouts of urban dwellings are unable to meet the needs of a changing society. In the last 50 years, the share of single-person households of total households has more than doubled in the United States. Rising employment levels and mobility opportunities coupled to an increase in private wealth has at the same time given millions of people more freedom in their choice of where and how they live <sup>(3)</sup>.

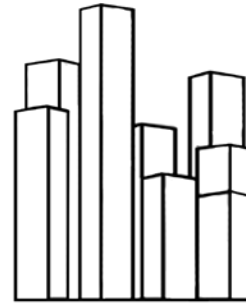
## Facts and Figures:

Every day

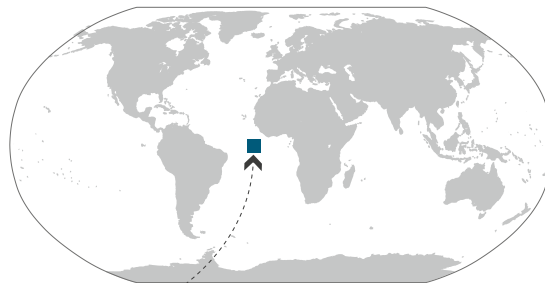


**+180,000**

dwellers move to  
cities worldwide



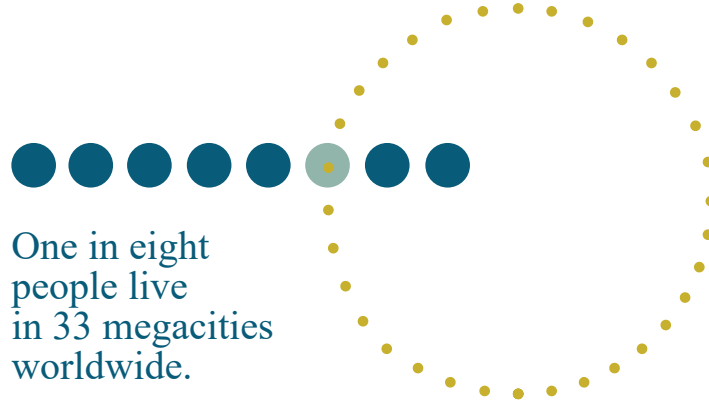
Cities occupy



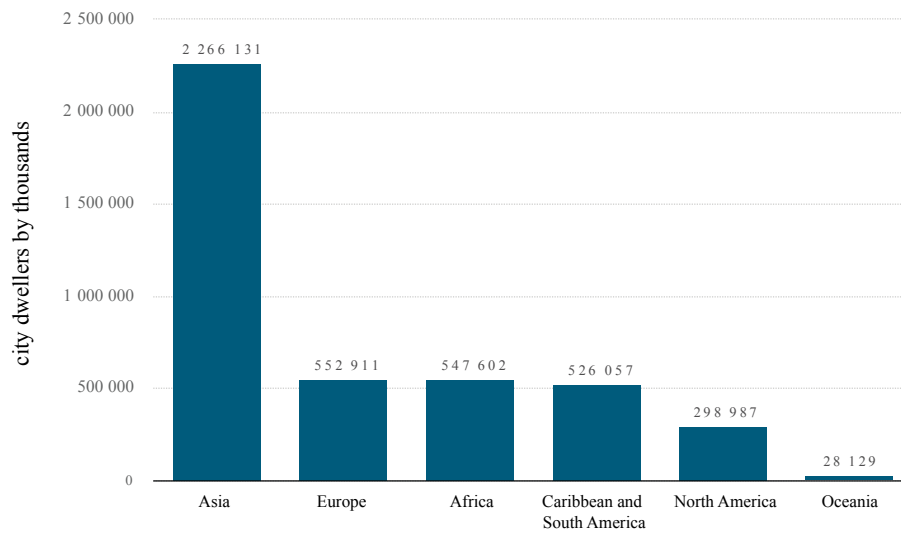
**2 %**  
of the worlds  
surface



One in eight  
people live  
in 33 megacities  
worldwide.



### Urbanization: number of city dwellers in the world regions



These changing societal norms and the new freedom in lifestyle choice has led to a vast change in urban living: collective building and living typologies have responded to the needs of the individual.

The idea of shared resources in new collective communities allows high flexibility as well as individual privacy for the generation known as 'digital nomads', who can work remotely and enjoy access to shared amenities and high mobility. This generation requires new concepts of living, adjusted to the blurred boundaries between private life and work. Digital nomads are exploring new possibilities of life/work organization in models of collective living. At the same time, the sharing economy calls into question traditional concepts of ownership as a global phenomenon since people are increasingly prioritising convenience over the commitment of ownership.

## Urban Living Lab Munich

Urban living lab Munich is a design research unit at the Technical University of Munich focussing on shared living concepts and urban density in architectural projects. The studio is engaged on projects exploring innovative spatial alternatives to contemporary living situations and the dissolution of the public-private divide.

The research unit develops architectural designs that concentrate the qualities of an entire city into strategies for redesigning urban neighbourhoods by offering affordable and space efficient housing solutions with shared living at its core. The research reported on here is divided into two parts. The first chapter investigates the relationship between the social frameworks underpinning communities and the history of dwelling. The second chapter proposes design strategies for urban dwelling in the context of shared concepts of living – as spaces with structural integrity, sustainable design and smart technology with a light environmental footprint. The design strategies connect private spaces for individual retreat with dynamic communal clusters. Thus, the potential for sharing space, time and infrastructure is embedded in an architectural context. These collaborative neighbourhoods connect dwellers to the urban fabric of their city.





Shared Living  
Concepts:  
investigating in  
the relationship  
of private and  
communal  
spaces.



# THE EVOLUTION OF SHARED LIVING

The following pages detail our investigation into the history and the bases of shared living as well as an architectural analysis of contemporary reference projects in the context of collaborative models for living. The relationship between private and shared spaces is analysed in terms of density, community, intimacy and flexibility. Furthermore, the social framework of different housing concepts is illustrated in diagrams and architectural drawings.

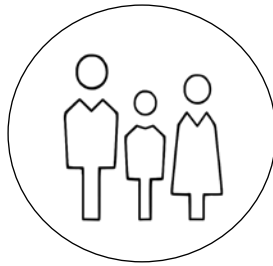
Despite a significant increase of interest, no well-defined and systematic classification of the term “shared living” has yet been established. This analysis contributes to a clearer understanding of shared living by asking the following questions:

- What currently drives our understanding of living and its challenges?
- What features of shared living and project experience can contribute to creating sustainable design?
- How can we best link shared living requirements to architecture?

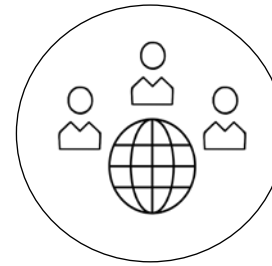
## Challenges of the 21th century:



Urbanization



Changing  
society



Sharing  
economy



## Three Worldwide Trends.

Three global trends are forcing us to develop new living arrangements, such as sharing space and living together:

### 1. Urbanization

Growing population shift from rural to urban areas is causing space shortages in cities.

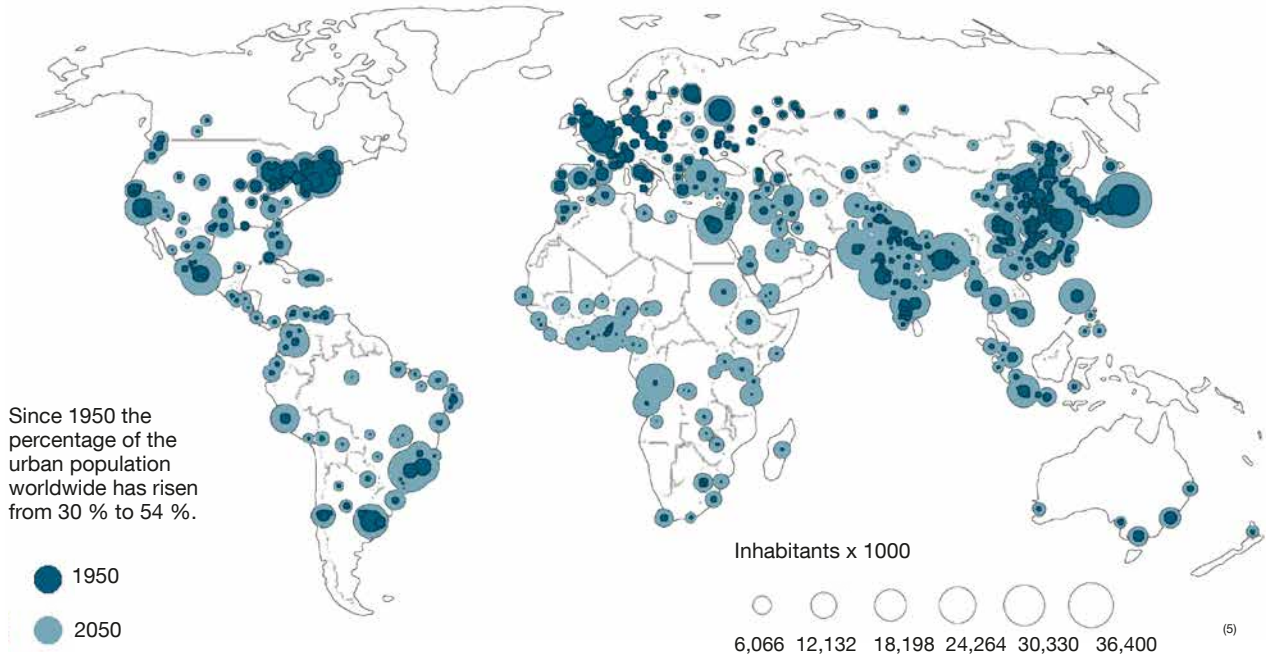
### 2. Changing society

New forms of living and work have triggered a more flexible lifestyle.

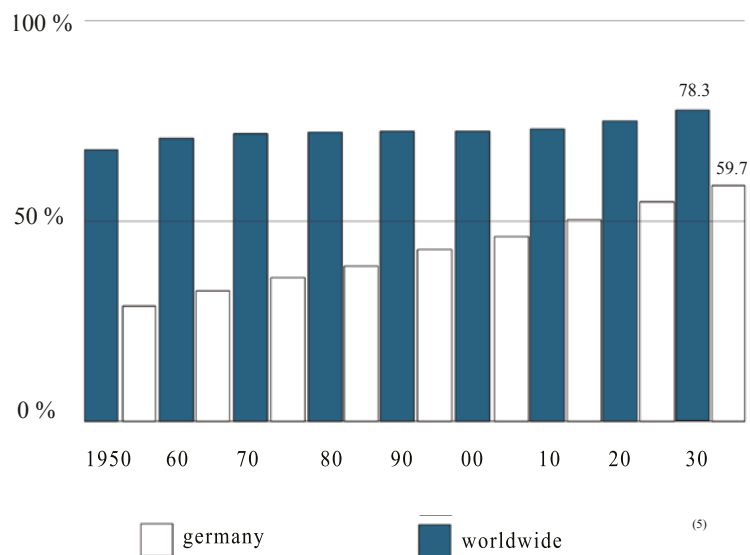
### 3. Sharing economy

An expanding willingness to use equipment, space and time jointly.

# Agglomerations 1950–2050



# Percentage of population living in urban areas



By 2050, it is projected that India will have added 416 million urban dwellers, China 255 million, and Nigeria 189 million. <sup>(5)</sup>

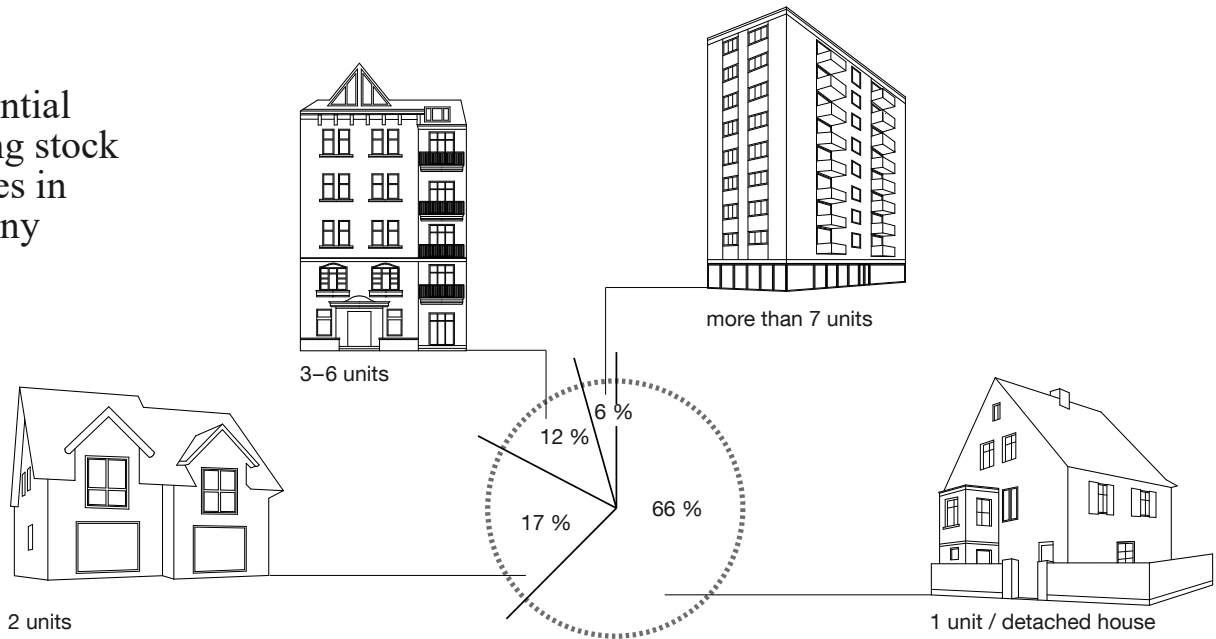
## 1. Urbanization.

Cities have always been and remain major engines for exchange and innovation. They are projection screens for hopes and desires. Urbanization is not a recent trend. Since the dawn of the industrial age, people have moved from rural to urban areas searching for work, infrastructure and a better life. Since 1950, the percentage of the urban population worldwide has risen from 30 % to 54 % and it is expected to grow further to 66 % by 2050. This ongoing trend is causing a growing housing shortage in crowded cities. Due to this shortage, the call for affordable housing is becoming ever louder. According to recent studies, the average household spending on rent is about 35 % of income, rising to more than 40 % in bigger cities like Berlin, Hamburg, Munich and Frankfurt. In London it accounts for around 62 % <sup>(6)</sup>. These issues are highlighted by the UN. In the words of John Wilmoth, Director of UN DESA's Population Division: "Managing urban areas has become one of the most important development challenges of the 21st century. Our success or failure in building sustainable cities will be a major factor in the success of the post-2015 UN development agenda," <sup>(6)</sup>. From an architectural perspective, three generic approaches may address this challenge:

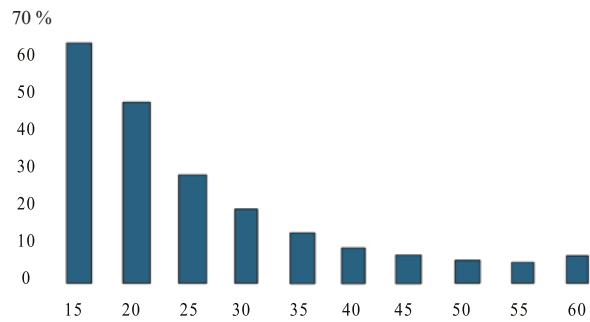
1. Questioning the use of personal spaces
2. Expanding spaces to accommodate more people
3. Sharing spaces and their functions

Although the first approach is a common strategy in alleviating the problem of space, it severely undermines expected quality of life. The second approach requires political decisions and building permits that often take years or even decades to attain. The third possibility – sharing spaces – is becoming an increasingly attractive alternative.

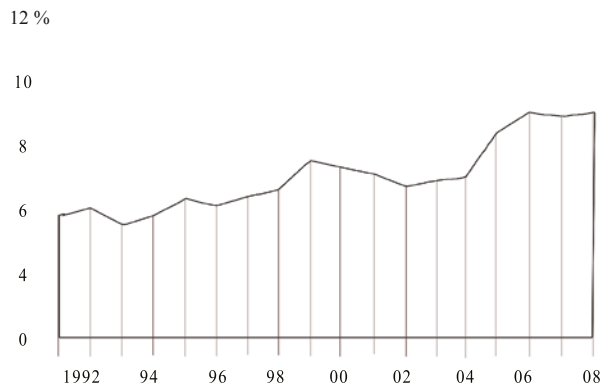
## Residential building stock by types in Germany



## Temporary contracts by different age groups in Germany



## Rise of temporary contracts in Germany



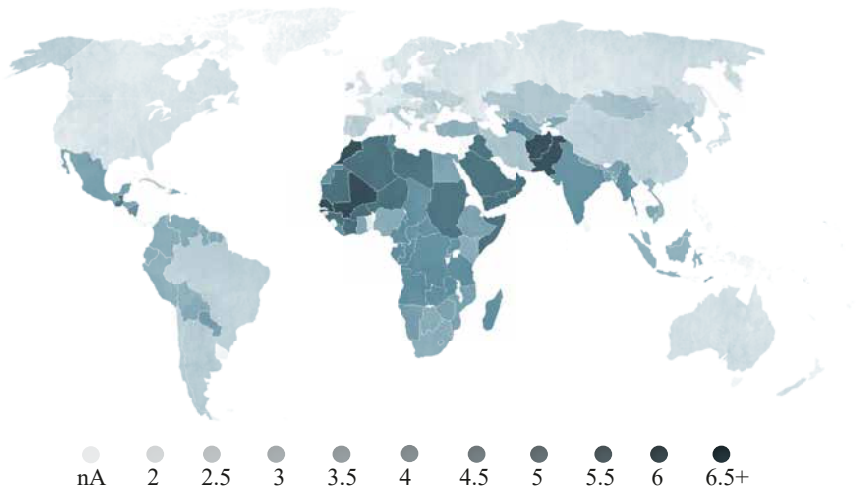
The housing market is not accommodating the fast changes of our society. In Germany 66 % of the buildings are detached houses.

## 2. Changing Society

“Buildings no longer symbolize a static hierarchical order: Instead, they have become flexible containers for use by a dynamic society.”<sup>(6)</sup>  
(Richard Rogers)

In the 1950s and 1960s, the “traditional family unit” was the assumed default model in the U.S. and Europe. However, since the 1960s, an increase in the number of non-marital partnerships and growing divorce rates has resulted in a different understanding of lifestyles. Non-marital partnerships with children, single-parent and patchwork families have supplanted the traditional model and are increasingly common. From 1996 to 2015, the number of people living alone in Germany rose by 29 %, while the number of married couples living with their children declined by 28 %<sup>(7)</sup>. At the same time, the number of single households in Germany has increased significantly – from 21 % in 1961 to 41 % in 2016 – while the number of households with five or more people has decreased from 14 % to 3 %<sup>(8)</sup>.

Moreover, most people’s vision of work is no longer limited to a rigid nine-to-five schedule. The idea of the domestic sphere as a refuge from the everyday workplace has changed in recent decades owing to a rise in flexible working. In Europe, where labour unions fought for almost a hundred years for secure and long term working contracts, employees and as well as employers nowadays expect more flexible working conditions, resulting in an increase of freelance work and temporary contracts. Coupled to the revolution in digital technology, which allows round-the-clock remote access to data networks, the “home office” and freelance work have transformed the domestic space into a new kind of integrated workspace: the kitchen, the living room, and even the bedroom, have become an improvised office, blurring the spatial boundaries between work and life.



Average size of households by country

As a result, “normal working conditions”, where employment is based on long, fixed-term contracts are on the decline. Atypical employment – meaning temporary and short-term – is replacing permanent positions on a global scale. For example, in Germany in 2015, almost every second recruitment (roughly 46 %) <sup>(9)</sup> was temporary. From 1991 to 2016, the percentage of atypical employment in Germany rose from 13 % to 21 %. <sup>(10)</sup>

This increase in atypical forms of employment forces workers to be more flexible and willing to change their place of residence. According to research carried out by Der Spiegel, almost half of young Germans would be willing to move for their job within Europe. In addition, the number of self-employed workers referred to as freelancers is rapidly increasing. “Freelancing in America: 2016” states that freelancers make up 35 % of the U.S. workforce, contributing about one trillion US dollars to the economy. The rising number of digital nomads are a subclass of freelancers, who use self-employment as a way of globetrotting. <sup>(11)</sup>

In short, the demarcation lines between work and leisure, home and office, private and professional are no longer clear. For digital nomads, who enjoy remote work and high mobility, these centuries-long distinctions simply do not apply. A generation of techno-savvy, flexible workers require new concepts of living. Their priorities centre not on home and job security, but on connectivity, not only to their specific data networks, but their social networks as well.

“Millennials”, “Generation Maybe”, “Gen Y “ or even “Generation Me”, comprises a well-educated, highly-connected, multilingual, globally-oriented population born between 1980 and 2000. The first generation to grow up with full access to digital technology and social media, they enjoy a flexible lifestyle often hopping from continent to continent. Caring more about experience than possession, collecting moments has become more important to them than collecting things. For such people, traveling and adventure is a more powerful indicator of achievement than buying a new car or home. Meeting people and exchanging ideas has more value than occupying the corner office. According to a study by the Trendence Institute, “More than 3 in 4 millennials (78 %) would choose to spend money on a desirable experience or event over buying something desirable.”<sup>(12)</sup> Thus, millennial modernity “is considered to mean social and aesthetic innovation, using state-of-the art technology and rejecting the values of continuity and tradition in order to shape the present and the new.”<sup>(13)</sup>

“The world’s largest taxi firm, Uber, owns no cars. The world’s most popular media company, Facebook, creates no content. The world’s most valuable retailer, Alibaba, carries no stock. And the world’s largest accommodation provider, Airbnb, owns no property. Something big is going on.”<sup>(14)</sup>

(Tom Goodwin)



### 3. Sharing Economy

These observations by Tom Goodwin highlight the disruptive elements of the sharing economy. Companies, business models or communities enabling common use of resources are part of this sharing economy. The idea of sharing goods by communal use is often based on consumption and growth-critical attitudes. Property is seen by people who enjoy a highly flexible lifestyle as a burden rather than a must-have. The term “sharing economy” covers a large number of common forms of consumption that are not fundamentally new, but this economy has been flourishing in recent years and is one of the fastest growing. It is projected to expand from \$ 14 billion in 2014 to \$ 335 billion by 2025 <sup>(15)</sup>. In this context, one of the fastest growing sharing economy companies is WeWork. Founded in 2010, WeWork started as a co-working startup offering its members desk space and shared facilities, such as meeting rooms, office hardware and secretarial services. In the last seven years, WeWork has grown from 1,000 members and two locations in its first year of operation to more than 120,000 customers in 156 offices in 49 cities across 15 countries <sup>(16)</sup>. In 2017, WeWork’s stock market valuation was estimated at \$ 20 billion<sup>(14)</sup>. WeWork has subsequently expanded into the co-living sector as “WeLive”, featuring apartments offering communal facilities for those who enjoy flexible lifestyles and shared living models in spaces that dissolve the distinction between living and working. WeWork’s chief executive, Adam Neumann, insists that “WeLive is going to be a bigger business than WeWork”. <sup>(16)</sup>

“The essential for the spatial town is what I call ‘spatial infrastructure’: a multilevel space-frame grid supported by pillars separated by large spans. [...]. This infrastructure represents the fixed part of the city; the mobile part consists of the walls, floorslabs, partitions, which make possible individually decided space arrangements: the “filling in” within the infrastructure. Thus all elements which are in direct contact with the user (i. e. those which he sees, touches, etc.) are mobile, as opposed to the infrastructure which serves for collective use and is fixed.”<sup>(17)</sup>

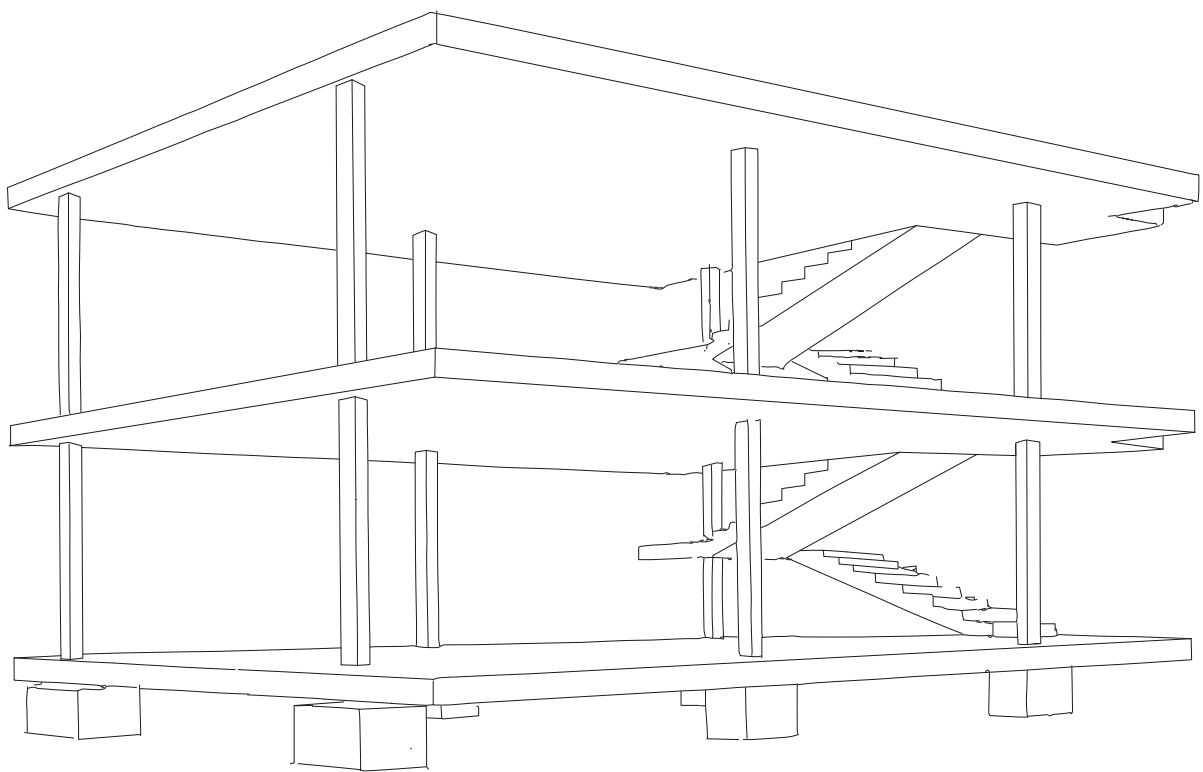
(Yona Friedman)

## Flexibility

“Because the outside world of today affects us in the most intense and disparate ways, our way of life is changing more rapidly than in previous times. It goes without saying that our surroundings will undergo corresponding changes. This leads us to layouts, spaces, and buildings of which every part can be altered, which are flexible, and which can be combined in different fashions.”<sup>(18)</sup>

(Walter Benjamin)

This observation of Walter Benjamin’s has been taken up by various architects and realized in the radical transformation of traditional approaches to building. The monolithic construction, where walls, floors, ceilings are composed of one volume combining different materials but highly connected to each other, and where spatial elements such as external as well as internal walls were also load-bearing structural elements ensuring the stability of the building, has increasingly given way to the separation of constructional building elements. Thanks to technology first developed in the late 19th century, (infra-)structural functions and more flexible building elements such as lightweight internal walls and curtain walling, i.e. a non-load bearing building envelope supports the weight of the façade from the bottom. The method was initially applied in the construction of non-domestic buildings in Britain and America beginning of the 20th century, and subsequently all over the world. Allowing a high degree of prefabrication, which is still important for high density cities, and where space for building sites as well as time is a major issue in terms of construction, this system has become standard for architects and engineers.



## La maison Dom-ino de Le Corbusier, 1914

In 1914, Charles-Édouard Jeanneret, the architect, designer, painter, urban planner and writer known as Le Corbusier, addressed an emerging societal problem: the question of how the massive increase in urban populations could be resolved by realizing social housing developments as quickly and as cost-effectively as possible. He designed an industrial system of repetitive structural elements as a construction kit. This system was named Dom-ino (from the Latin domus – the house – and the word innovation) relating to the game of dominos, an open system consisting of joinable parts, permitting endless possibilities of configuration. The idea was to provide a prefabricated structure for residential buildings, unique at the beginning of 20th century. The system allows high flexibility in configuration of floor plans and freely designed building envelopes. The combination of the Dom-ino construction system and the aesthetic principles of purism were applied for the first time in Villa Ozenfant 1 (Paris, 1924) and allowed Le Corbusier to develop a new architectural form that is equally applicable to all types of residential housing. Evolving from this rational and industrial architecture, the idea of “the house as a machine for living” was born. It was formalised in the Citrohan housing projects (1920–1922), named after the automotive industry, and finalised in 1927. The manifesto “Five Points for a modern architecture”. (French: cinq points de l’architecture moderne) are listed below: <sup>(19)</sup>

Pilotis – Replacement of supporting walls by a grid of reinforced concrete columns

The free design of the ground plan: the absence of supporting walls

The free design of the façade separating the building envelope from its structural function

The horizontal window, cutting the façade along its entire length, distributing light equally

Roof gardens on a flat roof, serving a domestic purpose while providing essential protection

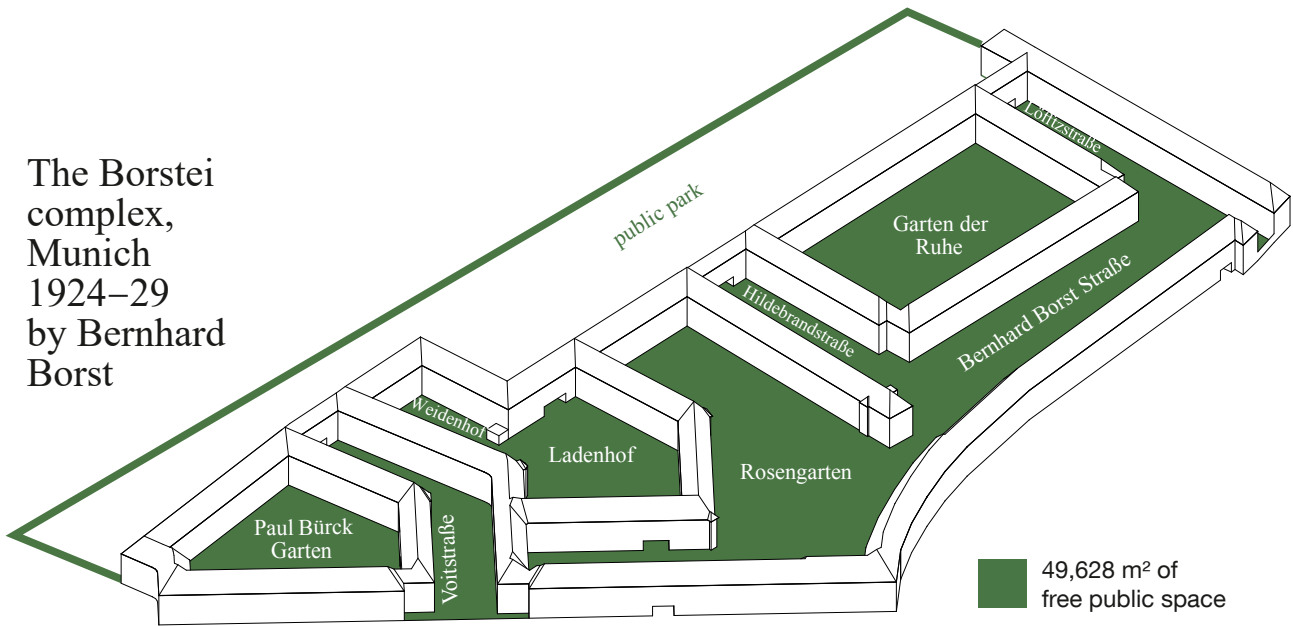
## A History of Shared Living Concepts

Although ways of living have changed over thousands of years, people have always shared premises. For centuries, the focus of households was not on family life but rather on economic interests. In antiquity the term “familia” meant the entire household community, including servants and slaves. A similar understanding of living communities can be found in the Middle Ages. The head of the family with his wife and children formed the core of the household, but it included a community of people from all different social classes. Houses incorporated space for both living and working, domestic and work life forming one unit. People lived together where they were working. This framework of the large family as a life community was the dominant way of living until industrialization in the 19th century.

At the end of the 19th century, several housing cooperative movements were established. These non-commercial associations were founded to solve the problem of the ever-rising value of leases by offering affordable living to their members. Such cooperatives were based on the idea of shared ownership, and thus collective responsibility and management. They were self-managing in the sense that they were free of control from outside.

New Lanark in Scotland is referred to in the literature as one of the predecessors of organized shared living projects. In this settlement, Robert Owen, the owner of New Lanark, realized that better living conditions would increase the production levels of workers. His ideas for improving the living circumstances of his laborers were visionary for the time (1800–1825). This idea was taken up by the reform movement in projects at the beginning of the 19th century as a reaction to the immense housing shortage caused by industrialization.

The Borstei  
complex,  
Munich  
1924–29  
by Bernhard  
Borst



In the context of the rising population of the U.S., a group of Finnish émigrés built New York’s first cooperative development in 1918. <sup>(20)</sup> A few years later, Abraham Eli Kazan, who became a pioneer of New York City’s cooperative housing projects, created thousands of dwellings for the middle-income inhabitants in New York City. One of the most important of these projects, the 1927 Amalgamated Houses on Van Cortlandt Park South in the Bronx survives to this day. But Kazan’s ideas went far beyond housing: He was also responsible for the creation of many cooperative food markets, pharmacies and optical services, a furniture center, credit unions and other cooperative enterprises. In this sense, Abraham Eli Kazan was not a builder or an architect; he had a holistic political approach and a strong belief in the power of community and co-operation. He promulgated his progressive utopian vision in the early decades of the twentieth century. <sup>(21)</sup>

In central Europe, various shared living concepts on a larger scale emerged in the context of expanding cities in the late 19th century and the period before World War II. Collective housing developments as the “Borstei” in Munich displayed the advantages of 772 apartments with collective infrastructure and amenities, including a laundry, a central-heating plant as well as kindergartens. Most of those developments were initiated and financed by industrial entrepreneurs such as Robert Bosch and others.

Another more progressive idea of collective housing is the “kibbutz” in Israel. However,





The Borstei  
complex,  
Munich 1924–29  
by Bernhard  
Borst

the kibbutz is much more than shared living; it is a community based on the principle of equality in all essential areas of life. It works as a collective enterprise based on its own labor and material resources, embodying a model of general social significance. The first kibbutz was built in 1909 on the shores of the Sea of Galilee, but even today three per cent of the population in Israel live in kibbutz collectives.

Other predecessors of communal living can be found in the former Union of Soviet Socialist Republics (USSR). To address the problems of urban densification with the onset of industrialization, a new type of housing emerged in 18th century Russia, whereby several parties shared one apartment. Under the Soviets, such dwellings became known as “kommunalki”. Communal apartments actually started appearing in Tsarist Russia as early as the 18th century. Lenin authorized the expropriation and division of properties deemed by the state to be too large for occupation by single families. Spacious bourgeois dwellings were symbolically redistributed to create kommunalki, allowing homeless citizens to acquire living space. The former owners of large apartments could remain in their homes but were forced to share them with other families. At the same time, many purpose-built kommunalki were constructed during the Soviet era. Although in most cases the kommunalki were usually densely overcrowded, with large families sharing a single room, and several families sharing a kitchen and bathroom in one apartment, some were show-case buildings, typically occupied by high-ranking state employees.

One of the most popular residential developments of this kind was the Narkomfin Building in Moscow with 54 units. Designed by Moisei Ginzburg with Ignaty Milinis and completed in 1930 for employees of the Commissariat of Finance, it was one of the first luxury residential complexes in Moscow, featuring communal facilities such as kitchens, crèches, a

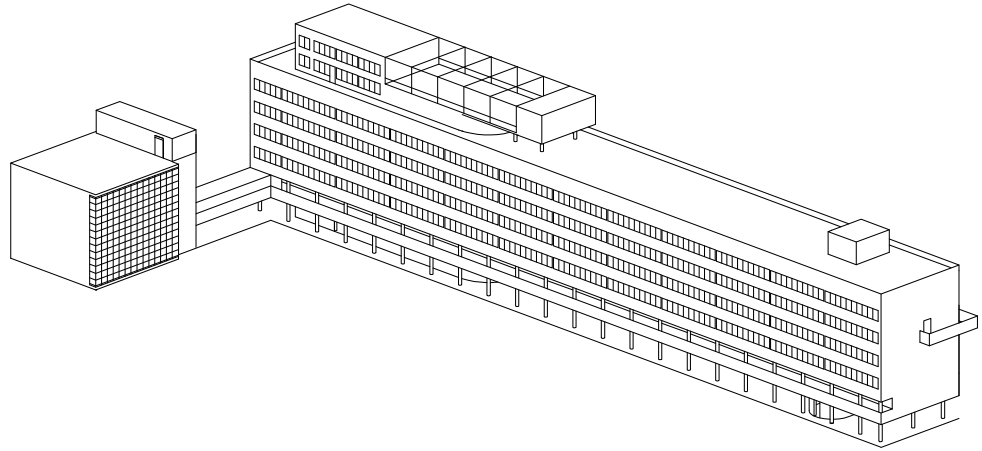


Narkomfin  
Building,  
Exterior view,  
front facade,  
detail



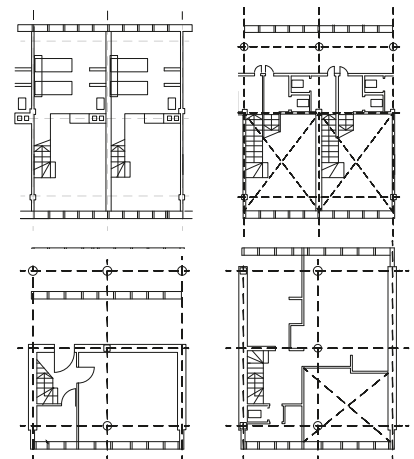
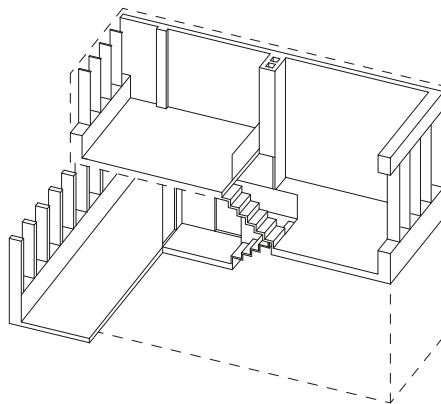
Narkomfin  
Building,  
Exterior view,  
front facade

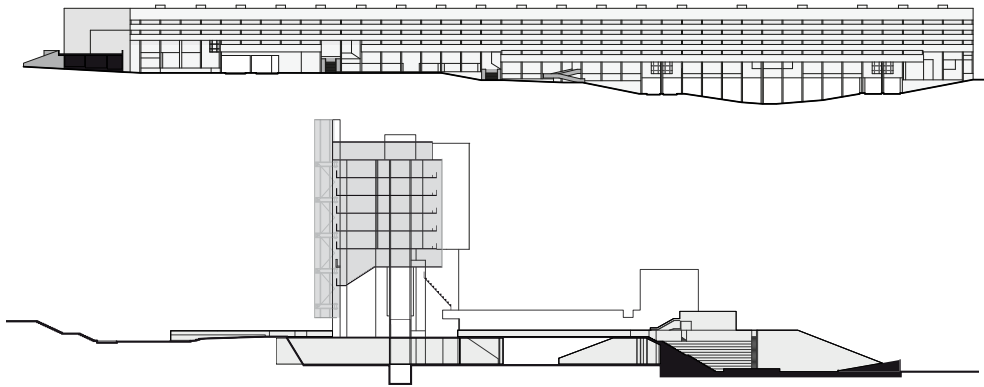
Narkomfin  
Building  
by Moisei  
Ginzburg,  
Moscow  
1928



laundry, gymnasium, library and a communal swimming pool. In keeping with *kommunalka* design, no single unit had its own kitchen. The communal kitchen encouraged residents to share time cooking and eating meals. Still inhabited in part, the building has succumbed to the societal changes in modern Russia. Some apartments are still individually owned, but a large swathe have been bought up by a real estate developer. This has led to stagnancy in the development of the building. It nevertheless remains a lasting source of inspiration and for architects all over the world and a challenge to established socio-ideological norms. Some historical cases show that shared living is not just a question of offering space to share but also requires the willingness to share. Some of the large-scale visionary projects of the 1970s have subsequently turned into social flashpoints. One such project is located on the

Apartment  
typology  
showing split  
level floorplans  
at Narkomfin  
Building





Elevation and cross section of the Corviale Building close to Rome, 1972

outskirts of Rome. Build in 1972 by the team of architects Fiorentino, Gorio, Lugli, Sterbini, and Valori, Corviale is one of the 1970s' manifestations of a linear building idea which dates back to the 1960s. It exemplifies the idea of a "machine for living", with apartments, services and urban functions under one roof, and also features three of Corbusier's Five Points of Architecture: separating the building envelope from its structural function, horizontal windows, and a communal and accessible roof garden. Corviale is furthermore a realization of a modernist ideal: the linear city composed of modernist megastructures and supersructures.

The building is nearly a kilometer in length and was conceived as an independent city for 8,000 people in 1,600 dwellings. The design featured shared infrastructure as well as other community facilities, such as schools, shopping precincts, recreation facilities and a church, though not all of them were realized. Floor number four as well as five, the so called "Piano Libero" underwent a particular evolution: conceived as a horizontal circulation zone featuring shops and communal services, the floors at first remained unoccupied. Later, instead of bundling the levels as planned, Piano Libero was occupied by squatters and developed through self-construction. In this sense, the planners have created a place of identity for many inhabitants, even for people considered as living on the margins of society, who struggle to find an apartment in traditional developments. Even though today most of its communal spaces are unused, Corviale functions as a living organism, organized by the inhabitants, who have a high degree of identification with their building and community.

Corviale  
Building



Inner  
courtyard of  
the Corviale  
Building







## The Corviale Building and its surrounding infrastructure.

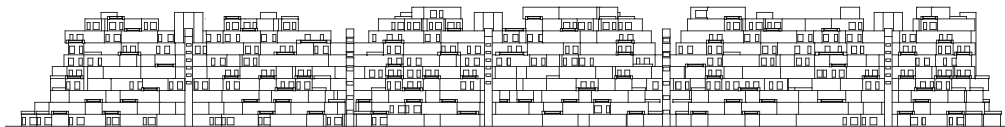
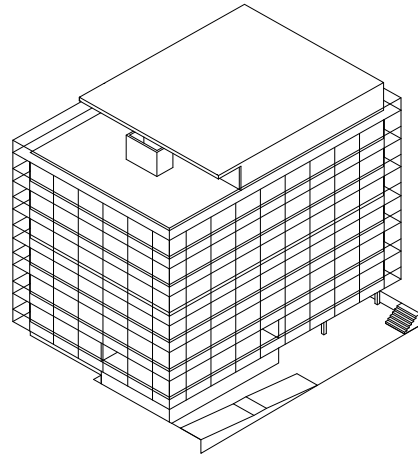
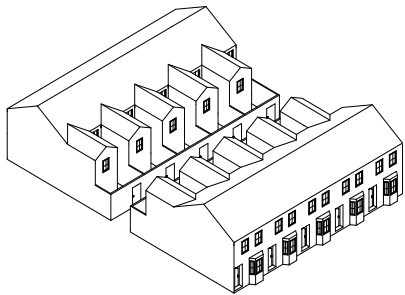
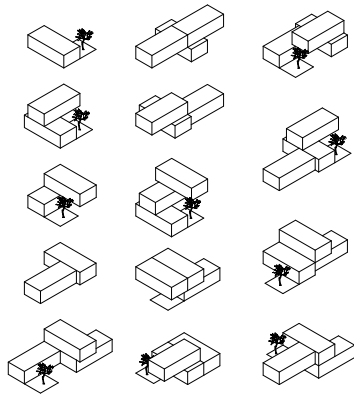
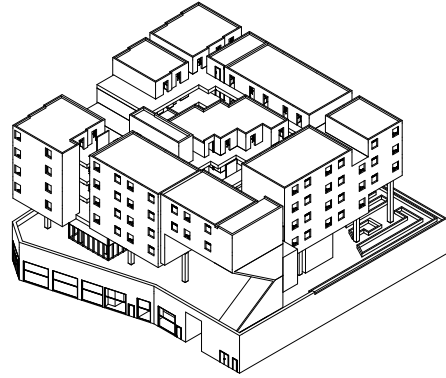
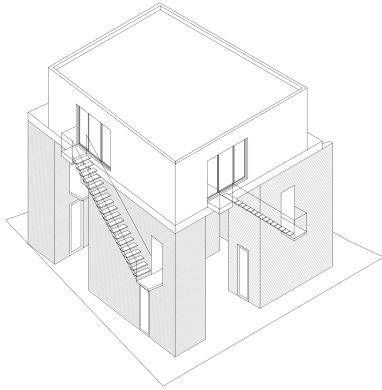
In contrast to such large-scale developments, several communal housing projects with shared living at their core have emerged from alternative concepts of living. This goes back to the 1970s where squatters and student housing communities sprang up in Tübingen and Freiburg in the south of Germany as well as in Zurich and Geneva, and developed as an alternative to conventional housing typologies. This movement, which was characterized by people occupying buildings and a strong belief in the power of the community, also served as a platform for critique of state housing policies of that time. From March 1979 to November 1984 in the city of Berlin, 281 houses were occupied, of which 143 were in Kreuzberg. More than 150 vacant homes were squatted in West Berlin. The city became a Mecca for youth from other parts West Germany in search of freedom and adventure.

Other famous examples from this era include the “Fristad Christiania” in Copenhagen, a commune of around 1,000 residents squatting a former military barracks in the Danish capital. Christiania’s mission statement, dating from 1971 stated: <sup>(22)</sup>

*“The objective of Christiania is to create a self-governing society whereby each and every individual holds themselves responsible over the wellbeing of the entire community.”*

## View from inside of the Corviale Building to its surrounding countryside

This modern form of co-housing as a community, as a way of living together to escape the isolation in society, also finds its roots in Denmark in the 1960s and later spread to other Scandinavian countries as well as to Northern America.



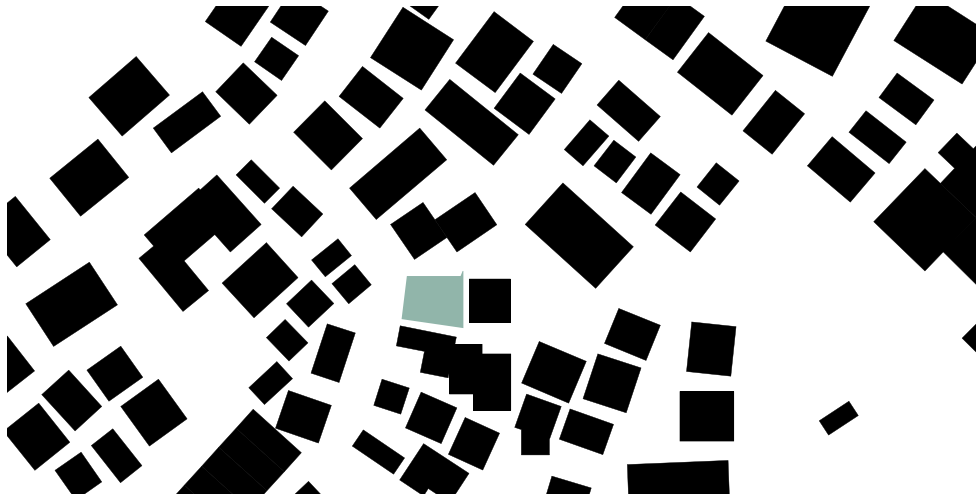


# MAPPING SHARED LIVING CONCEPTS

Metropolitan city centers are becoming increasingly popular with investors, making housing or temporary leases near the workplace prohibitively expensive. However, the profound changes in our cities at a societal level as well as the rapid growth of urban agglomerations have prompted architects to challenge existing residential concepts and create housing options which go beyond the mere provision of space. Concepts vary from autonomous living and self-sufficient communes to highly curated and serviced apartments with shared amenities. In response to the trend towards increasing social isolation and the rising costs of apartments, which continues to squeeze households, some of the proposed approaches promote human contact between residents, encouraging them to interact as large, extended families. They are hybrid concepts, where the idea of broad community and compact privacy is a challenge to current housing typologies.

The following pages present a diverse range of approaches to shared living concepts at the urban scale in different typologies. The drawings and diagrams illustrate the relationship between social frameworks and the architectural design strategies described.

Historical and  
contemporary  
shared living  
concepts.



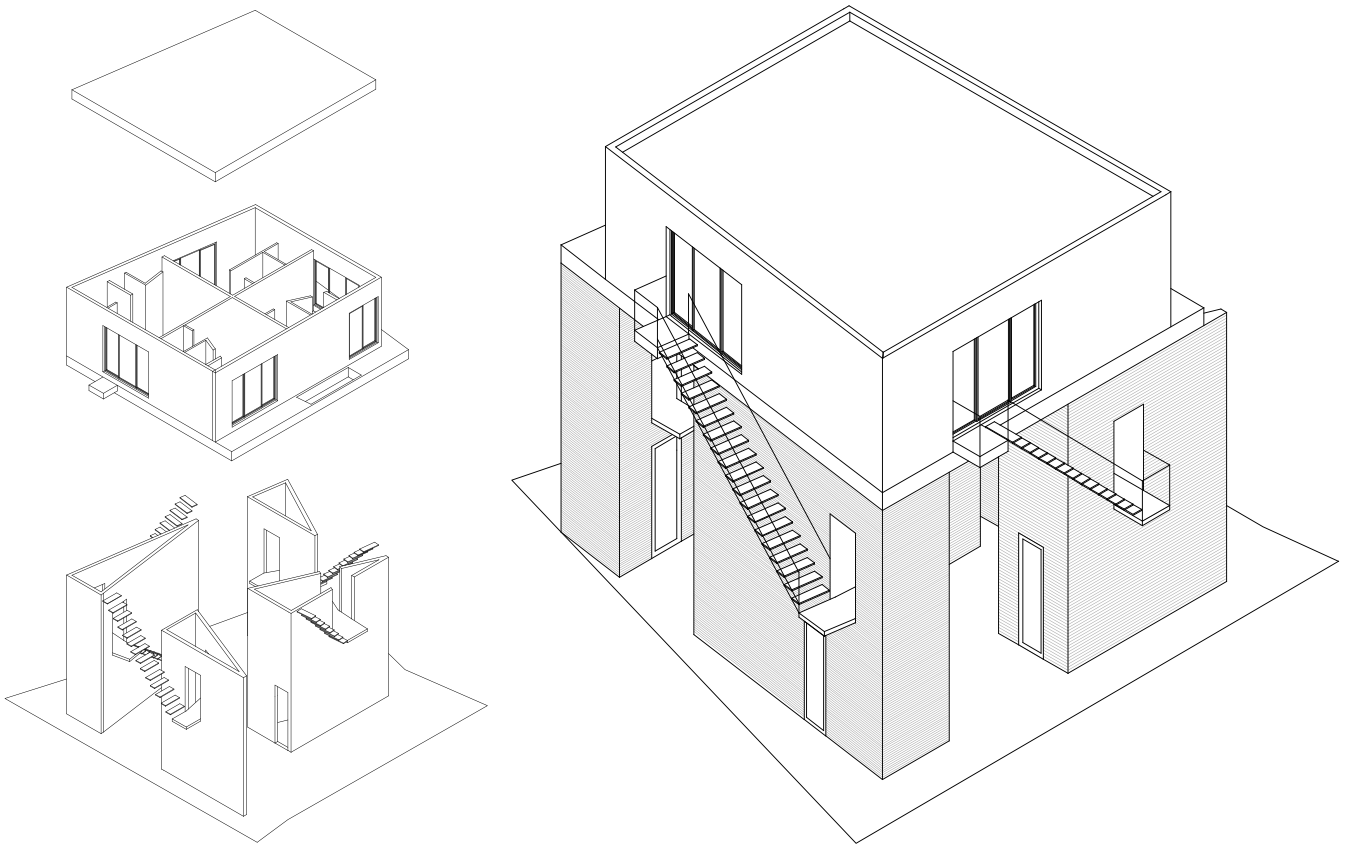
## YOKOHAMA APARTMENT – Kanagawa

Located in a small scale neighbourhood in Kanagawa, Japan, this two-storey residential building for young artists was designed in 2009 by ON design partners. The existing urban context is wooden houses and narrow roads. Yokohama apartment is divided into a communal area on the ground floor, with semi-public stairways leading up to the private apartments and terraces. The staircases act as a dividing screen between the terraces of each apartment, allowing the inhabitants to enjoy the exterior and the splendid view of the roof tops of Kanagawa in seclusion. A semi-public courtyard is located at the center of four one-room units for young artists. Each individual living space has a private bathroom and a kitchenette and all of them form a volume that pinwheels around the centre.

The communal courtyard serves as a multifunctional space for exhibitions, work, and socialising. It also offers an environment people can adapt to their own forms of use. There is a complete outdoor kitchen where inhabitants can congregate, a washroom and storage closets. The space seeks to encourage a variety of lifestyles by adding elements such as stairs, making it unique in the surrounding environment. While it is open to the street, the house as a whole still offers privacy through the careful allocation of space.

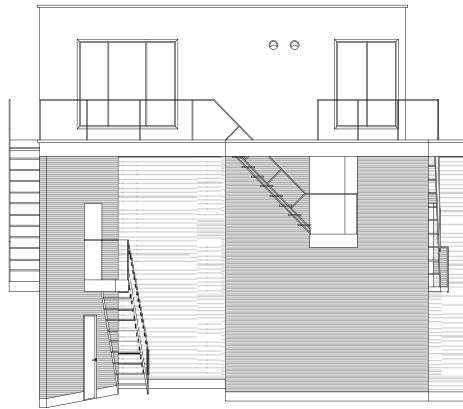
Access to the elevated living space above is gained by a series of exterior staircases that wrap around the courtyard. The landings serve as small outdoor terraces, providing a visual connection to both the street and communal area below. The triangular shaped sculptures act as storage space and staircases form the outer wall to the public space. The entire building is constructed of wood, in keeping with the construction of the individual houses in this region of Japan. Its colourful surfaces, on the other hand, causes the building to stand out from the buildings in the surrounding area.

Isometric  
view of  
Yokohama  
Apartments

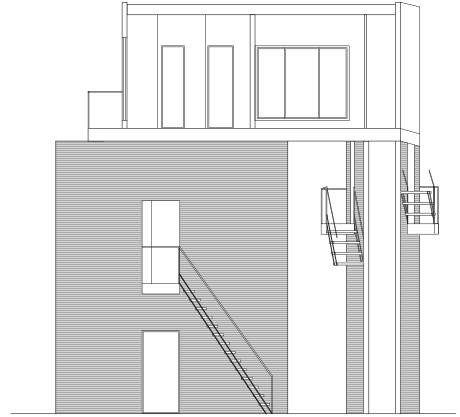


# Floor plans of Yokohama Apartments

## Elevation



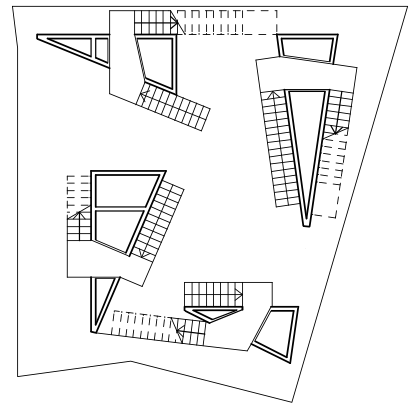
## Section



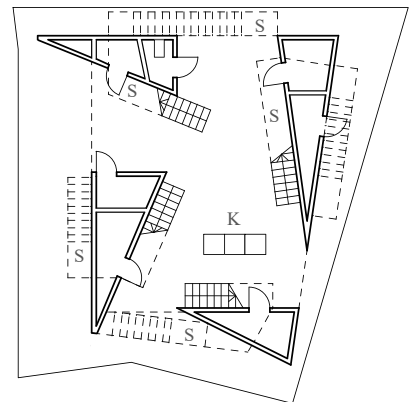
## First floor

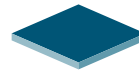
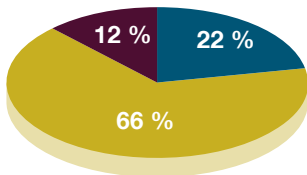
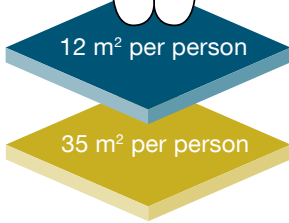
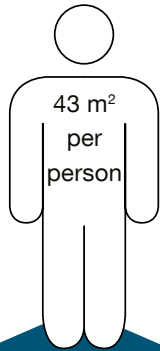
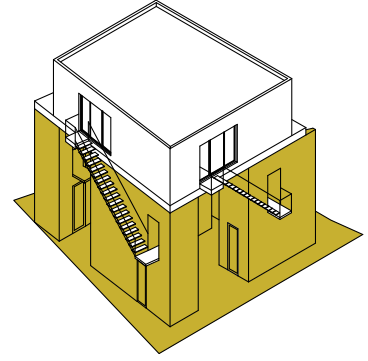
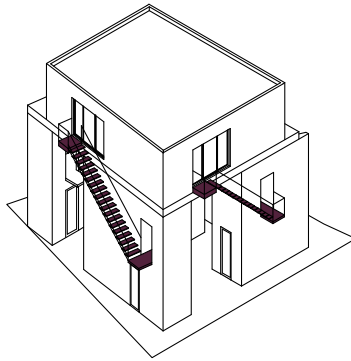
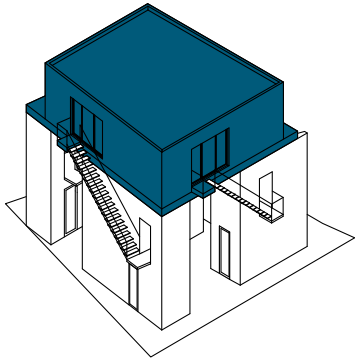


## Stair case

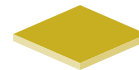


## Ground floor

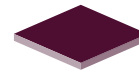




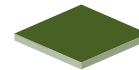
private spaces



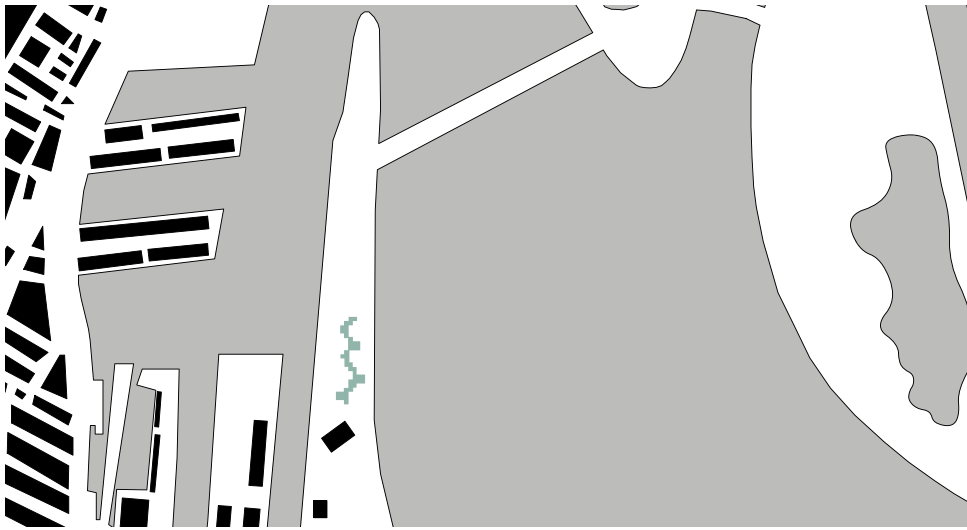
communal spaces



infrastructure  
structure /envelope



public spaces



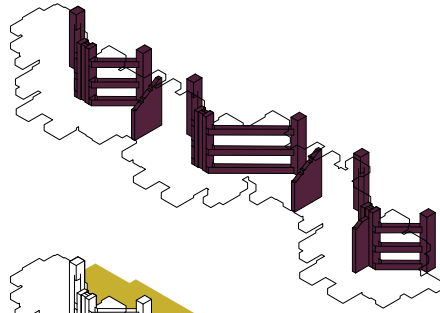
## HABITAT 67 – Montreal

Initially designed for Moshe Safdie's thesis project, Habitat 67 has become one of Montreal's best known landmarks, nestling between sky and earth, city and river, greenery and light.

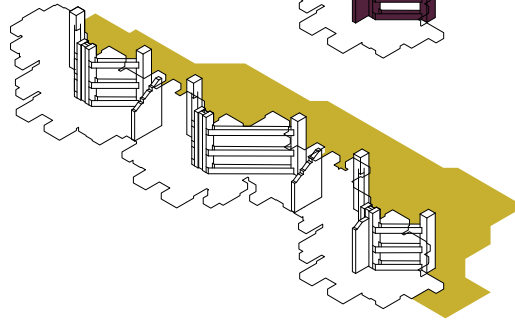
In 1965, Safdie, who was then working for Louis Kahn, was asked to realize his thesis project at McGill University, titled "A Case of City Living", for the world exhibition in 1967 in Montreal. Habitat 67 was exhibited alongside Richard Buckminster Fuller's Biosphere and the Casino de Montreal, which have all become landmarks on Saint H el ene Island. Safdie, only 23 at that time, wanted to provide a modern take on a model community housing complex. He rethought common "living spaces" and combined suburban garden residences with the urban apartment building. The result was a gigantic sculpture composed of futuristic interiors, links between pedestrian streets and monumental elevators, as Safdie describes them, fully in tune with Montreal's aspirations to modern metropolitan living.

Safdie's idea was to incorporate public and communal facilities such as shops, kindergartens, restaurants, etc., into the complex. However, due to funding and location issues, only private housing was realized in the project. Habitat 67 is made up of identical, prefabricated concrete modules, combined in various ways to create 158 apartments of between 50 m<sup>2</sup> to 150m<sup>2</sup>. Thanks to the recessed stacking of the modules, each apartment has a private terrace with a stunning view over the Saint Lawrence River.

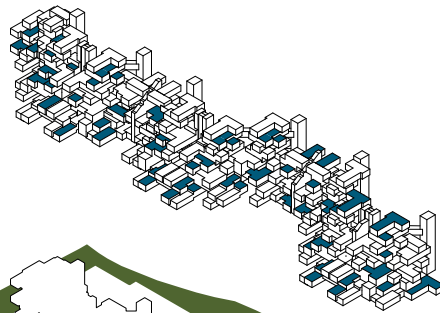
The 300 m long and twelve story high complex is equipped with three elevator towers, various bridges, staircases and covered streets leading to each apartment. Habitat 67 has remained a very popular residential building, with apartments now selling for up to 1.5 million dollars.



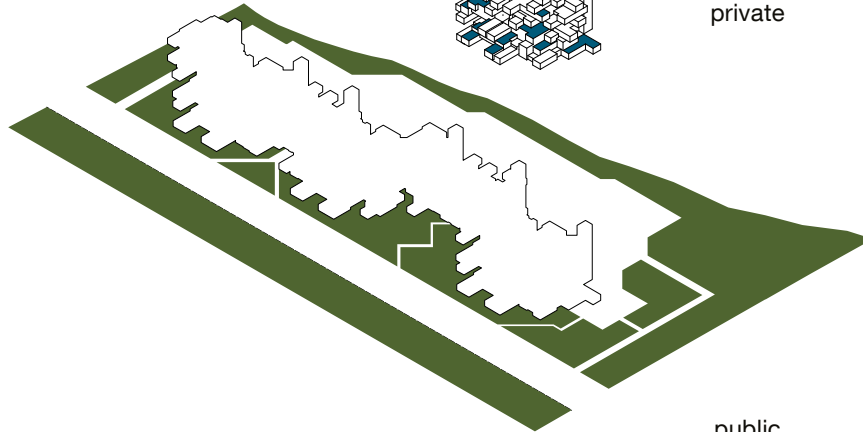
infrastructure



communal



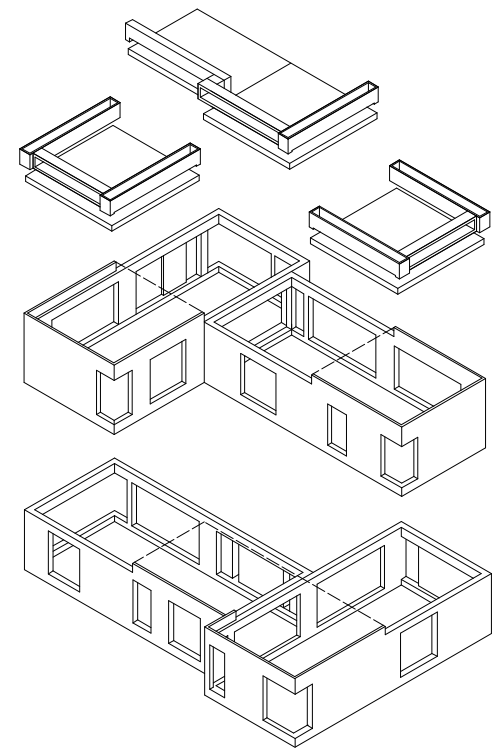
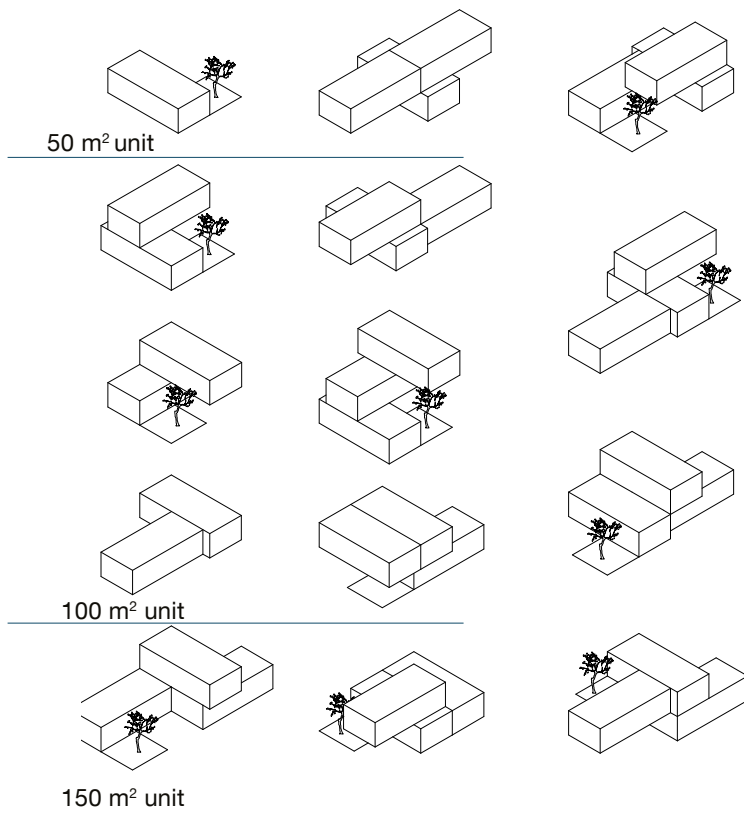
private



public

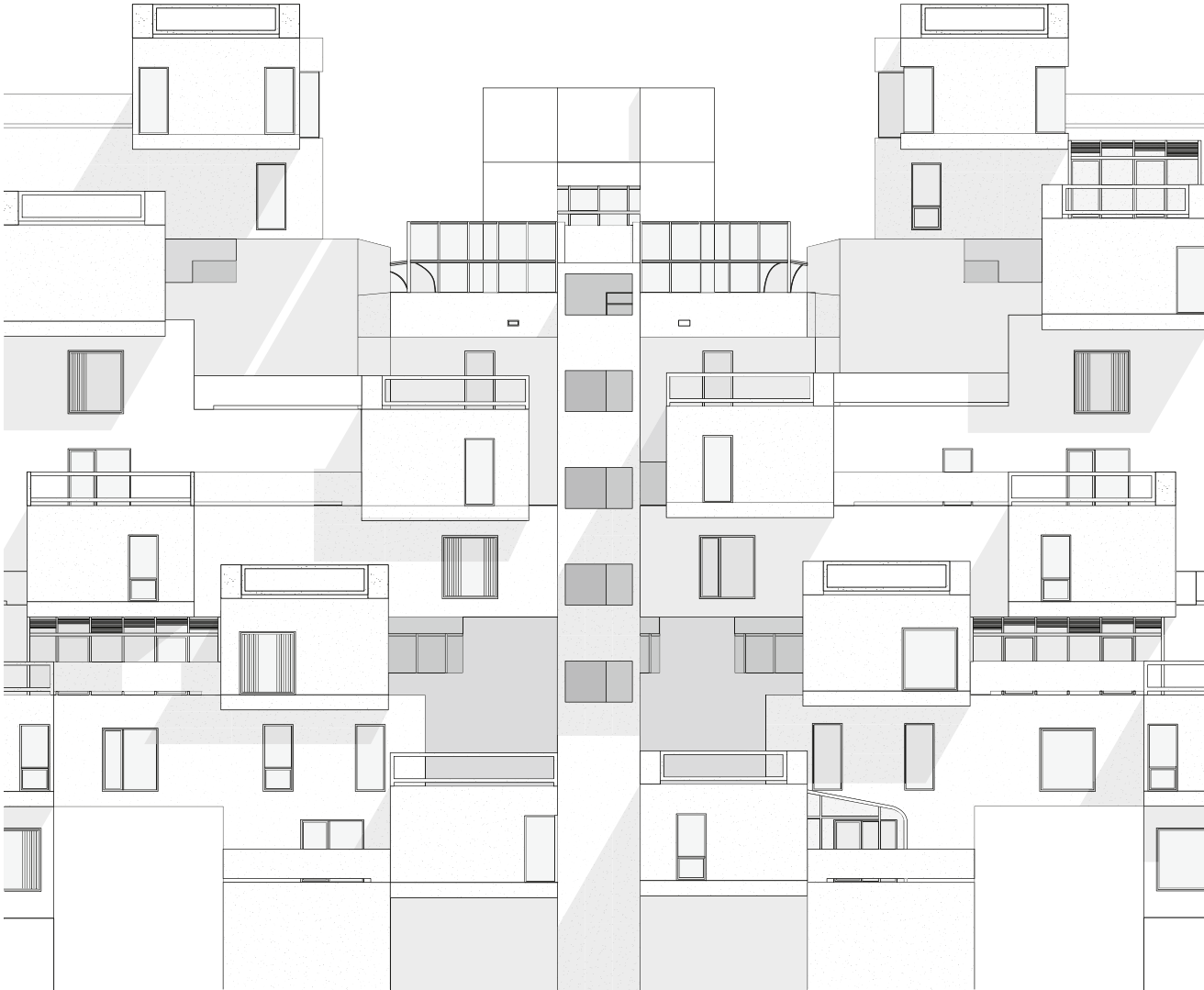
# Apartment typologies

# Structural setup of units





Elevations of  
Habitat 67



Elevation

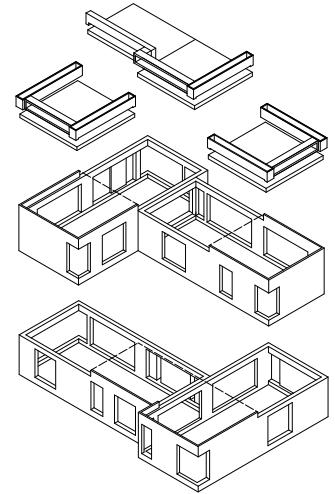
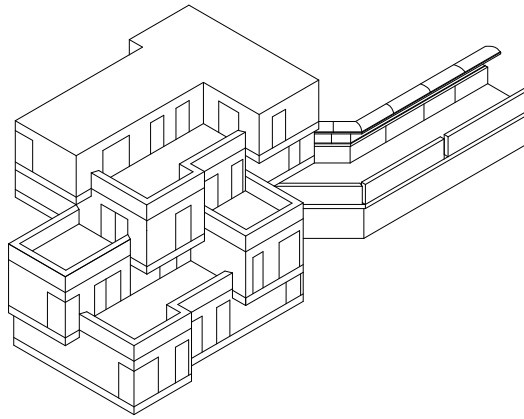
Habitat 67  
elevation  
from east



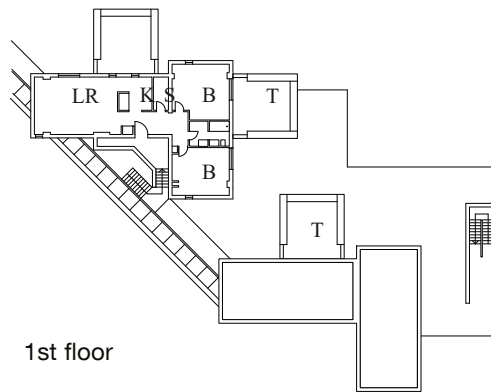
Habitat 67,  
detail of  
constructive  
intersections



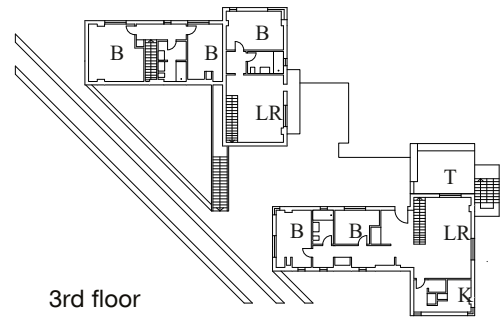
# Axonometric view of the apartments



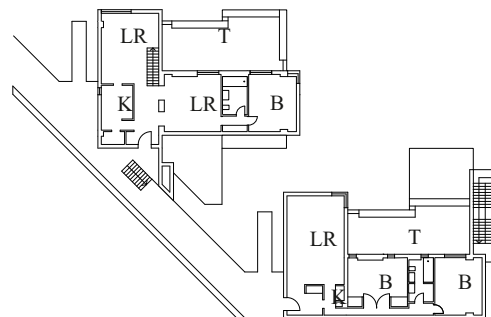
# Typologies



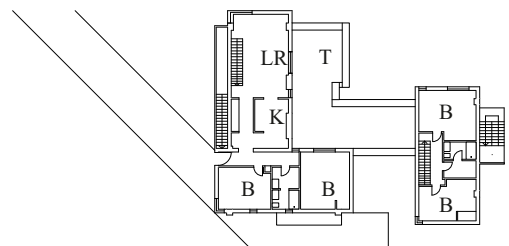
1st floor



3rd floor

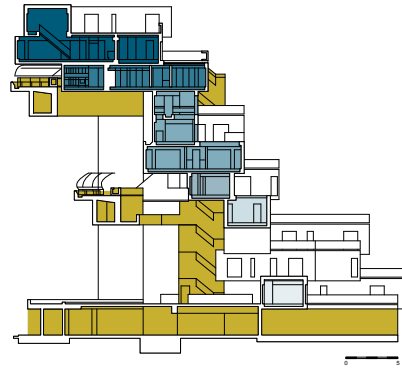


2nd floor

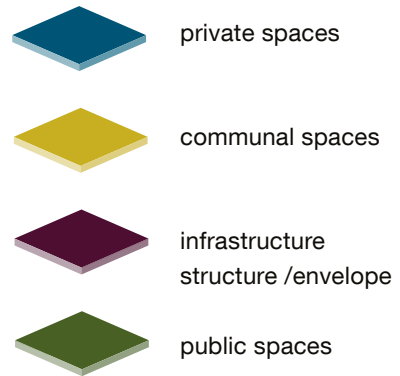
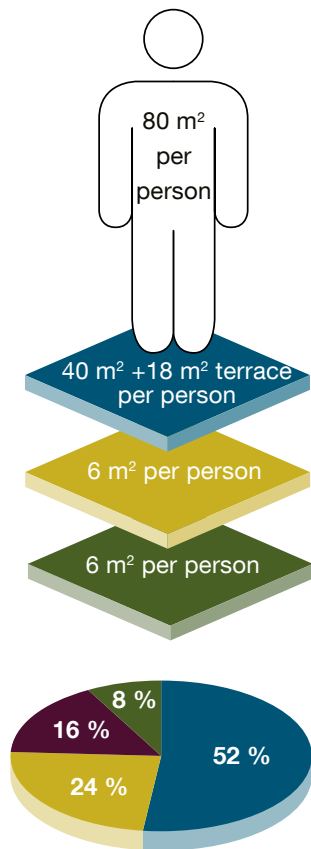


4th floor





Section





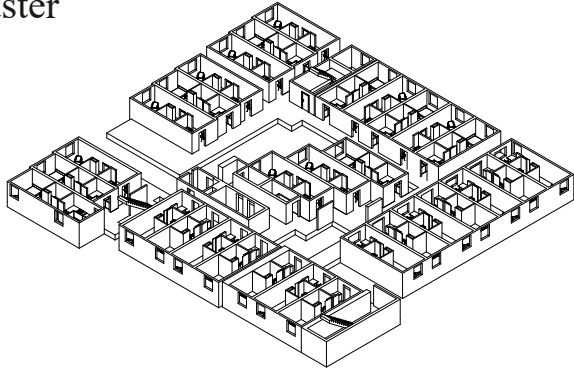
## STAR APARTMENTS – Los Angeles

The “Star Apartments” are located in Los Angeles’ skid row, also known as the area with the highest number of homeless people in the United States. The housing complex was developed by the Skid Row Housing Trust, designed by Michael Maltzan Architecture (MMA) in 2012, and completed in 2014. Accommodating long-term homeless people was the express purpose of this sensational project.

102 prefabricated units are situated on top of a concrete deck supported by huge concrete piles traversing the existing building. The architect chose not to demolish the former shopping mall on the ground floor, instead refitting it with a clinic and health centre that could be used both by the residents and others living in the neighbourhood. The building is also home to ‘Los Angeles County Department of Health Services offices.

The floor above consists of different communal spaces providing communal facilities to the residents, such as spaces for art, a gym, as well as urban gardening. Cookery courses are regularly offered in the big communal kitchen, with vegetables and fruit sourced from its own garden. This area is the place where residents usually meet up and spend most of their day. Private units are all situated on the upper storeys, providing a sedate and pleasant atmosphere. Each unit is fully furnished with kitchen, dining table for two, bed, and shelves in an area of 32.5 m<sup>2</sup>. Insulated walls and natural ventilation help maintain a perfect indoor climate inside the prefabricated modules. The six storey building comprises 8,800m<sup>2</sup>. About 1,400 m<sup>2</sup> is devoted to public and communal spaces – in all about 16 %. The total cost of the project was \$ 19.3 million.

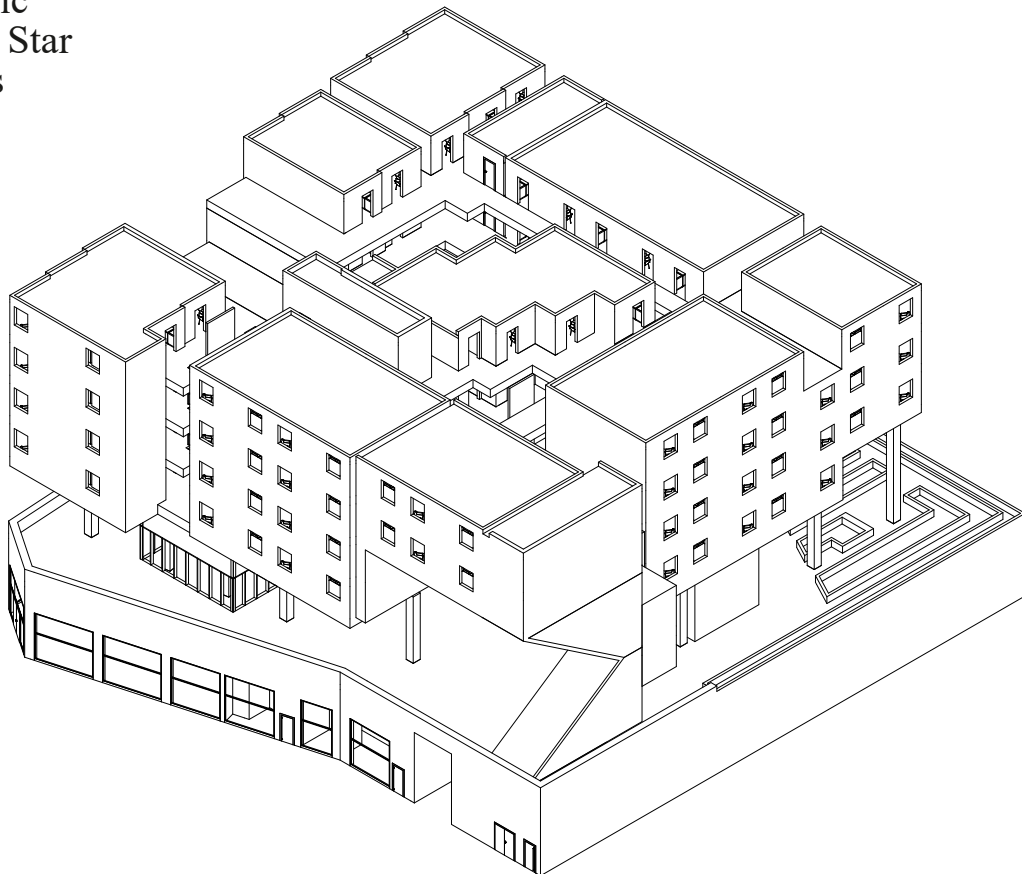
Axonometric  
view of the  
Cluster



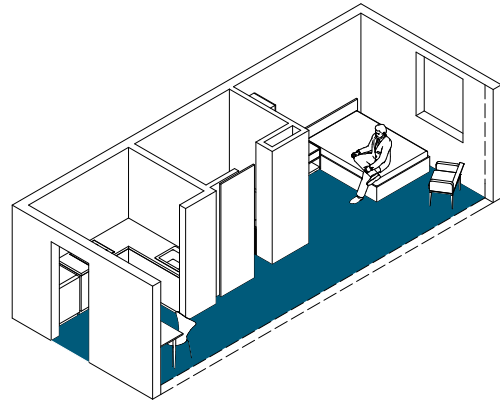
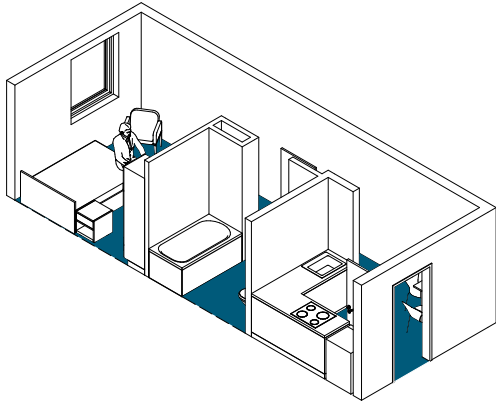
Section



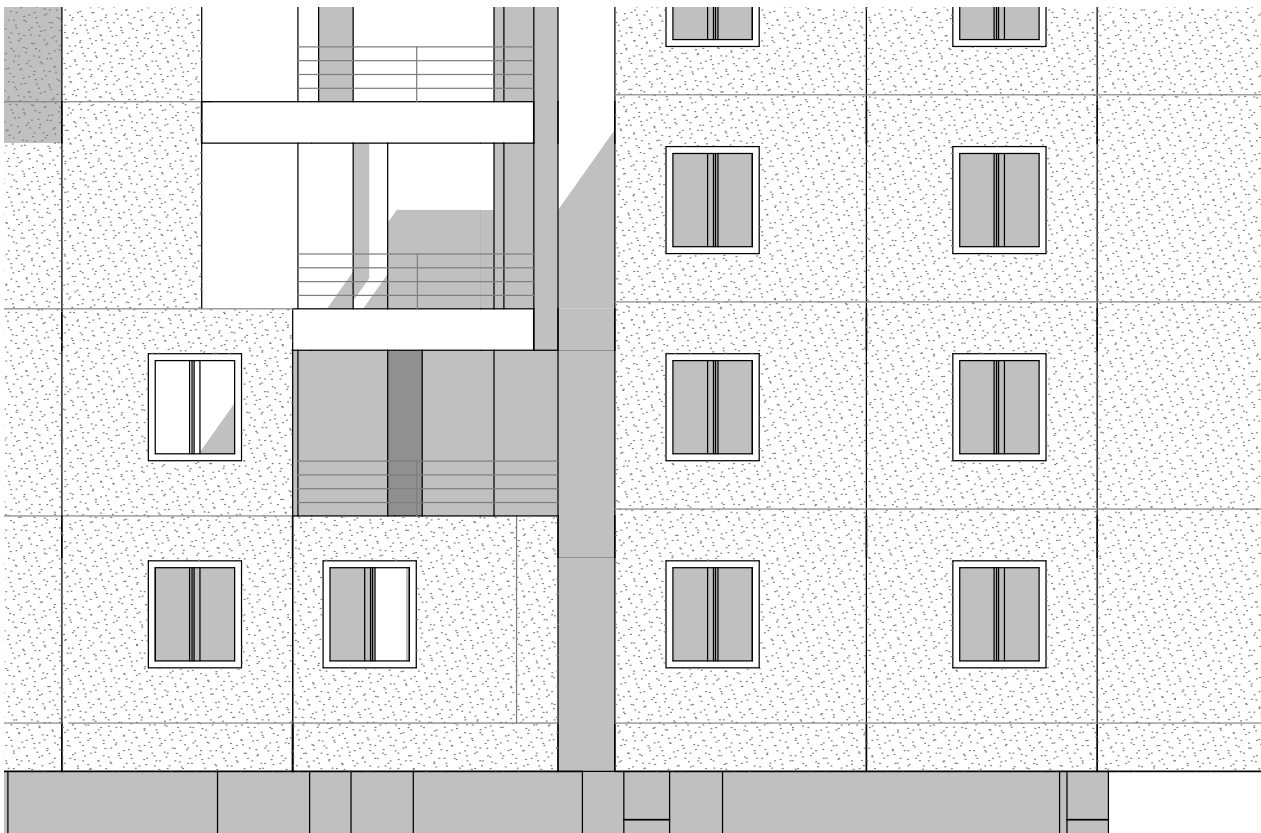
Axonometric  
view of the Star  
Apartments



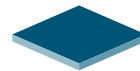
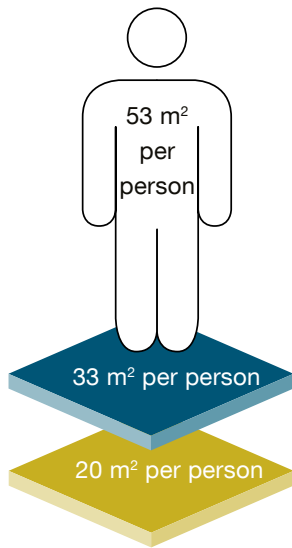
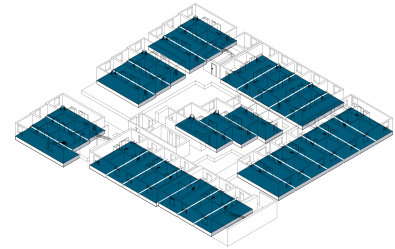
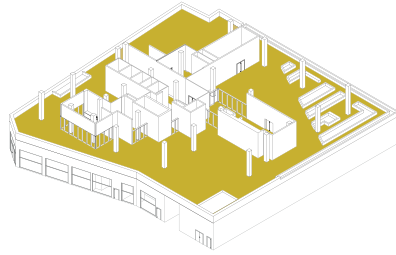
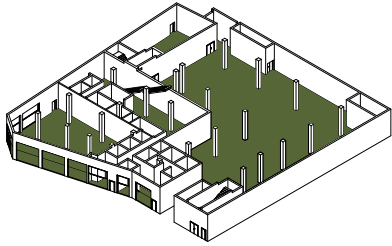
Section / Axonometric view of one unit



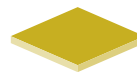
Façade



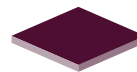




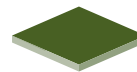
private spaces



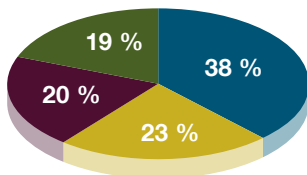
communal spaces

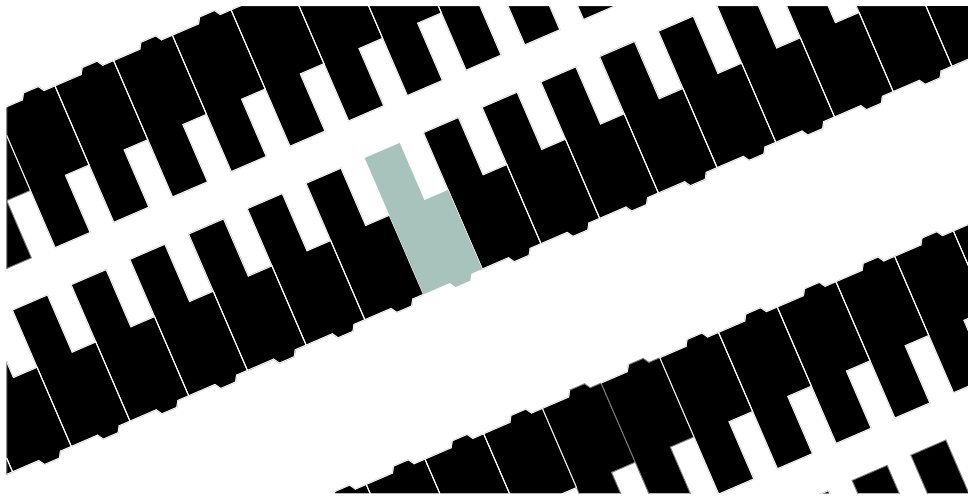


infrastructure  
structure /envelope



public spaces





## VICTORIAN HOUSES – UK

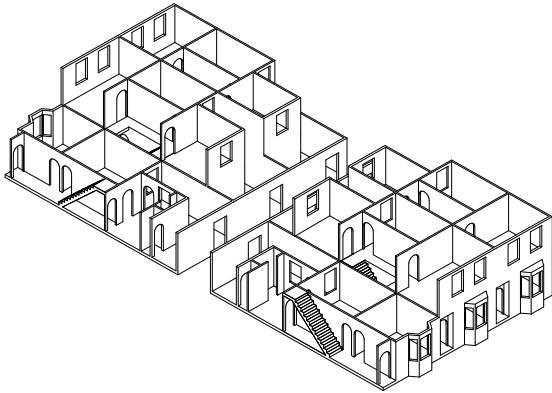
Victorian houses are the archetype of an architectural phenomenon globally exported from the United Kingdom and named for Queen Victoria (1837–1901). The Victorian style of house therefore loosely correlates with the Victorian era.

The industrial revolution saw a massive increase in migration of workers to industrial centers, precipitating a population boom in British cities. The population of London alone rose from two to six million people. Many millions of Victorian brick houses, which are now a defining feature of most British towns, were erected in very short order as a way of accommodating this influx.

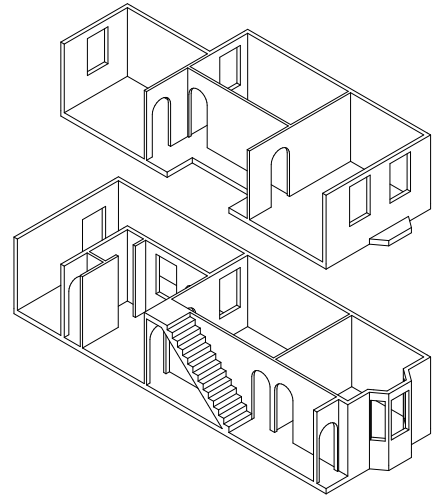
The invention of the railway in 1850 made it possible to produce bricks at low cost and transport them to construction sites. As a result, Victorian houses are characterised both by their homogeneity and ubiquity.

In order to further reduce costs and save space, the houses were usually attached on both sides, creating so-called terraced housing. This configuration reduced heat loss as well as ensuring high density and efficient use of infrastructure. Large windows front and back allowed enough daylight for the kitchen and the living room. Bedrooms were usually situated upstairs .

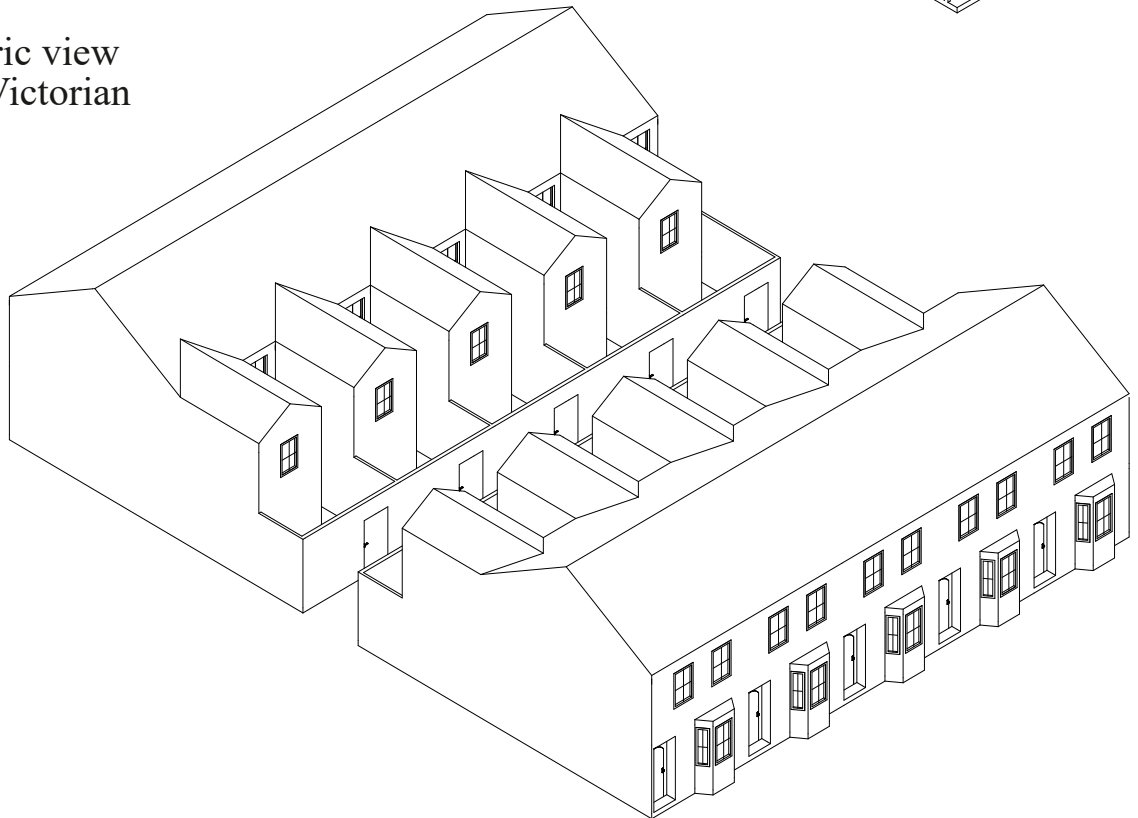
Axonometric  
view of a cluster



Axonometric  
view of a unit

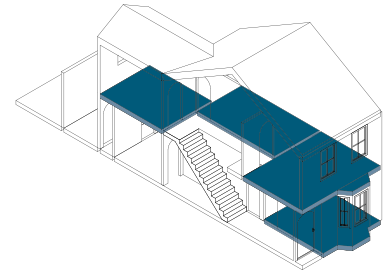
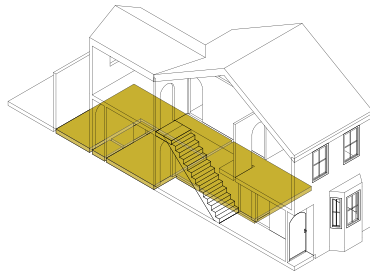
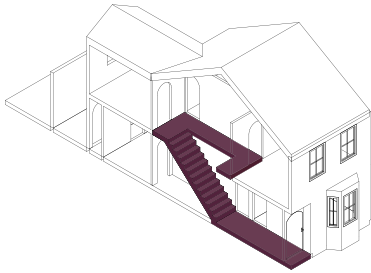


Axonometric view  
of typical Victorian  
houses

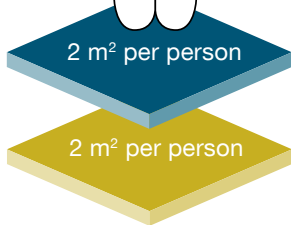
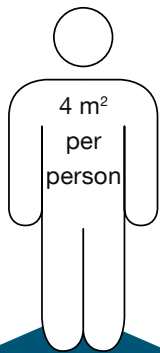


Front façade

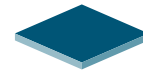
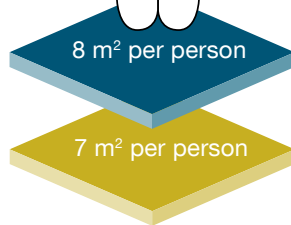
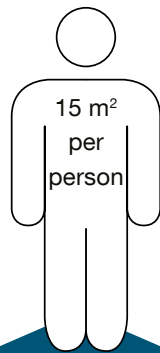




Victorian era



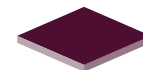
Today



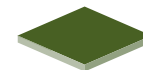
private spaces



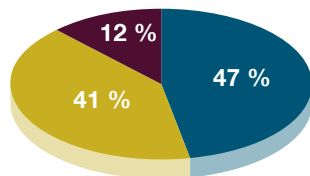
communal spaces



infrastructure  
structure /envelope



public spaces





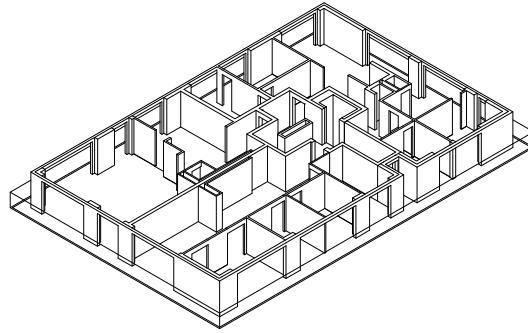
## R50-COHOUSING – Berlin

Berlin's Kreuzberg district has seen an exponential rise in the price of housing. The R-50 project was created in 2013 to offer a new type of affordable housing. This joint building venture was initiated by the architects in a competition procedure for building plots, which was put out to tender by the Berlin Senate Department for Urban Development and Environment. The development followed an intensive design process in consultation with the future residents – a group composed of architects, artists and journalists.

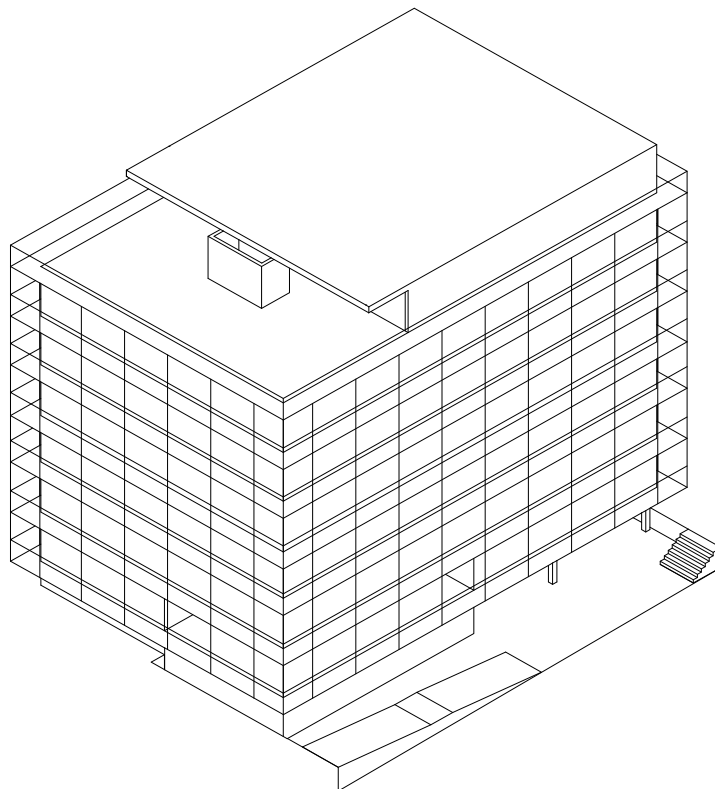
The architects Verena von Beckerath, Jesko Fezer, TimHeide, Christoph Heinemann, Susanne Heiss and Christoph Schmidt brought together potential residents from their social and professional networks, including friends, acquaintances and collaborators, and involved them in a participative design process. Besides financing their individual apartments, future residents contributed to the financing of communal spaces even before the project was developed. This method of financing was made possible by the UmweltBank, Nuremberg.

The R50 project was specifically designed to circumvent the city's prohibitive housing market and to show how people can act to create their own homes. The concept mirrored housing developments in the 1990s in Freiburg and Tübingen, where this model for housing was set up at urban scale.

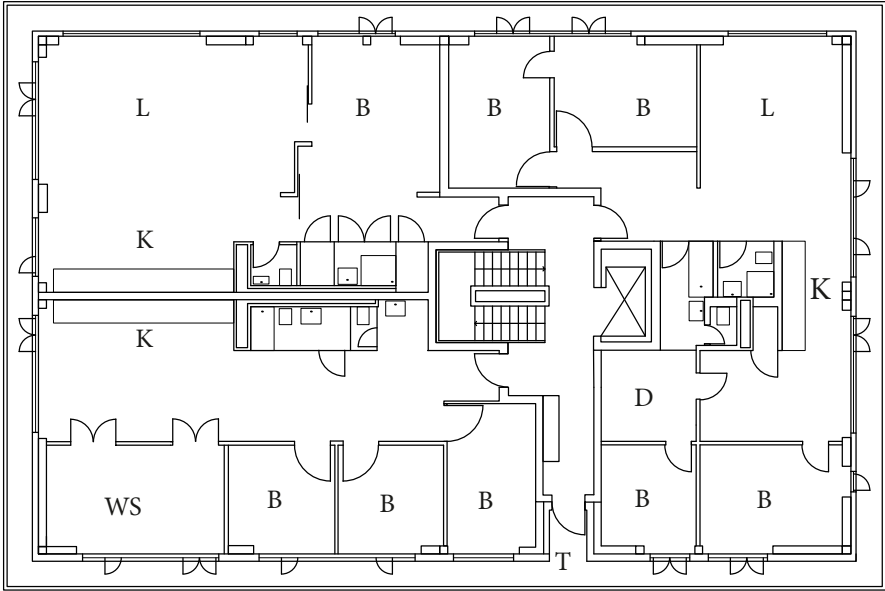
Axonometric  
view of a  
typical floor



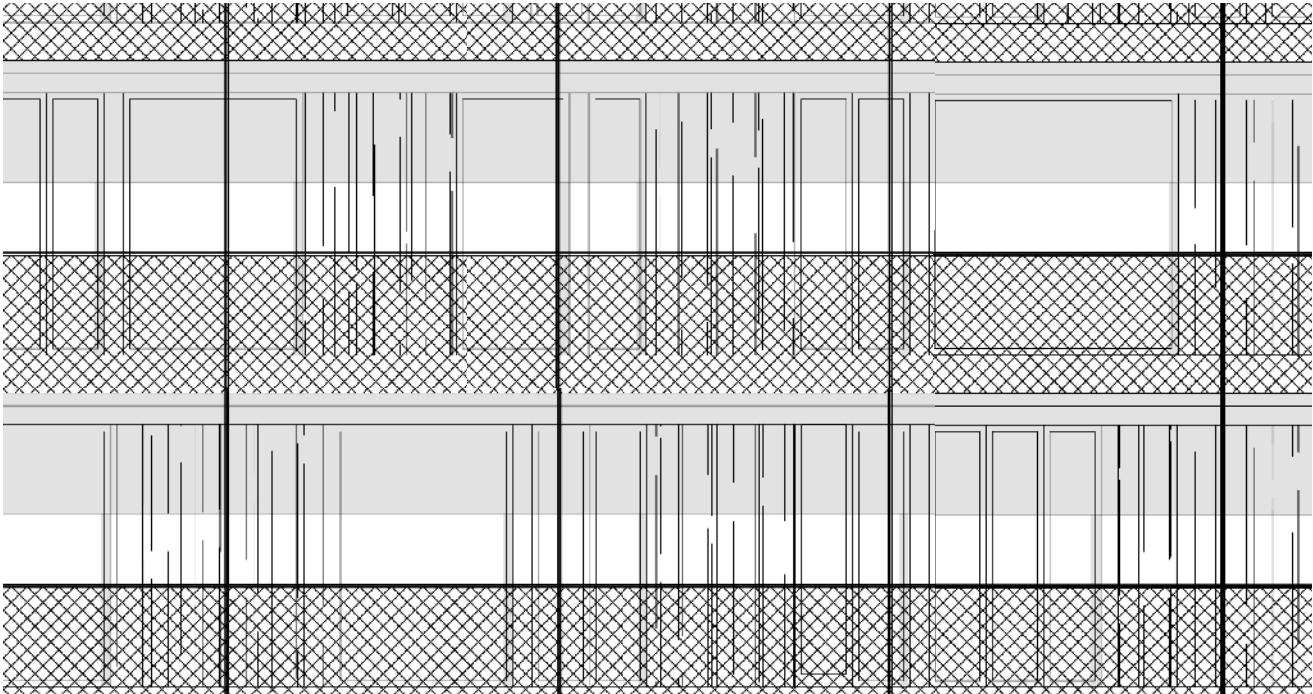
Axonimetric  
view of the  
building



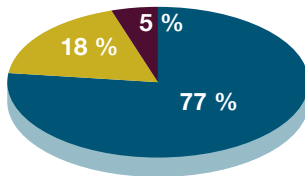
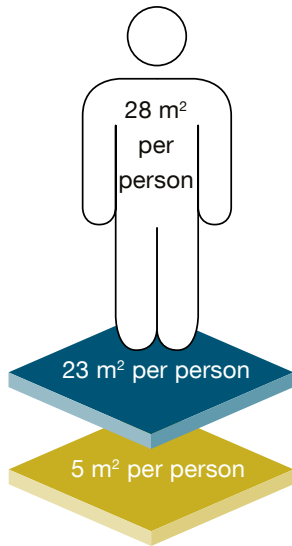
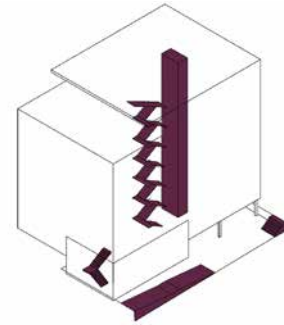
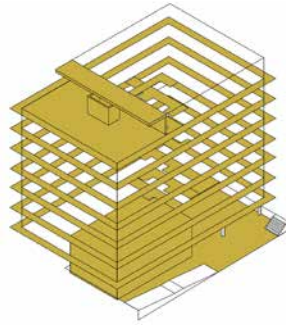
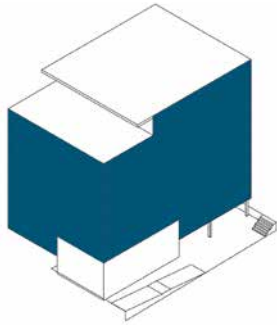
Typical floor plan




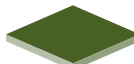


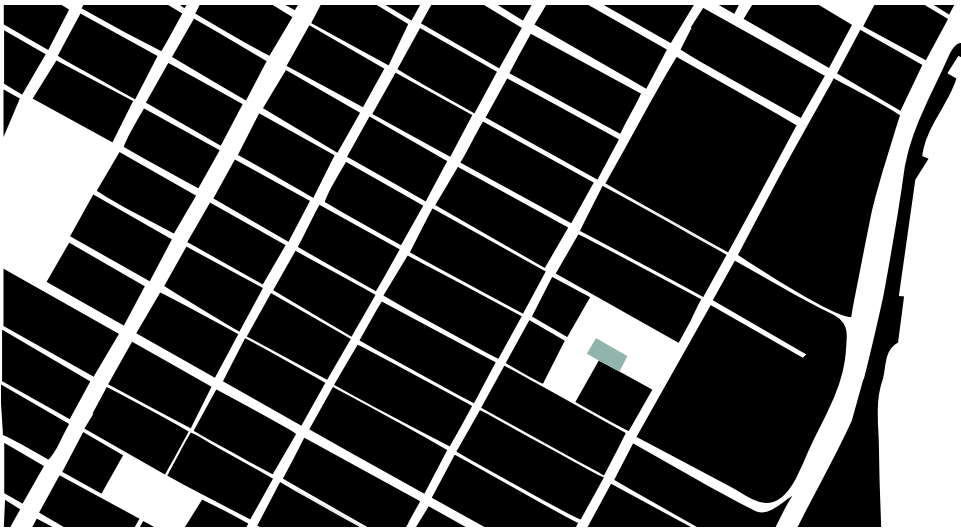
Elevation







	private spaces	1,705 m <sup>2</sup>
	communal spaces	396 m <sup>2</sup>
	infrastructure structure /envelope	115 m <sup>2</sup>
	public spaces	



## CARMEL PLACE – New York

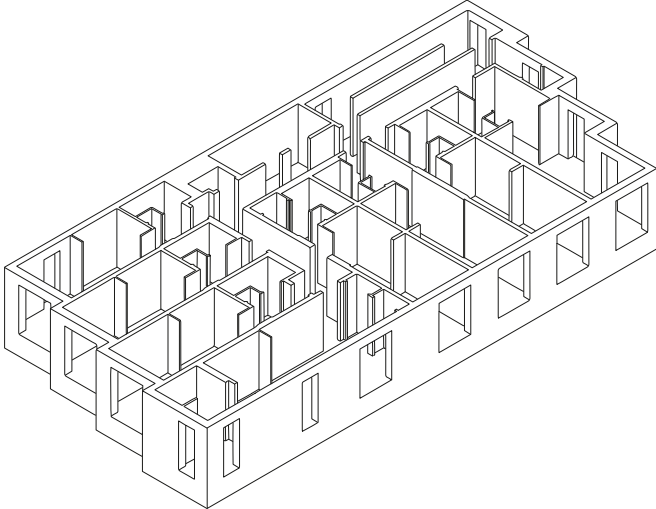
nARCHITECTS' Carmel Place was the winning proposal in the adAPT NYC competition. The construction of Carmel Place is highly prefabricated. The urban context as well as the site conditions required an integrated design process of fabrication, transportation and the stacking of 65 individual self-supporting steel framed modules. 55 modules are residential micro-units, while the remaining 10 serve as the building's core.

The building's exterior resembles four slender mini towers, connecting the concept of micro-living to the form and identity of the building. By incorporating recesses in the design of the stepped mini towers, Carmel Place's urban form could in principle be adapted to different sites. The use of four shades of grey brick make connections to the project's local context, while also situating Carmel Place within New York's long legacy of brick housing.

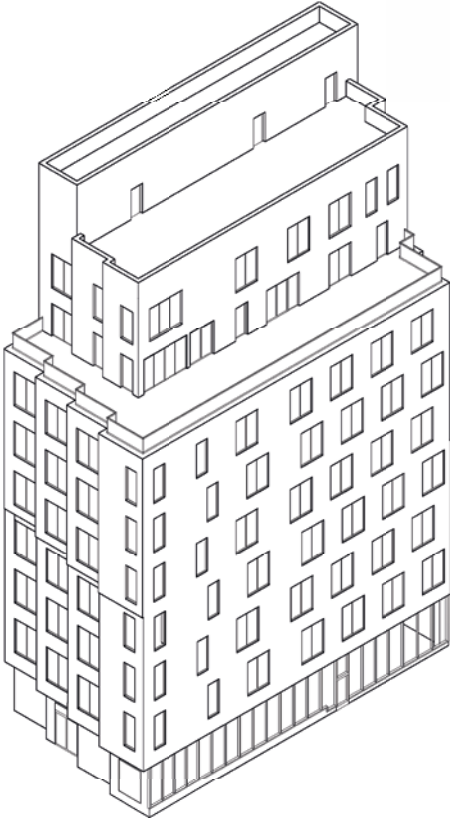
nARCHITECTS' design goal for the unit interiors was to achieve a sense of spaciousness, comfort, and efficiency. To achieve this, the architect-developer team increased the size of everything except the floor area. nARCHITECTS also worked with Resource Furniture to source flexible built-in furnishings that integrate storage, couch, and bed into the layout of almost half of the units.

Carmel Place's communal amenities are accessible to all residents. Designed for multiple functions, they are located in the building's best spaces. A generous lobby connects Mt Carmel Place's sidewalk on the west to an exterior porch for residents' use on the east. In the cellar, residents have access to a den, general storage, bike storage, and a laundry, while on the 8th floor, a community room with a pantry leads onto a public roof terrace with sweeping city views.

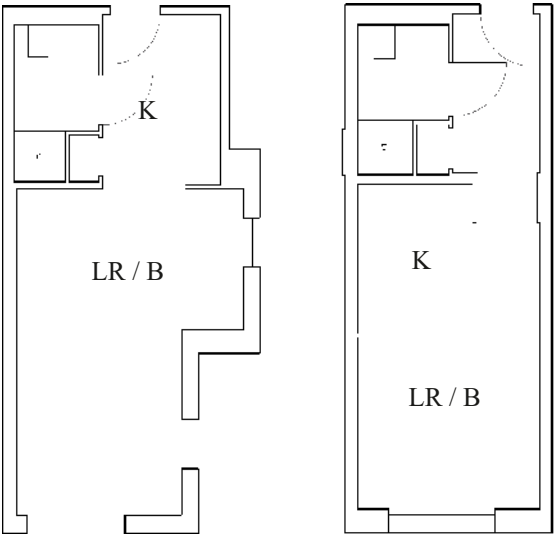
Axonometric  
view of a typical  
floor



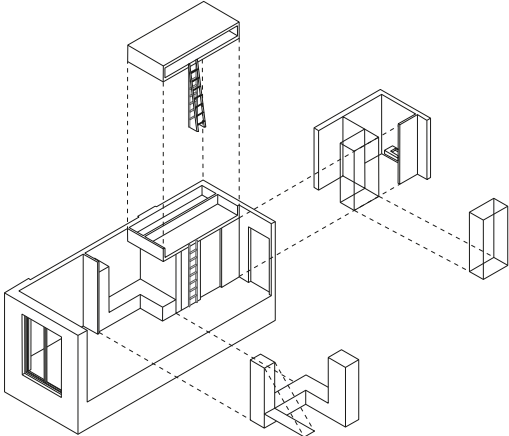
Axonometric  
view of the  
building



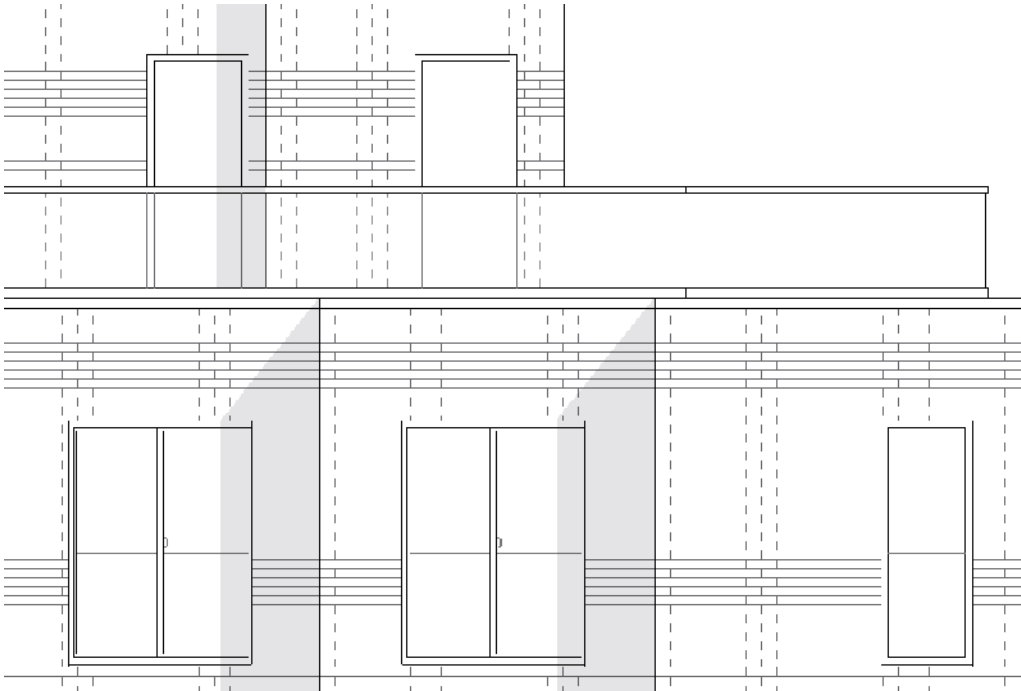
Typologies of private units

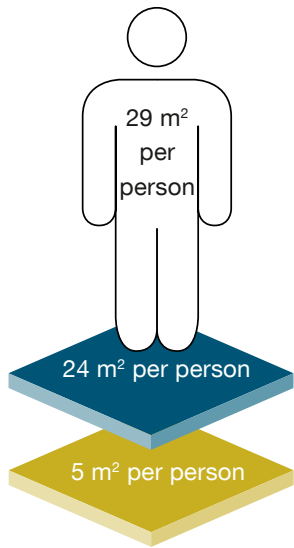
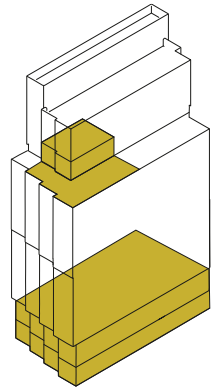
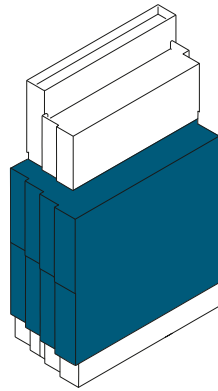
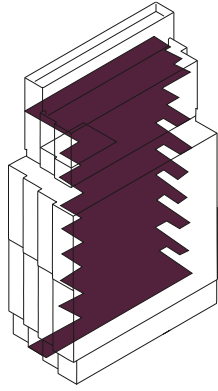
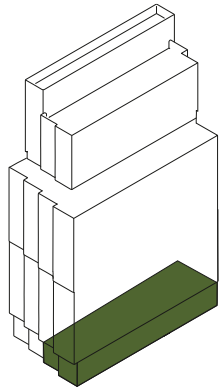


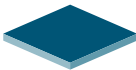
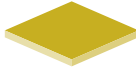

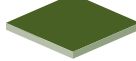
Axonometric view of an apartment

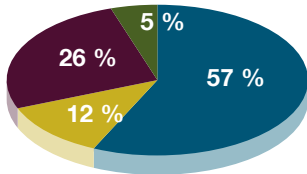


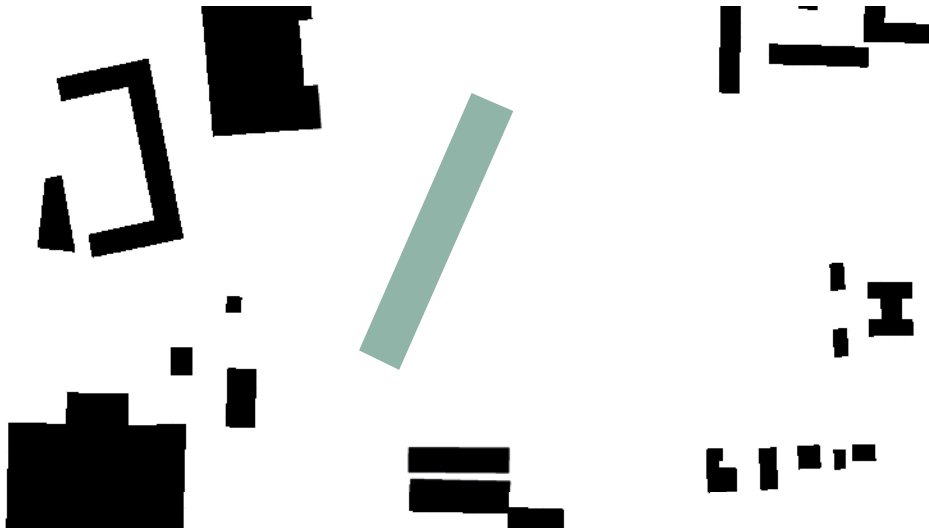
Elevation





-  private spaces
-  communal spaces
-  infrastructure  
structure /envelope
-  public spaces



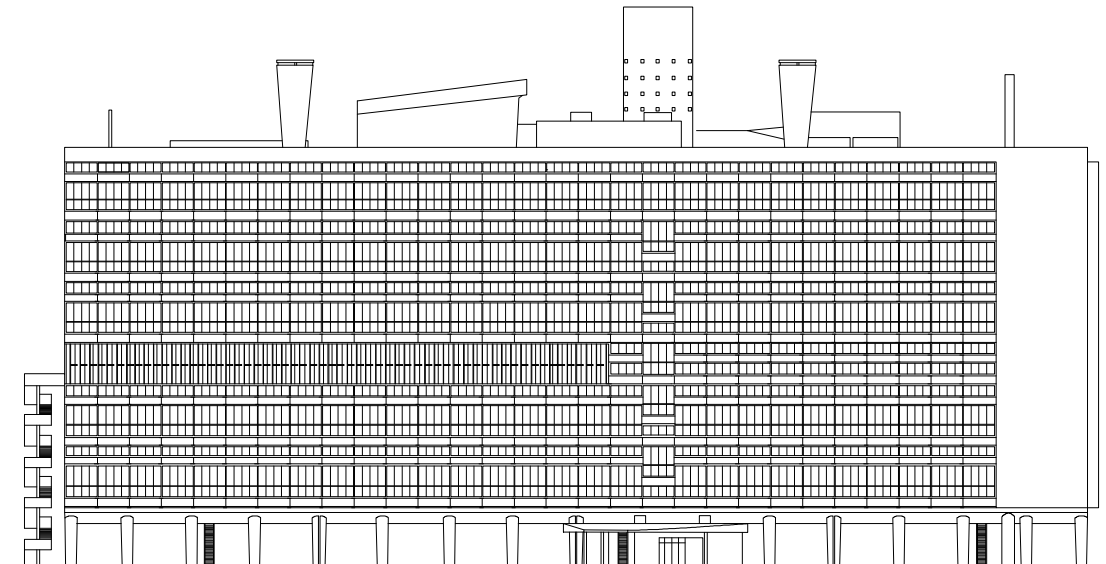


## UNITE D'HABITATION – Marseille

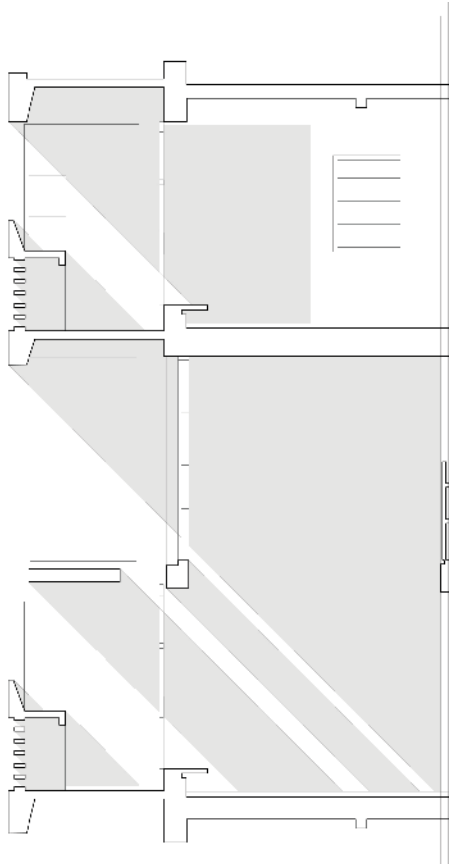
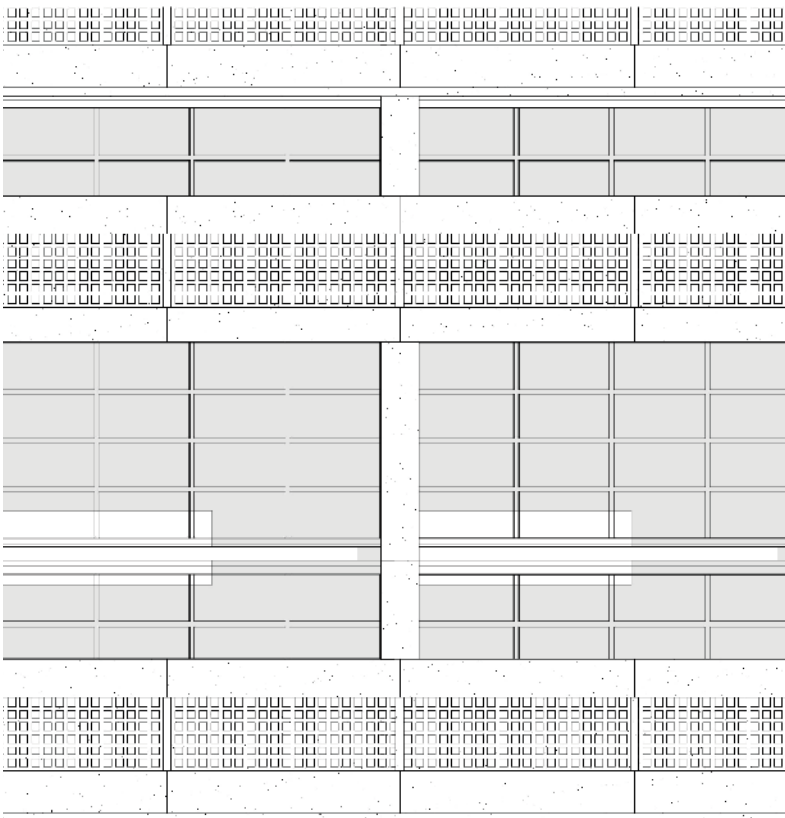
World War II left thousands of French families homeless. In this context, Raoul Dautry, the first French Minister of Reconstruction appointed Le Corbusier to design a residential building as an experimental prototype. “La Cité Radieuse” was built between 1947 and 1951 in the middle of a park on the heights of Marseille and showcased the radical idea of “a machine for living”. This ultramodern building houses 1,600 residents and works as an entirely self-contained community: it is 165 m long, 24 m wide and 56 m high. Le Corbusier was fascinated by the huge advancements in industrialization at that time. The structure of the building is entirely of raw concrete. However, the different elements of the apartments were prefabricated. In terms of numbers, this urban unit comprises 337 apartments on 18 levels of 23 types ranging from 13 m<sup>2</sup> to 203 m<sup>2</sup>. The most common is a group of 196 duplex apartments of 98 m<sup>2</sup>, designed to accommodate a family (parents and two children).

The radically new type of floor plan on two levels allows a double exposure east to west with partly double-height spaces. In all cases, the living room features large double-height windows providing high levels of daylight along with a balcony. The kitchen is either upstairs or connected to the living room, depending on the arrangement of the apartment. However, the kitchen area is only 4 m<sup>2</sup>; Le Corbusier’s intention was that residents would meet in communal kitchens and shared facilities. Furthermore, this building features a shopping centre, containing a fishmonger, a butcher, a dairy, and a grocery, as well as a bakery along a central interior road on levels 7 and 8. Further facilities include a laundry, cleaning service, pharmacy, a barbershop, and a post office. Along the same corridor there is hotel accommodation and a restaurant snack bar with special service to the apartments. The 17th and last floor contains a kindergarten and a nursery, from where a ramp leads to a roof garden and a swimming pool for children, a gymnasium, a 300 m running track, and a solarium with a snack bar.

La Cité  
Radiouse in  
Marseille,  
1951

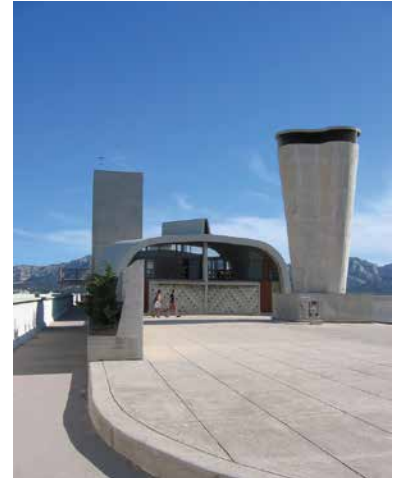


Elevation and section of the façade

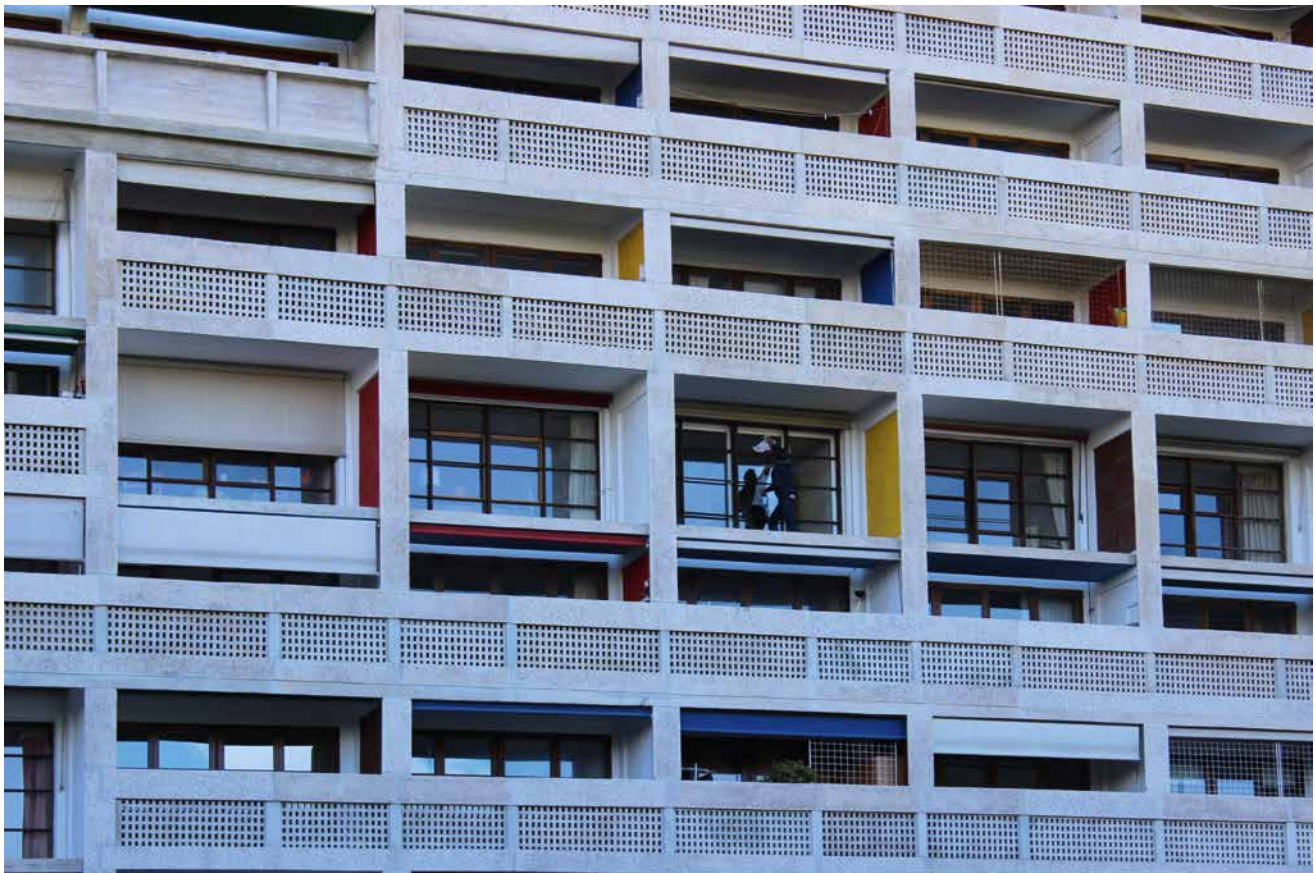




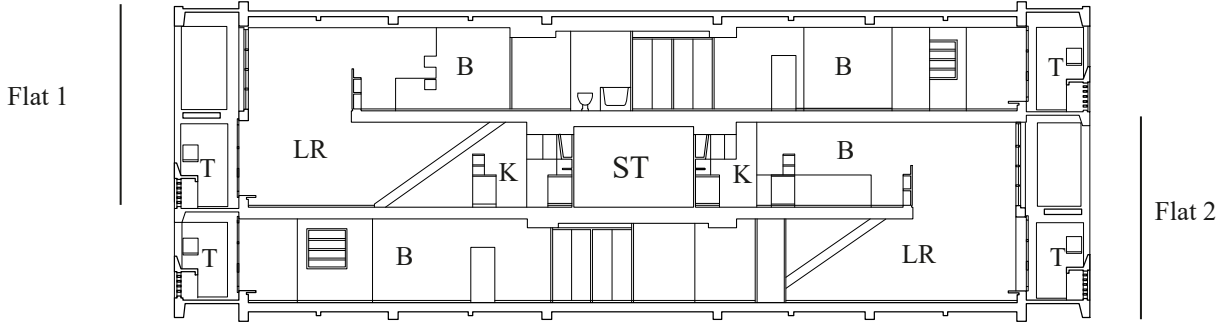
Collective  
roof garden



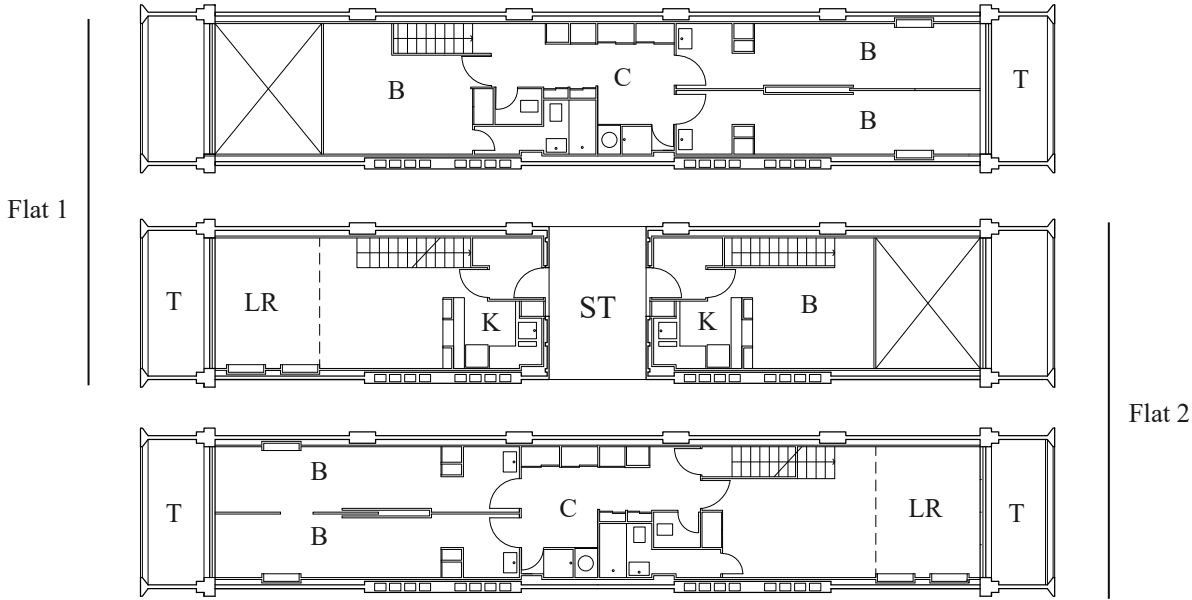
Façade detail

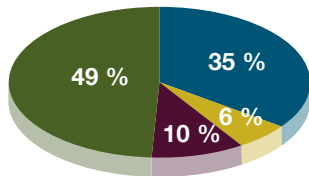
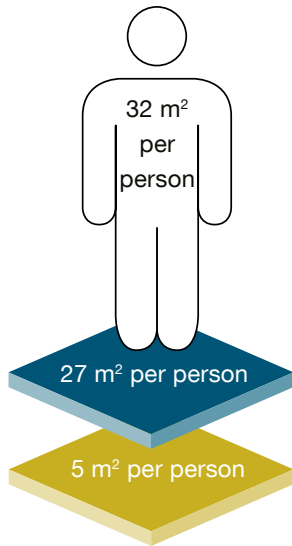
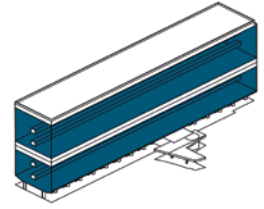
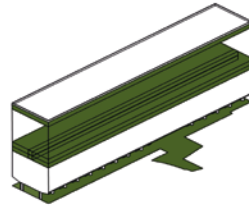
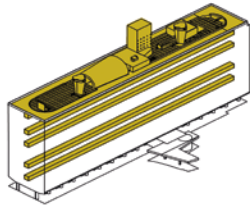
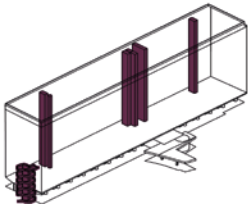


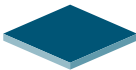
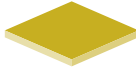

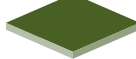
Section of two  
apartments featuring  
double height space  
and internal corridor

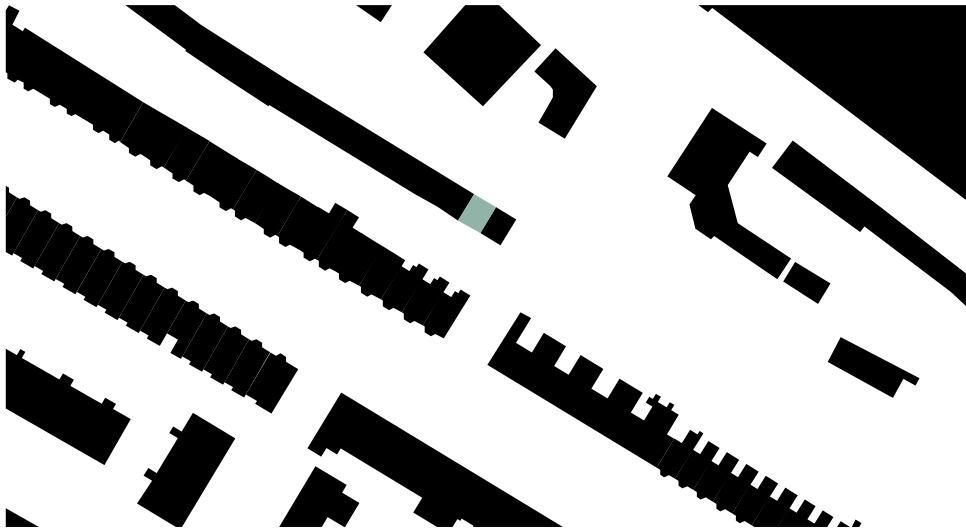


Floor plans of  
two apartments  
featuring double  
height space





	private spaces	28,062 m <sup>2</sup>
	communal spaces	4,905 m <sup>2</sup>
	infrastructure structure /envelope	7,594 m <sup>2</sup>
	public spaces	39,470 m <sup>2</sup>



## GARDEN HOUSE – Noiascape’s co-living – West London

Teatum+Teatum architects designed a co-living space for their property development company Noiascape. The firm addresses urban dwelling challenges in the conviction that living in cities should be more social. They have created a network of spaces across the city that can be accessed by a Noiascape ‘community’. The facilities include informal working and living spaces, which means time spent at work and at home is within a community.

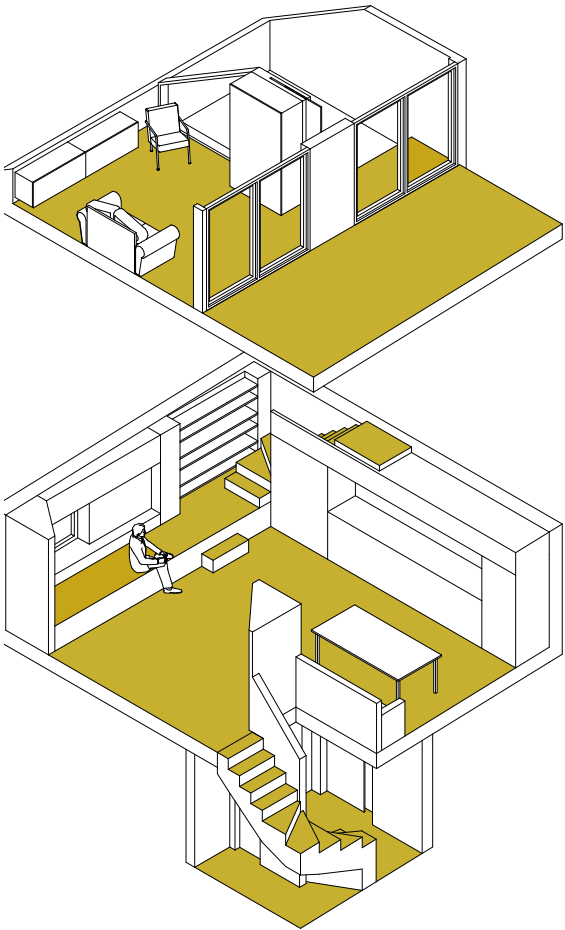
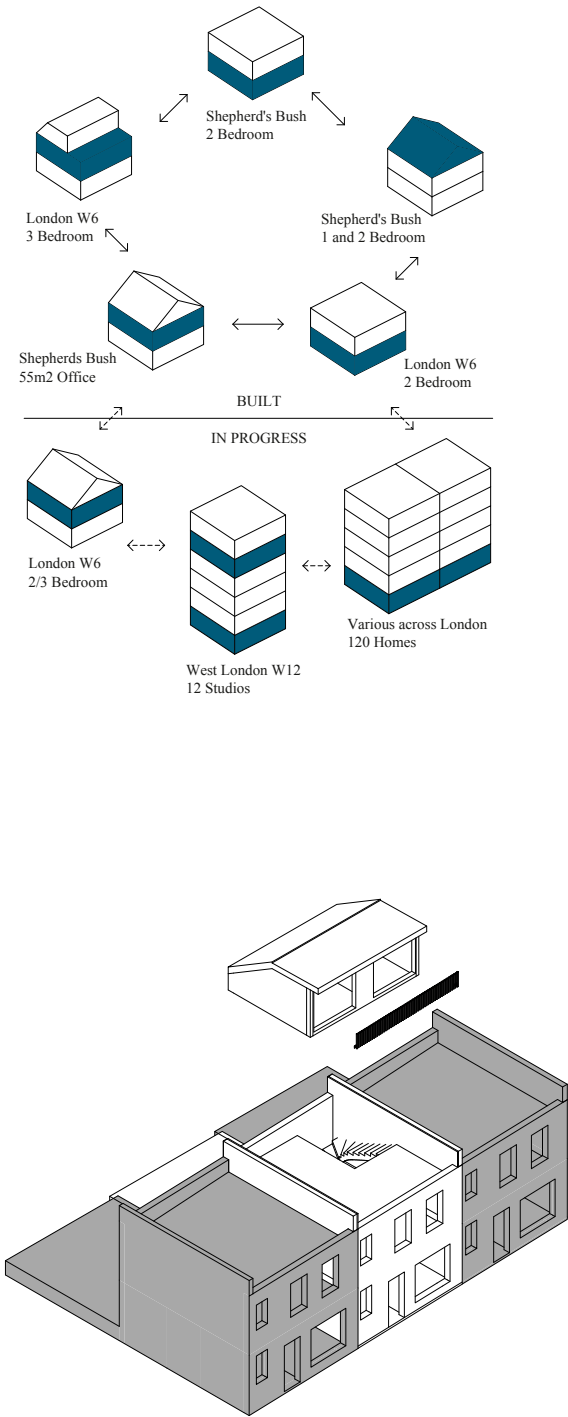
Garden House is a three-bedroom terraced mews house situated in West London. Each bedroom can be individually rented; other spaces are shared, not only between the residents, but by the whole Noiascape community. Interior rooms differ from popular student-style co-living spaces currently on the market, where a large number of residents share impersonal kitchens and lounges. Noiascape’s developments are more refined, boasting double-height and triple aspect living spaces. The projects enable home working in an informal way. Common spaces are fluid, open, and interconnected in order to encourage residents to socialize, work and spend alone time in the space without being restricted to their bedrooms. A metal bridge separates the living space from a rooftop study, creating a physical separation between relaxation and work zones. Furniture and storage made from birch plywood is integrated into the walls to allow occupants to move in with just the bare necessities.

The project is a renovation of a typical terraced house. In addition to new interiors, it has gained a roof terrace, which does not interrupt the roofline of the surrounding buildings. Where it does differ, is in its striking green façade, which signifies this house is conceptually unlike any of its neighbours.

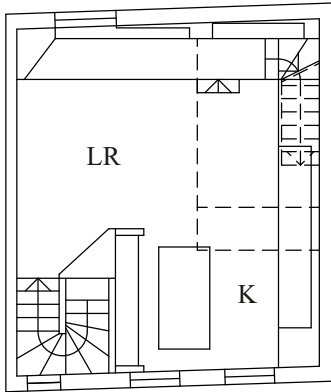
Current state  
of all Noiascape  
properties

An additional  
storey was  
added on the top  
of the house;  
the rest of the  
roof can be used  
as a terrace

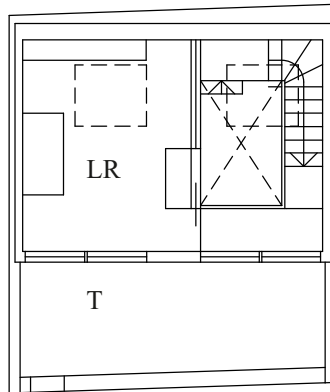
# Conceptual sketch of communal space



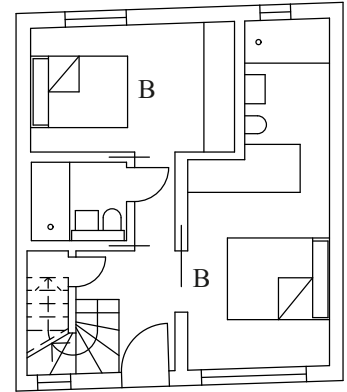
First floor



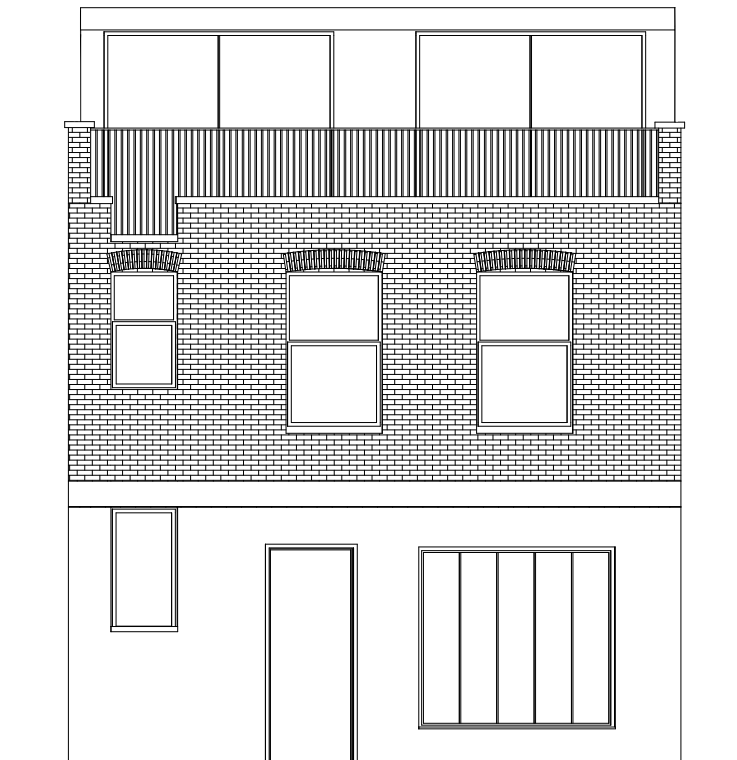
Second floor



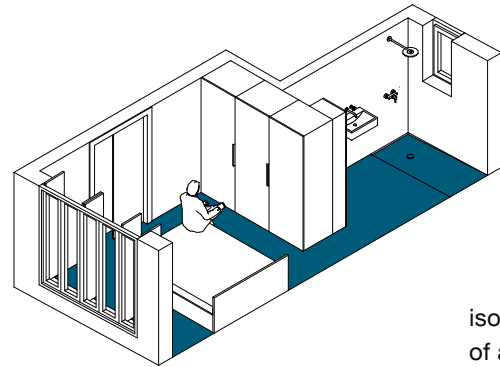
Ground floor



Building elevation

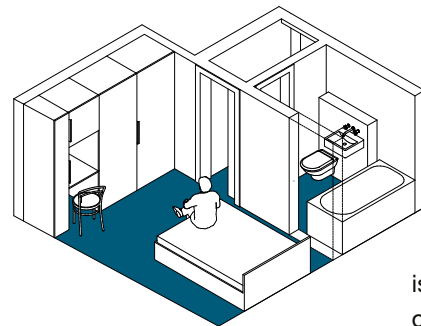


Bedroom type 1

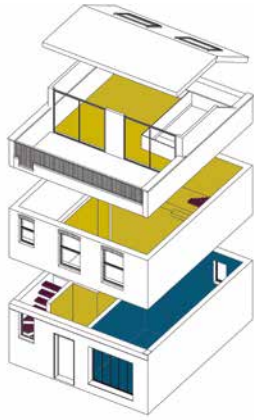


isometric view of apartments

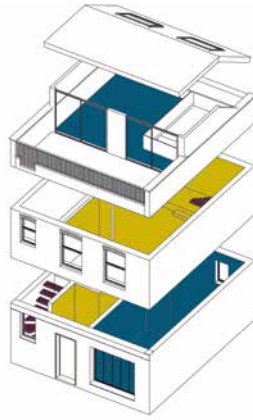
Bedroom type 2



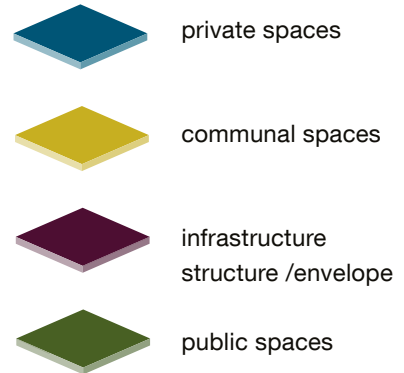
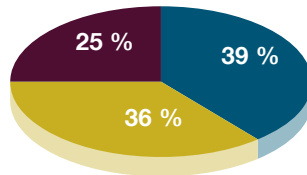
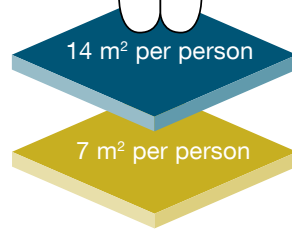
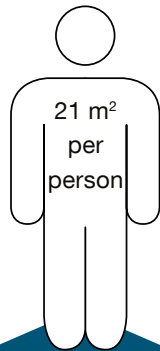
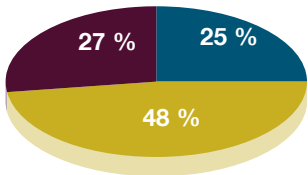
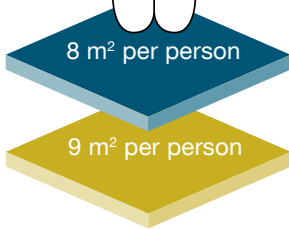
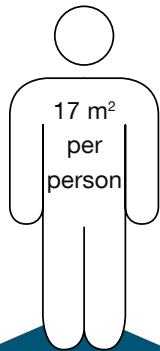
isometric view of apartments



4 persons



5 persons





## LA BORDA - Collective Property – Barcelona

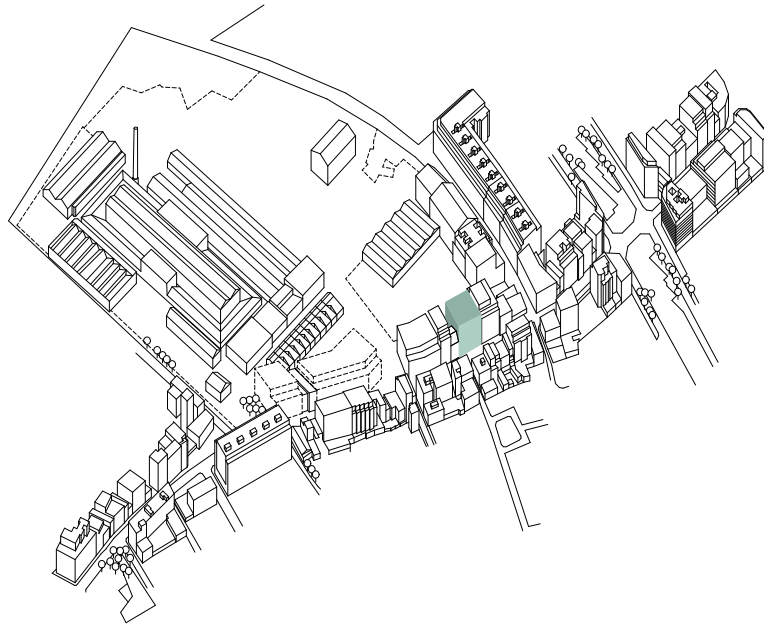
On November 30, 2015, a leasehold was granted to La Borda by Barcelona City Council. La Borda is a plot located on Constitució Street at the edge of Can Batlló, a former industrial heartland in the south of Barcelona. It is classified as State-Subsidized Property (HPO). The subsidized lease is for 75 years subject to an annual fee. In addition, self-development and collective management implies that the participation of future users in the whole process is the most significant and distinctive feature of the project: future inhabitants can define the entire project in accordance with their specific needs.

In this model of cooperative housing, the property is held collectively, while use is personal. Residents have the status of cooperative partners and can live there for life. A General Assembly is the decision-making institution. The model eliminates property speculation and profiteering in favor of a fundamental right to housing. Members can neither sell nor rent out their flat. As a viable alternative model of housing access to traditional ownership and rent, it prioritizes use value over exchange value.

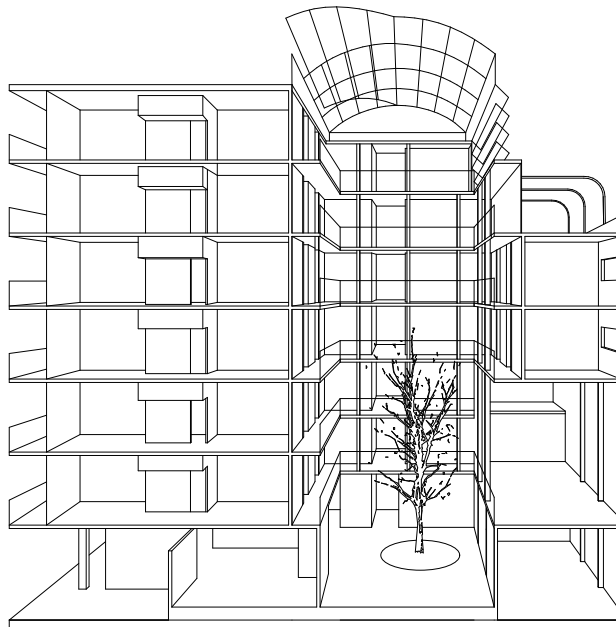
Potential members cannot exceed a maximum income. It also establishes a maximum fee to be charged for use in order to ensure lower-income residents benefit, which is one of the main purposes of the cooperative.



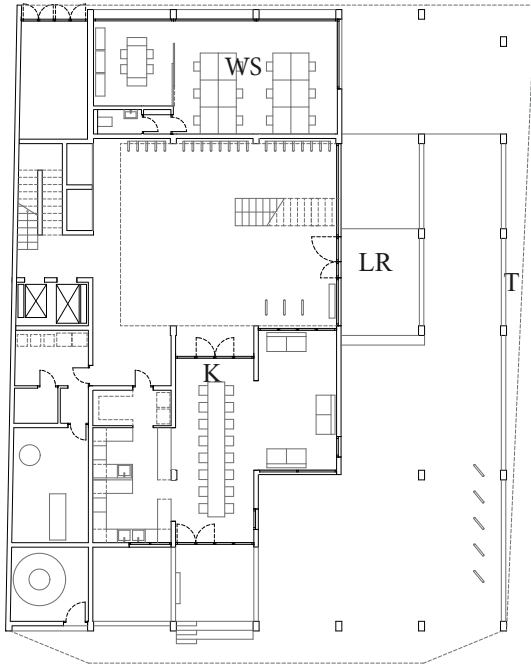
Urban context  
of La Borda



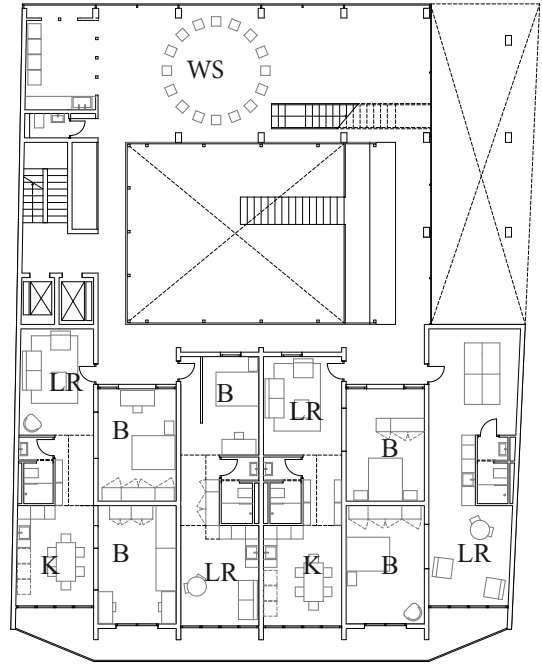
Section through  
the main atrium



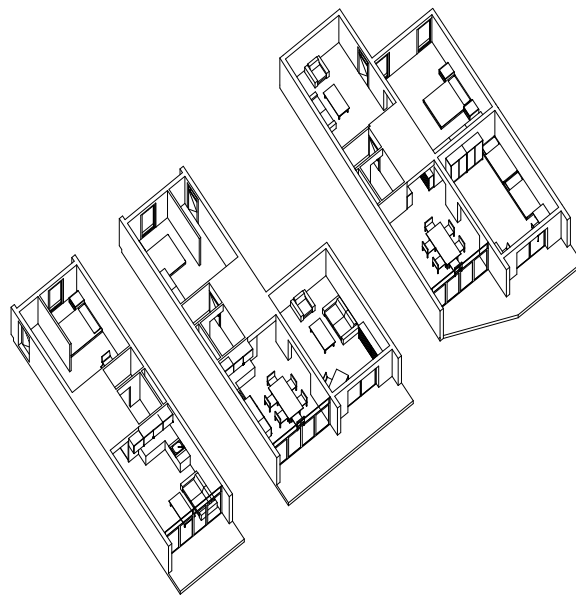
Ground floor plan

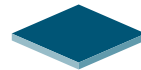
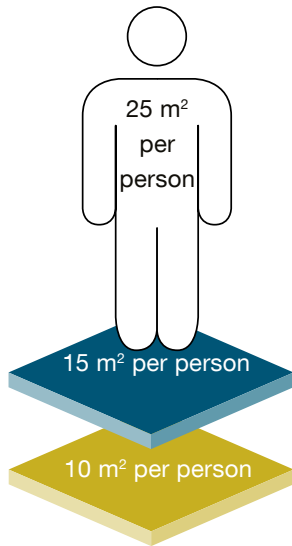
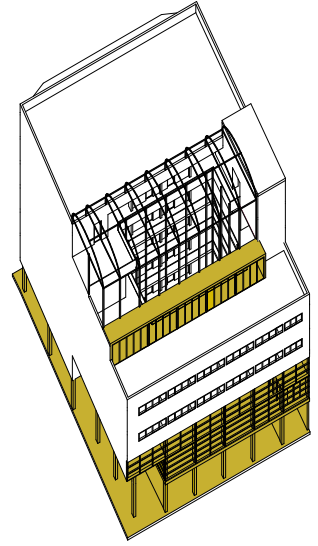
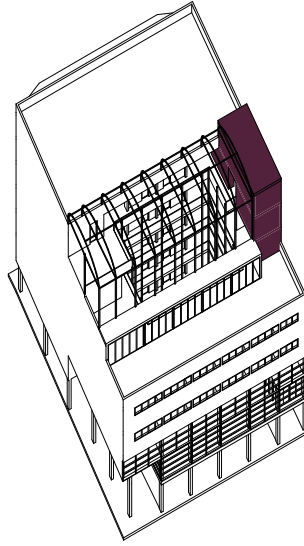
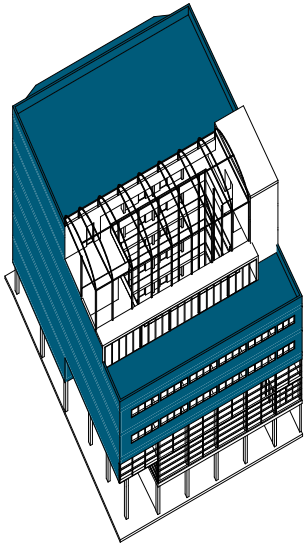


Upper floor plan

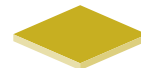


Isometric view  
of typologies

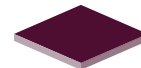




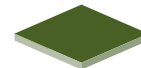
private spaces



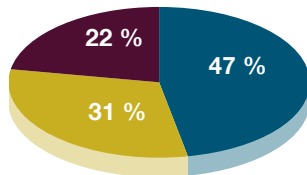
communal spaces

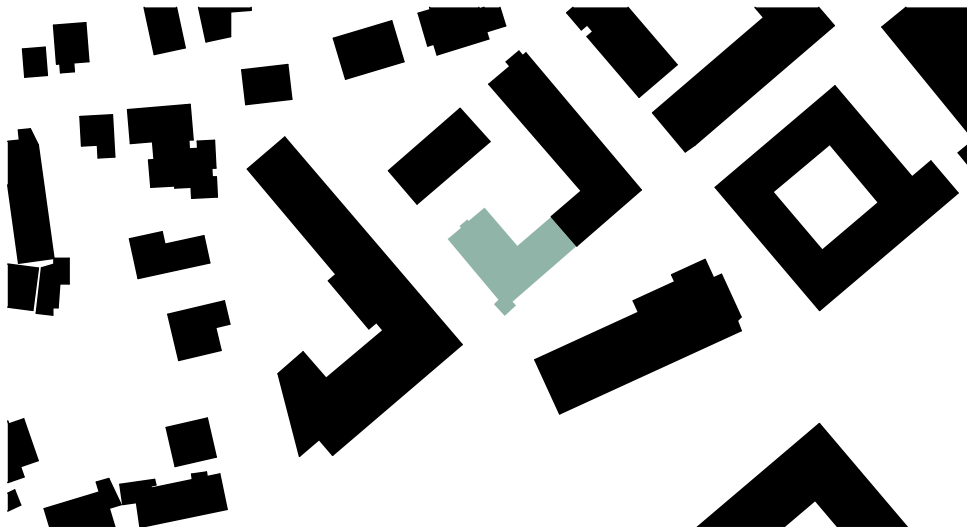


infrastructure  
structure /envelope



public spaces





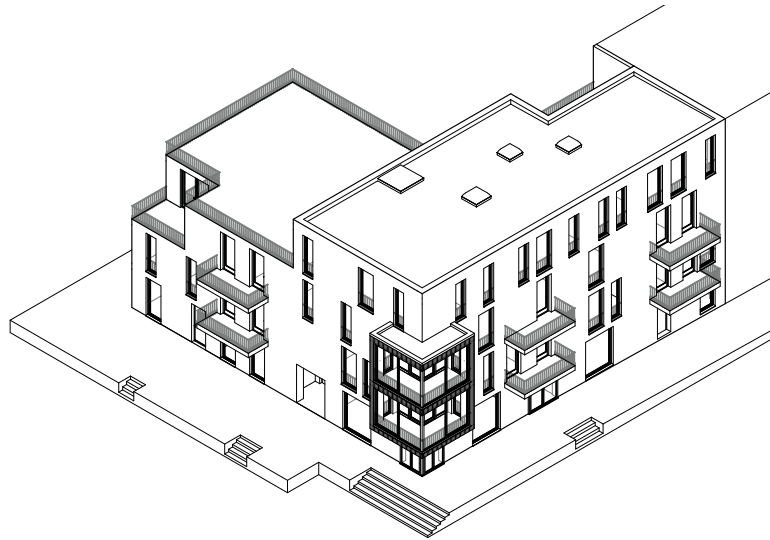
## EN FAMILLE – Tübingen

The recent urban developments in Tübingen, a city in south of Germany are, together with the “Quartier Vauban” in Freiburg, a landmark in the development of sustainable neighbourhoods. They were winners of various prestigious awards and are leading examples of numerous contemporary urban developments in Zurich, Berlin and other cities, where housing associations as well as cooperatives becoming increasingly popular. However, in Freiburg and Tübingen, for the first time in modern history, housing associations and shared living concepts are part of legal planning requirements at an urban scale.

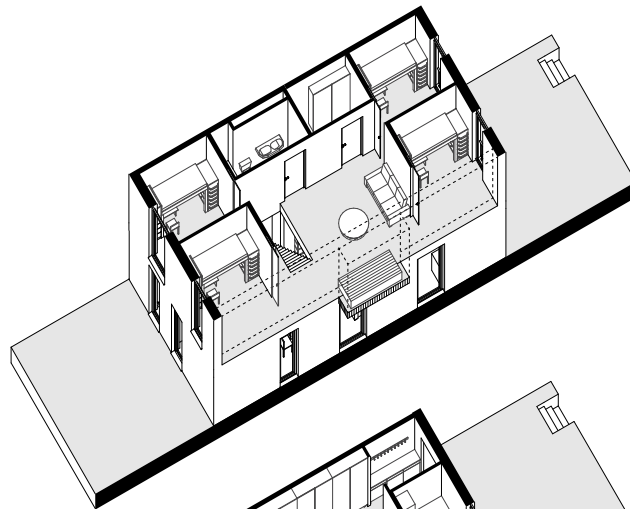
Located in Tübingen’s new neighborhood “Alte Weberei”, this four-story residential building emerged from the joint venture of eight young families aiming to secure their individual housing affordably in a cooperative and family-oriented setting. Designed by Manderscheid Architekten, this building is representative of the large-scale urban interventions in Tübingen over the last two decades.

The ground floor interface works as an inviting outdoor space creating access to a family café run by the residents and a ceramic workshop. Special attention was paid to the design of the stairway: This vertical sculpture unveils a complex spatial experience flooded with daylight, and invites residents to discover communal in-between spaces, encouraging communication between the neighbors. On the first floor, the stairway connects to a large communal garden with seating and a playground for children. All apartments are designed differently to suit their occupants. Cost efficiency is also paramount in the plan; the ambitious aim is to keep the price per square meter down to € 23.00.

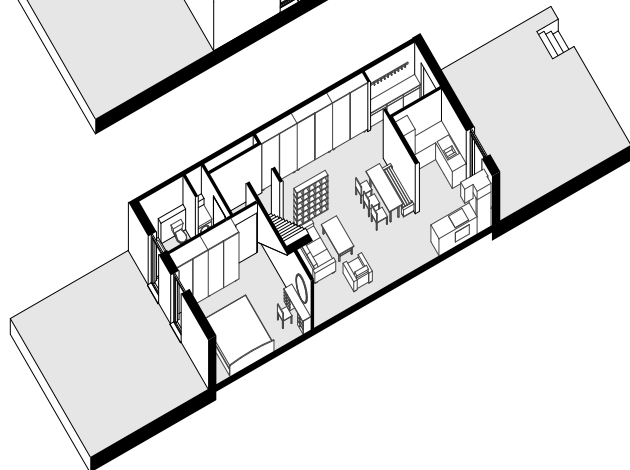
Isometric view  
from south



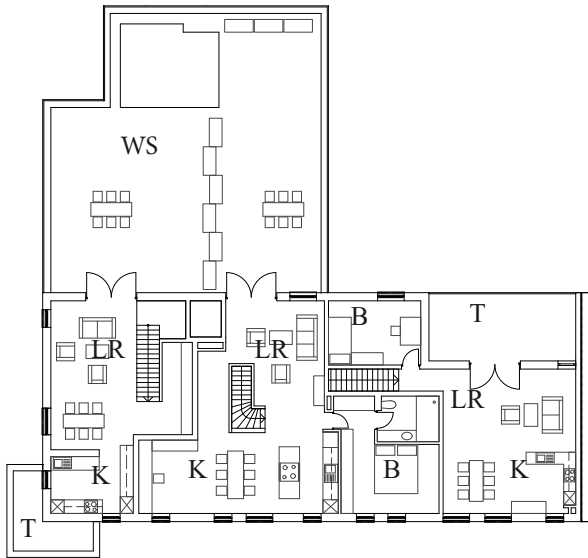
Family  
maisonette  
Second floor



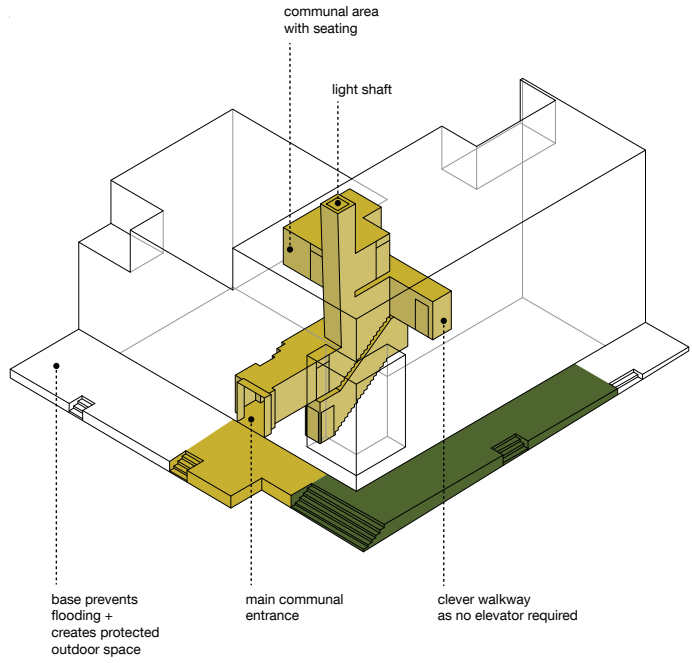
Family  
maisonette  
First floor



Fourth floor



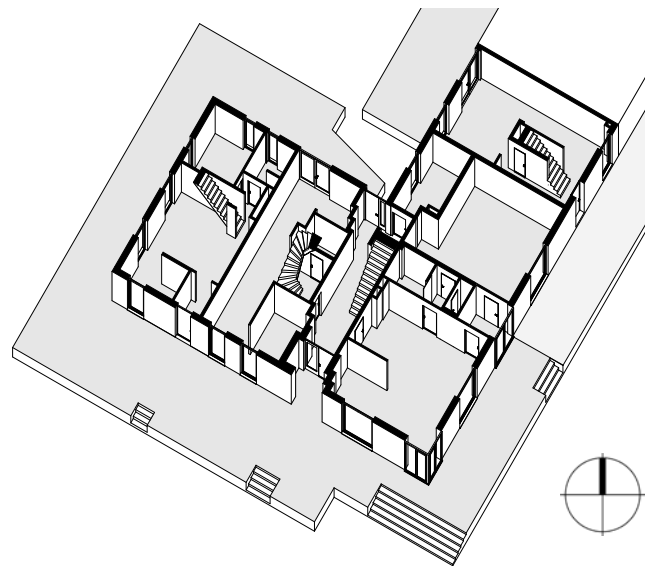
Stairway as vertical sculpture

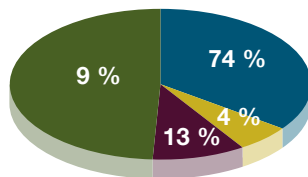
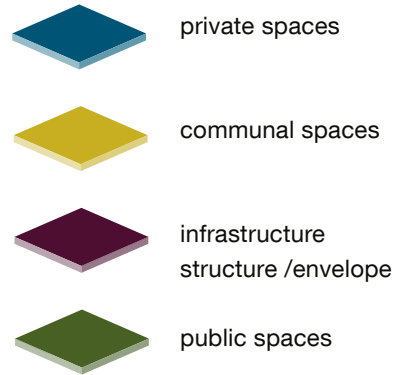
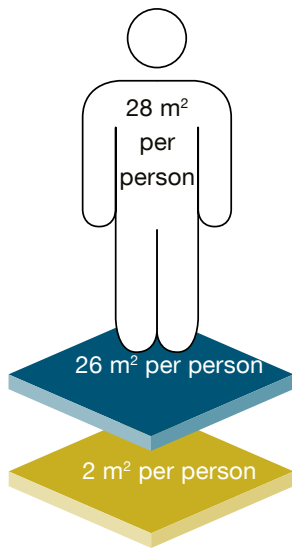
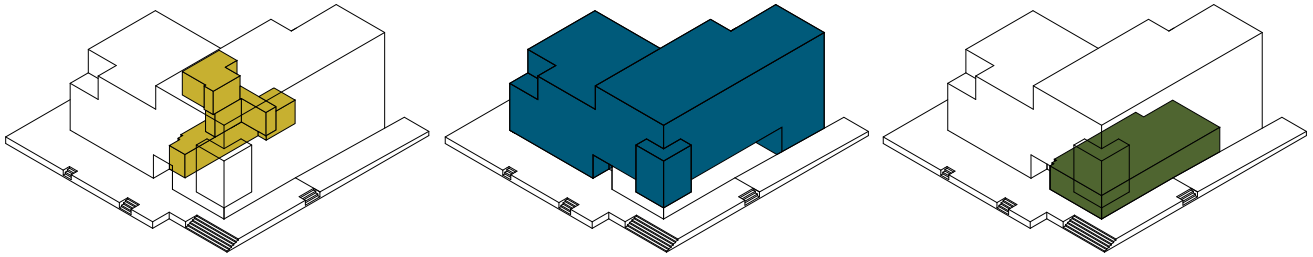


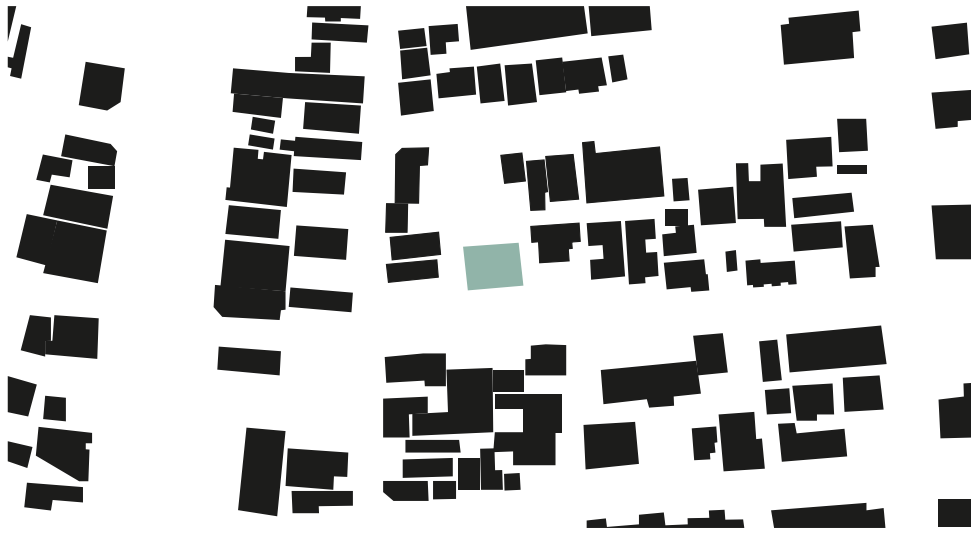
South-west elevation



Ground floor interface







## LT JOSAI -Living as a family – Nagoya

LT Josai was built in western part of Nagoya in 2013, and designed by Naruse Inokuma Architects.

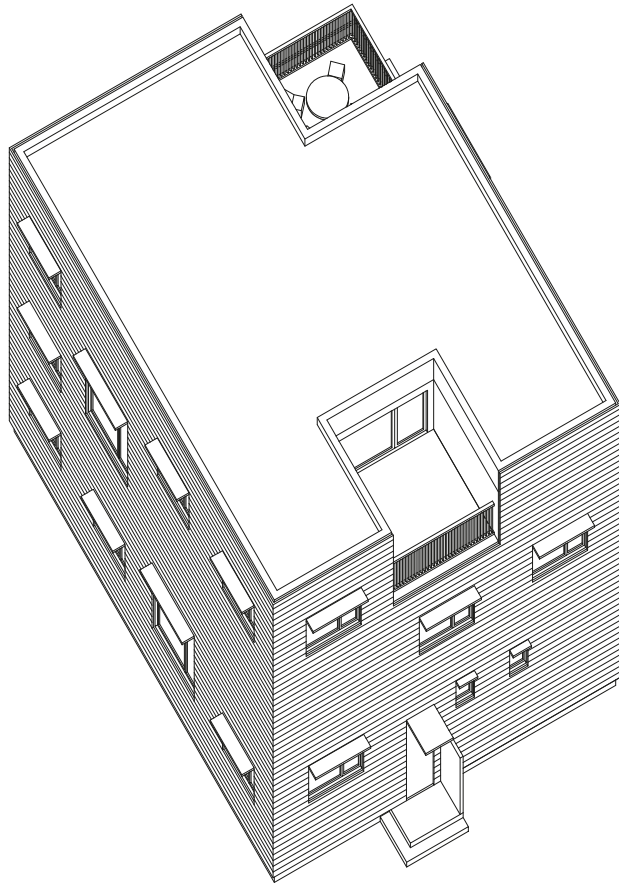
The “share house” is an increasingly popular style of living in Japan, somewhat similar to a large house in which the water systems and living room are shared by the residents. What makes it different from a large house, however, is that the residents are not family but unrelated strangers. Also, unlike living in a building formed by single apartments, the residents live together in a more intimate way. Thus both its management and its space must be carefully organized to enable complete strangers to share spaces with one another.

The share house spaces were created through a reconsideration of the building’s entire composition. The shared and individual spaces were studied simultaneously and, by laying out individual rooms in a three-dimensional fashion, multiple areas, each with a different sense of comfort, were established in the remaining shared space. All the spaces are planned on a 3,640 by 3,640 mm grid. Each private room is 12.4 m<sup>2</sup>.

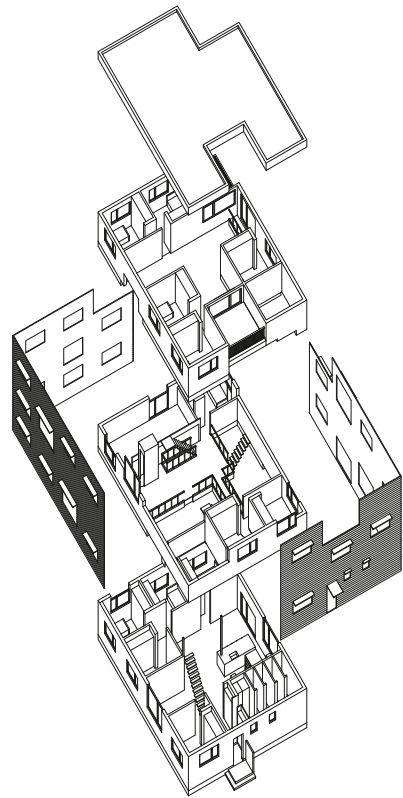
Communal spaces and circulation structures are combined, which individualizes each part of the multi-functional central area in order to make the residents feel at home and able to interact naturally with each other.



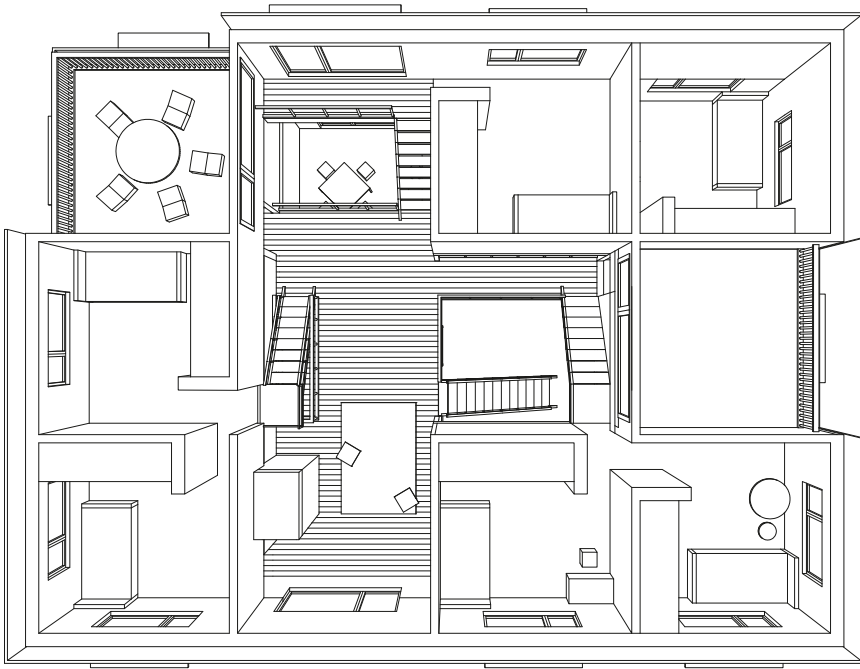
Axonometric view  
on the building



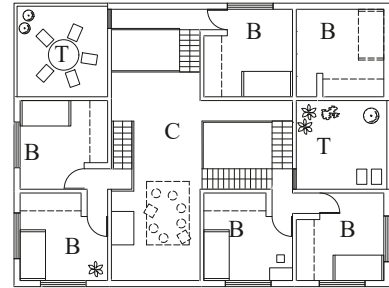
Axonometric view  
on the floors



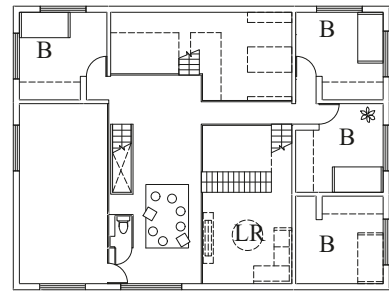
Void as communal space



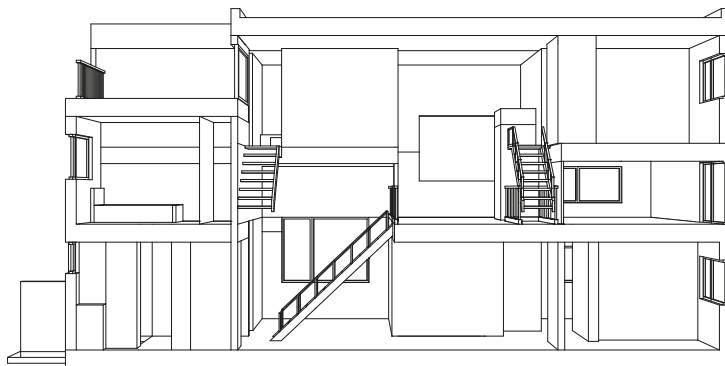
Second floor



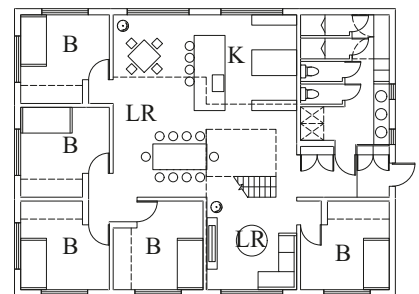
First floor

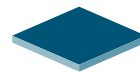
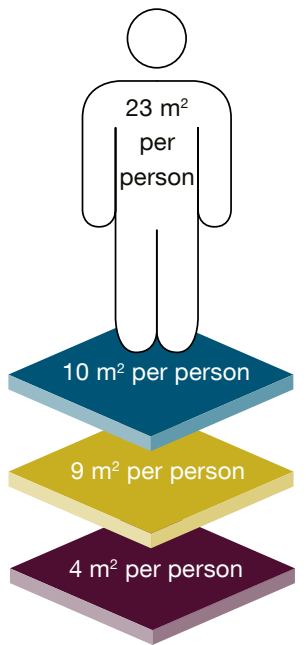
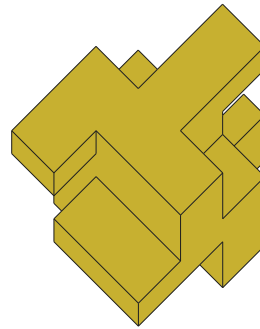
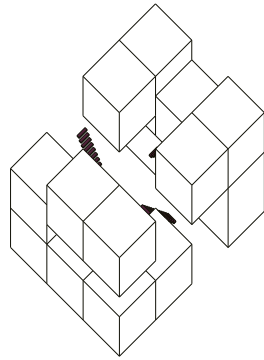
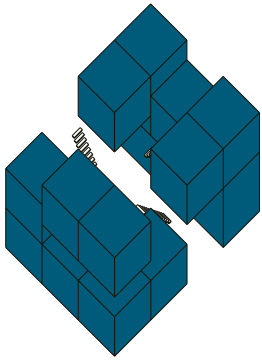


Section through communal space

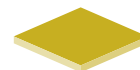


Ground floor

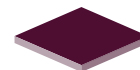




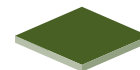
private spaces



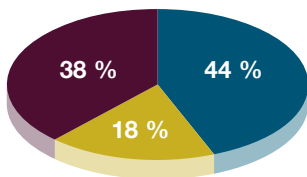
communal spaces

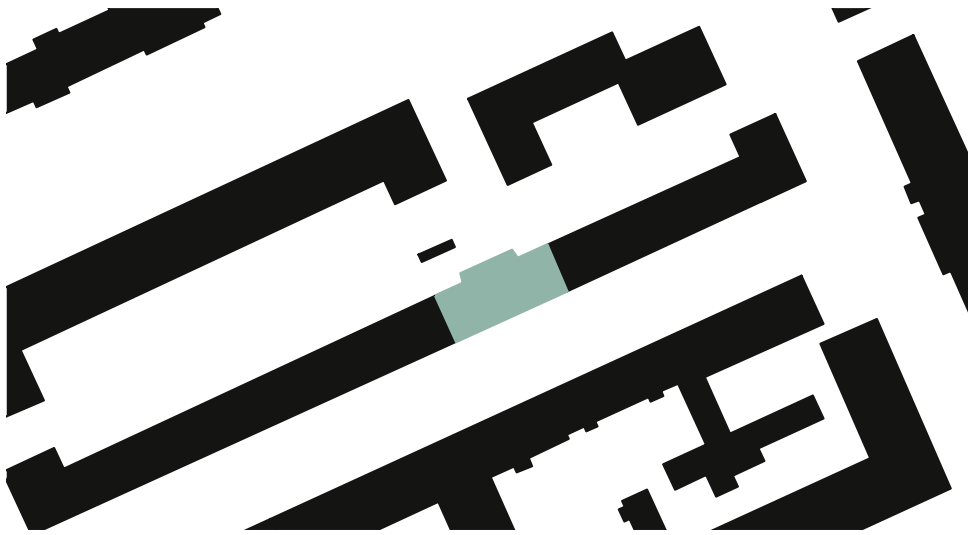


infrastructure  
structure /envelope



public spaces



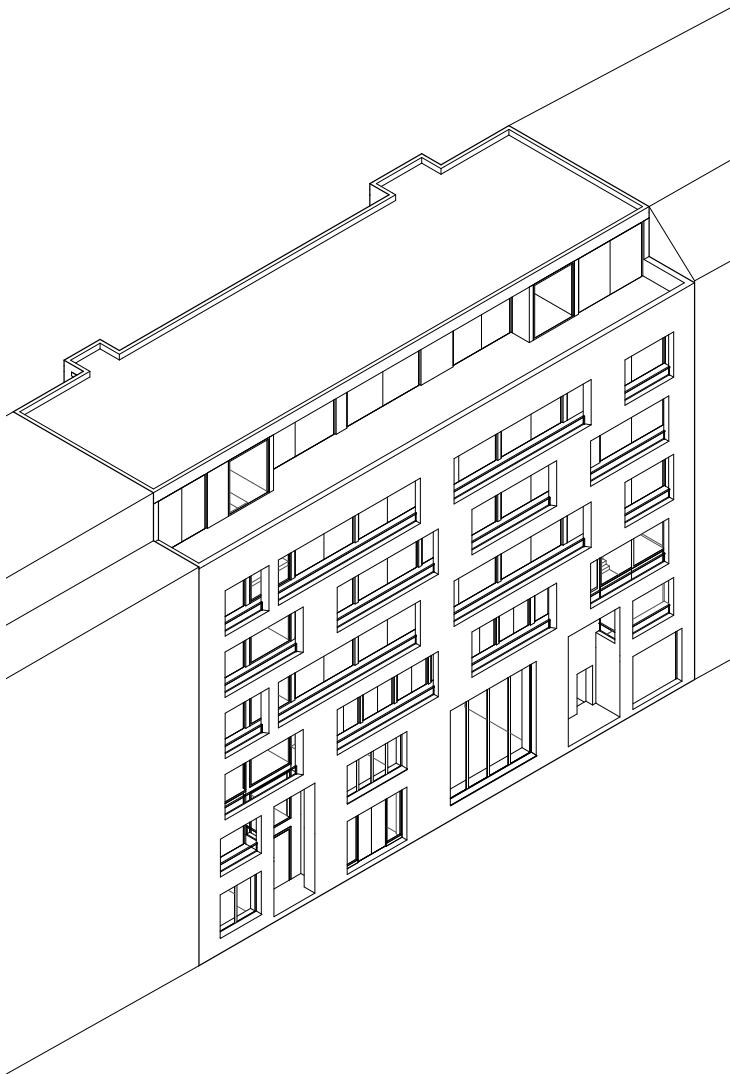


## SCHÖNHOLZER 15/16 – Berlin

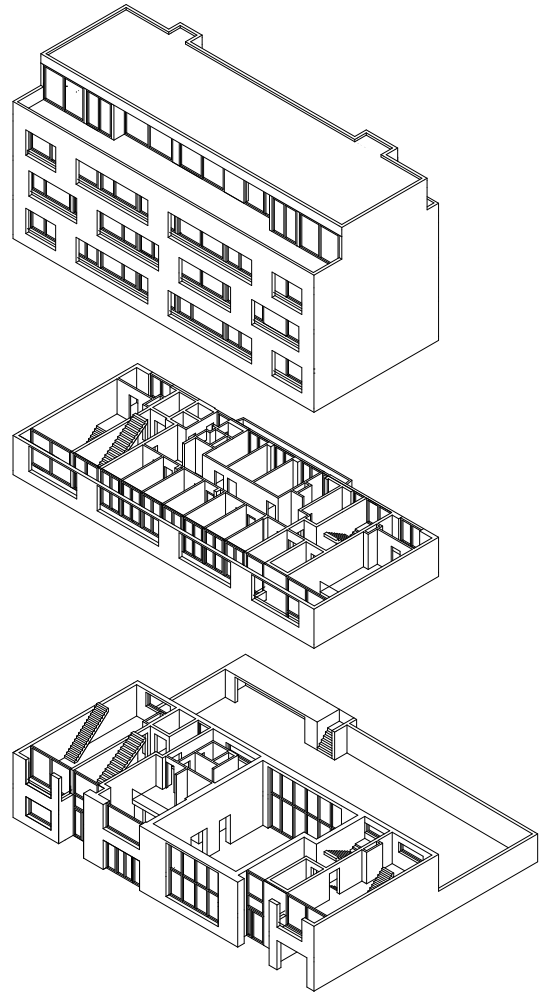
Initially imagined by its clients as a second dwelling in the city, the project quickly emerged as a paradigm for uniting different cultures, lifestyles and age groups. It was realized by roedig.schop architekten from 2006 to 2014 on a site just near the former border between West and East Berlin. The ground floor has a two-storey multi-functional event hall, cafeteria and foyer that can be rented by the public for seminars, conferences and as a theater. This floor works as an urban interface connecting the building and its residents to the urban context. Additionally, the second floor contains artists' cloak rooms while the third floor provides Japanese-style minimalist guest rooms as short-term dwellings for artists, tourists or modern migrant workers. This floor works as a spatial buffer between the public floors and the upper private zones. The upper floor incorporates a variety of typologies: the two-story maisonette, the six-room apartment, meant for families but easily separable in the middle when needs change, and the large flat-sharing community on the upper two levels.

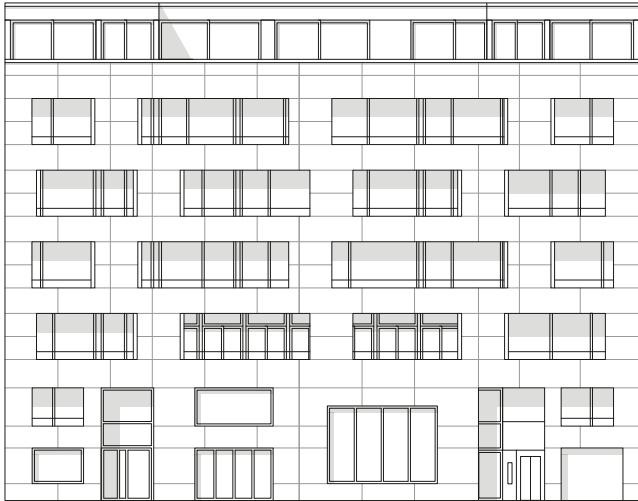
The building also benefits from ecofriendly design, featuring the implementation of a grey-water plant, a cogeneration plant with heat recovery systems, and diverse sustainability features. The basement serves as a bicycle parking area including an e-bike charging station.

Axonometric  
view of the  
building

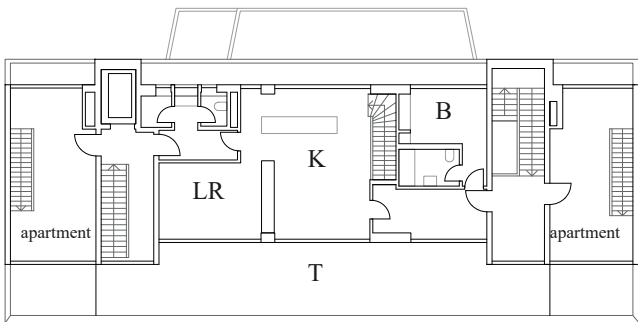


Axonometric  
view of the  
floors

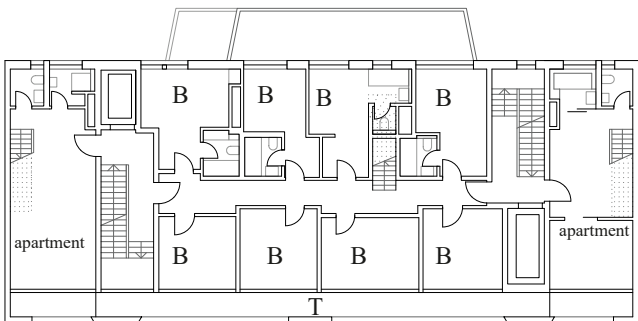




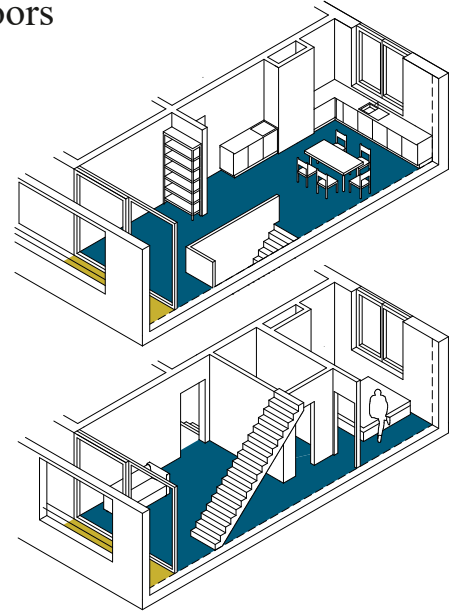
Seventh floor - roof



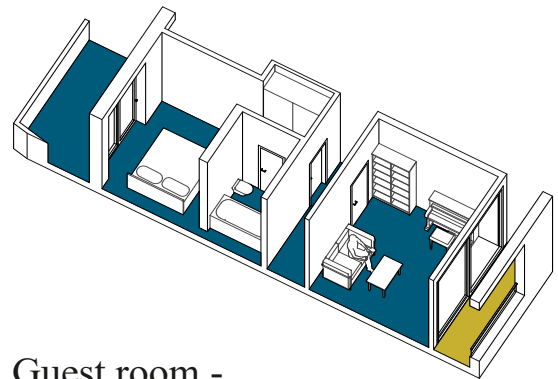
Second floor - guest floor



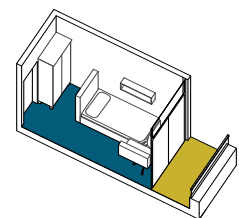
Corner apartments -  
all floors

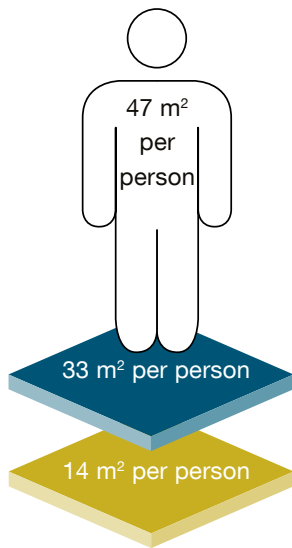
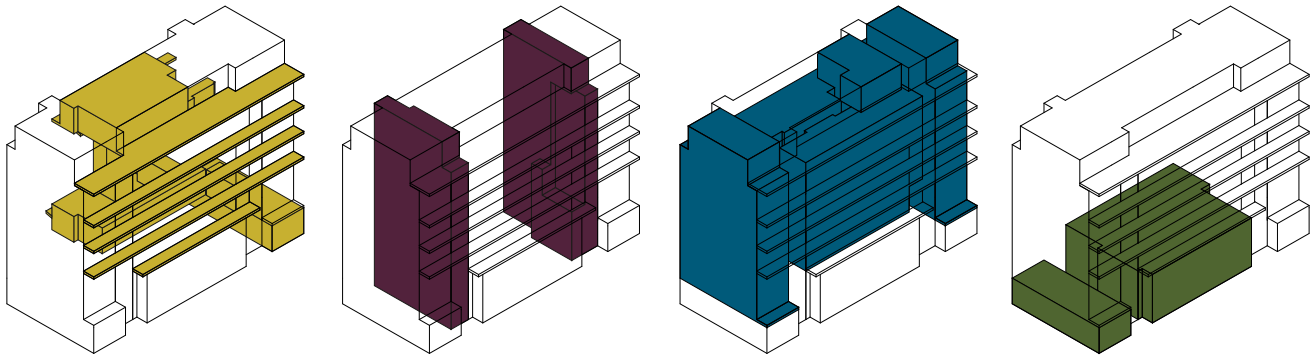


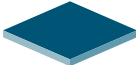



Flat-sharing -  
fifth floor

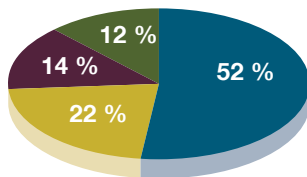


Guest room -  
second floor





-  private spaces
-  communal spaces
-  infrastructure  
structure /envelope
-  public spaces







# DESIGN STRATEGIES

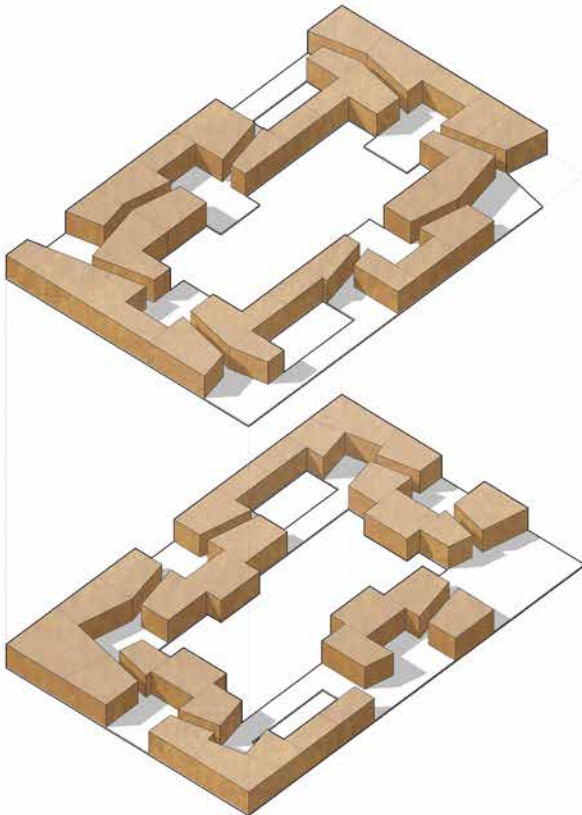
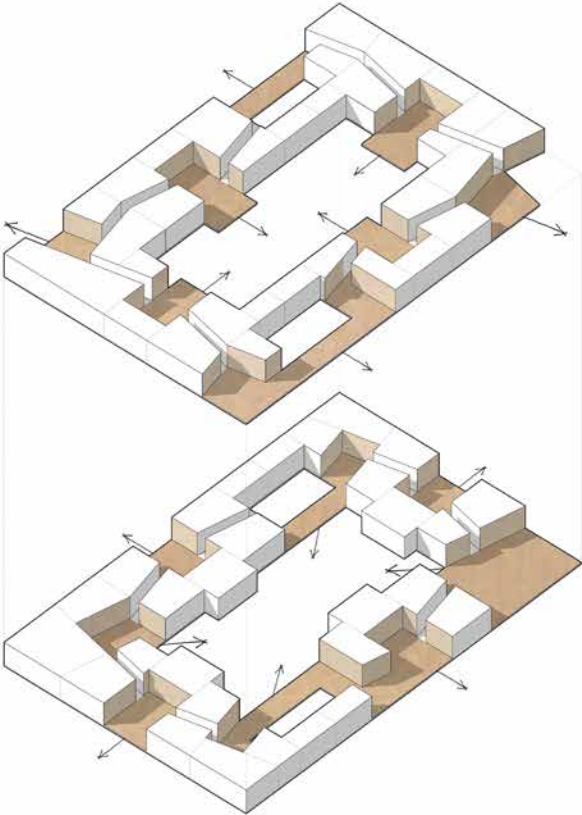
This chapter proposes design strategies for urban dwelling in the context of shared living concepts. Shared living places ensure a light environmental footprint by increasing the efficiency of serviced amenities. These design strategies connect private spaces for individual retreat with animated communal clusters. The potential for sharing space, time, and infrastructure are presented in an architectural context. Based on the Aristotelian idea that “the whole is more than the sum of its parts”, these collaborative initiatives illustrate the advantages of communal living and connect residents to the urban fabric of their city.

A generic  
model showing  
the diversity of  
same boundary  
conditions  
translated  
into diverse  
architectural  
approaches





Public and private space as urban infrastructure in one floorplan



# MICROCITTÀ

Carla von Münchow, Elena Giannitsopoulos

The idea of Microcittà is based on two main questions. “How do people like to live together?” and “How can we save space?”

## The structure

Humans have been living together in urban agglomerations for centuries. The structure of the Microcittà combines three main aspects, which define a city: piazzas where one can meet other people, alleyways to connect and transition between areas, and homes to provide shelter and privacy.

In Microcittà, the interaction between private and communal spaces plays a major role. It is visible in the interior structure and the outside façade, the high, open surfaces in the communal space, and the framed, protective windows in the private areas.

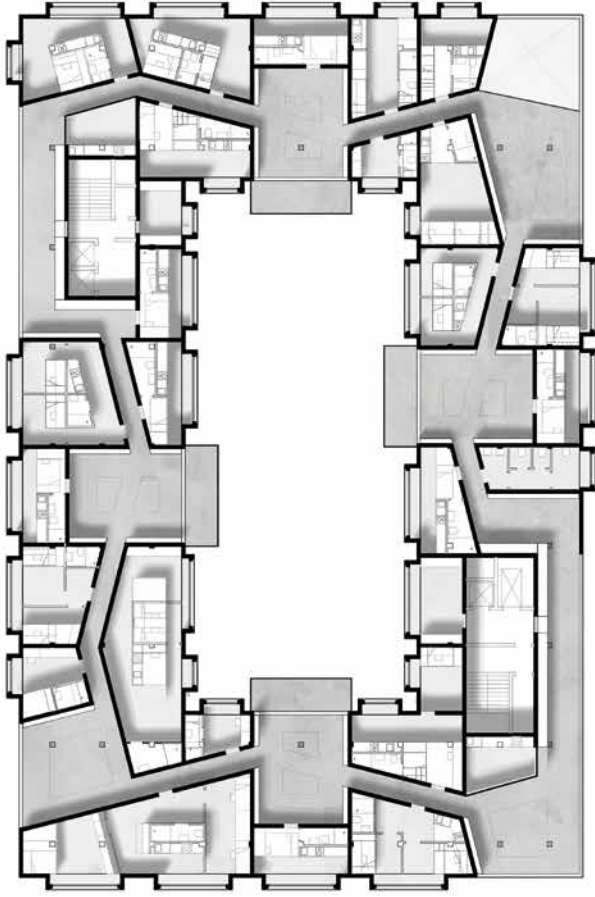
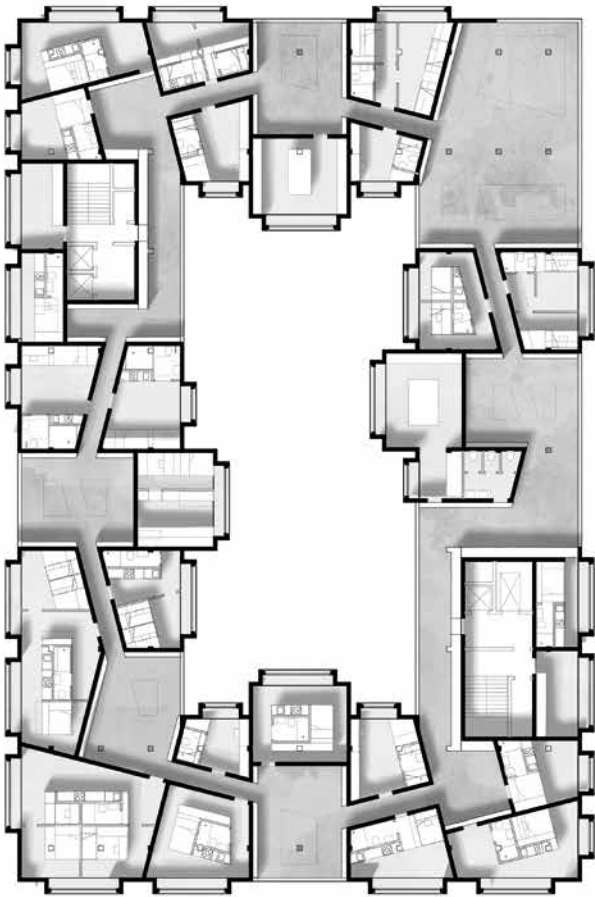
## Concentration of function

The concept for saving space is to put all the necessary services together in one core. With this concentration of functions in an individual box or wall, the rest of the room is left free for creative use.

## The Piazza

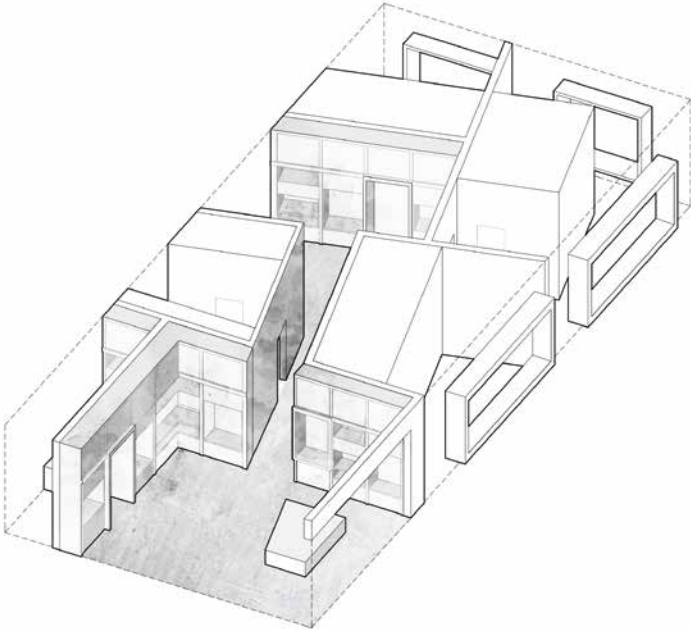
These are defined by the surrounding façades. This also follows the concept of functional walls providing different services. Every piazza incorporates some basic functions and a special focus, for example, library, co-working, etc.

First and second floor plan

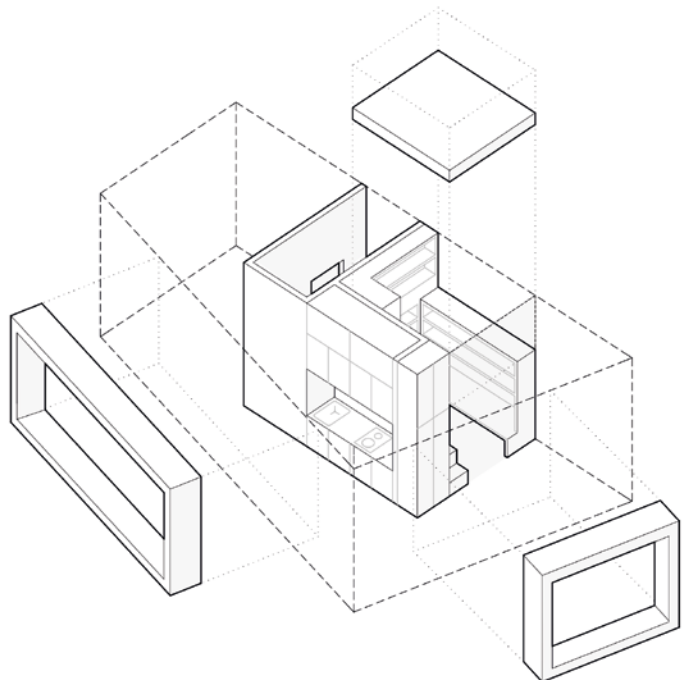
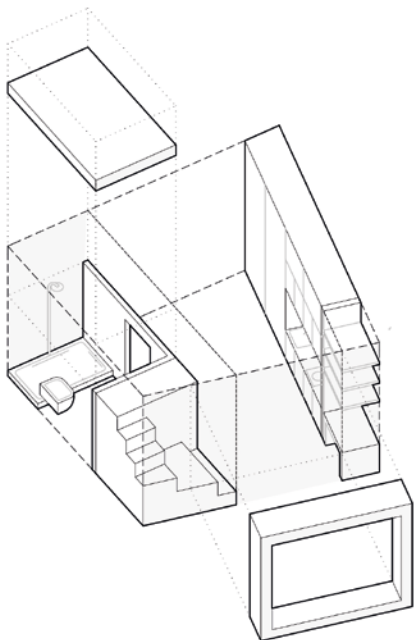
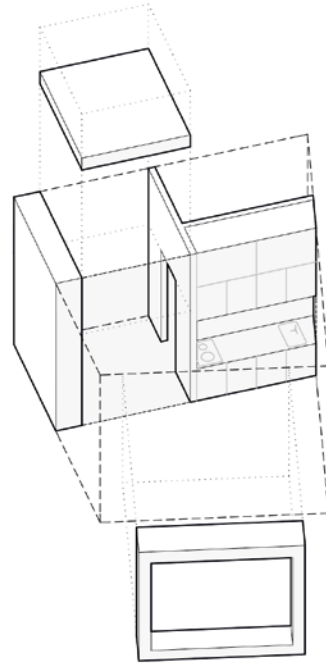
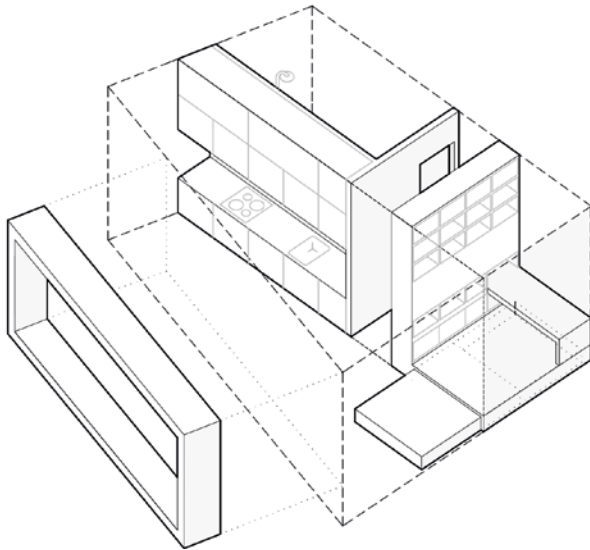




Typical  
apartment  
layout

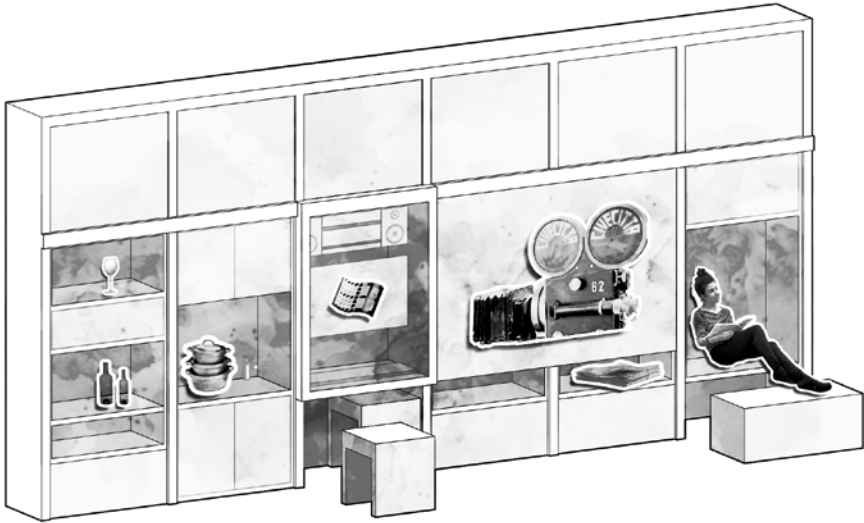
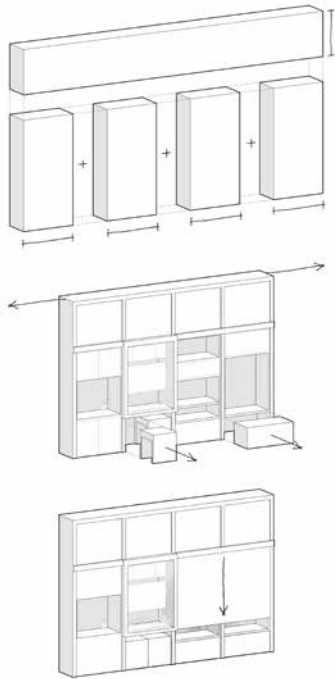


# The living furniture

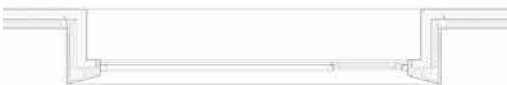




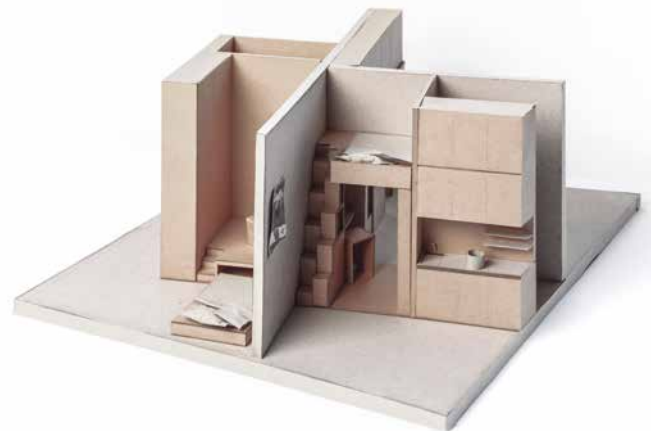
Modular  
integrated  
furniture  
allows flexible  
use of space



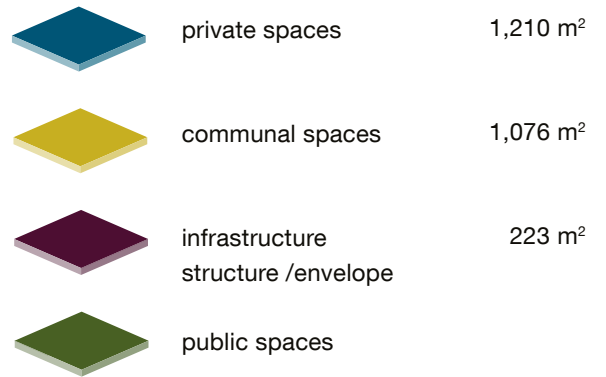
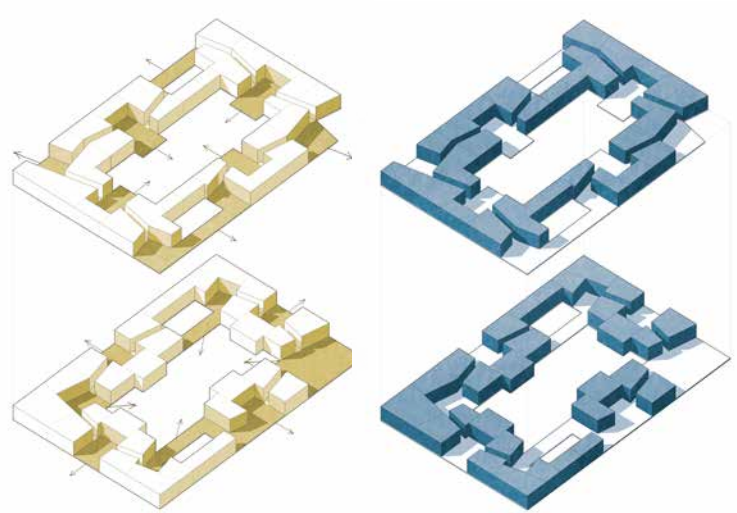
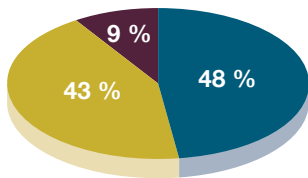
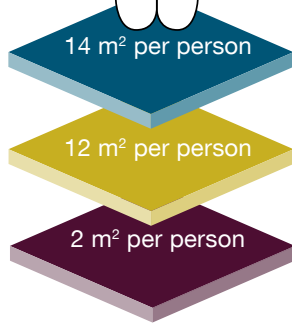
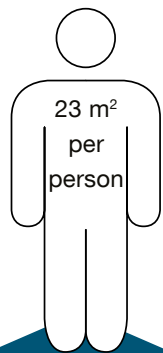
The window:  
relationship of  
architectural  
elements and  
spatial function

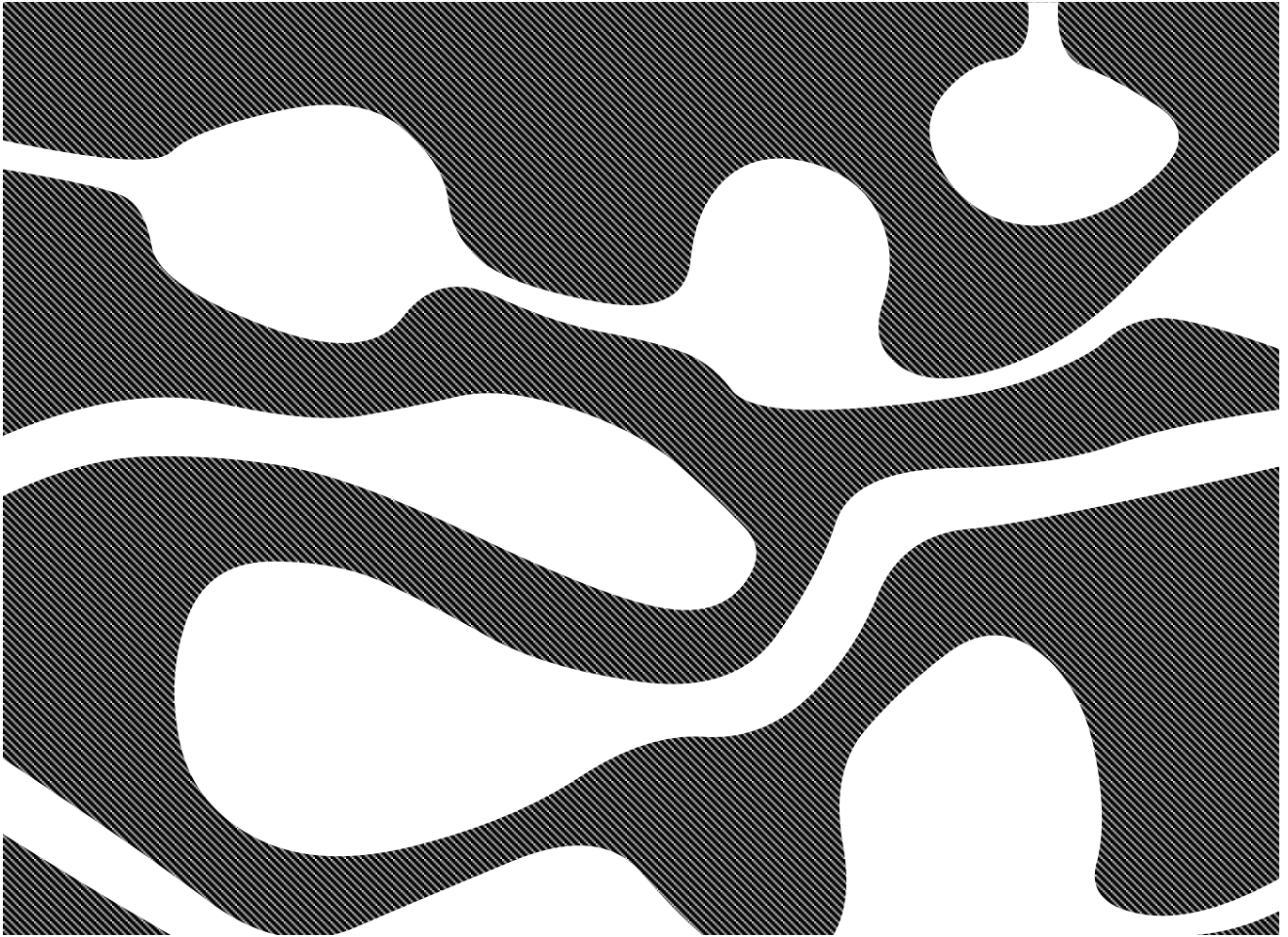


The core unit as  
a central element  
defining space



90 people





# THE NEST

Sofía Ruiz, Antonia Albrecht

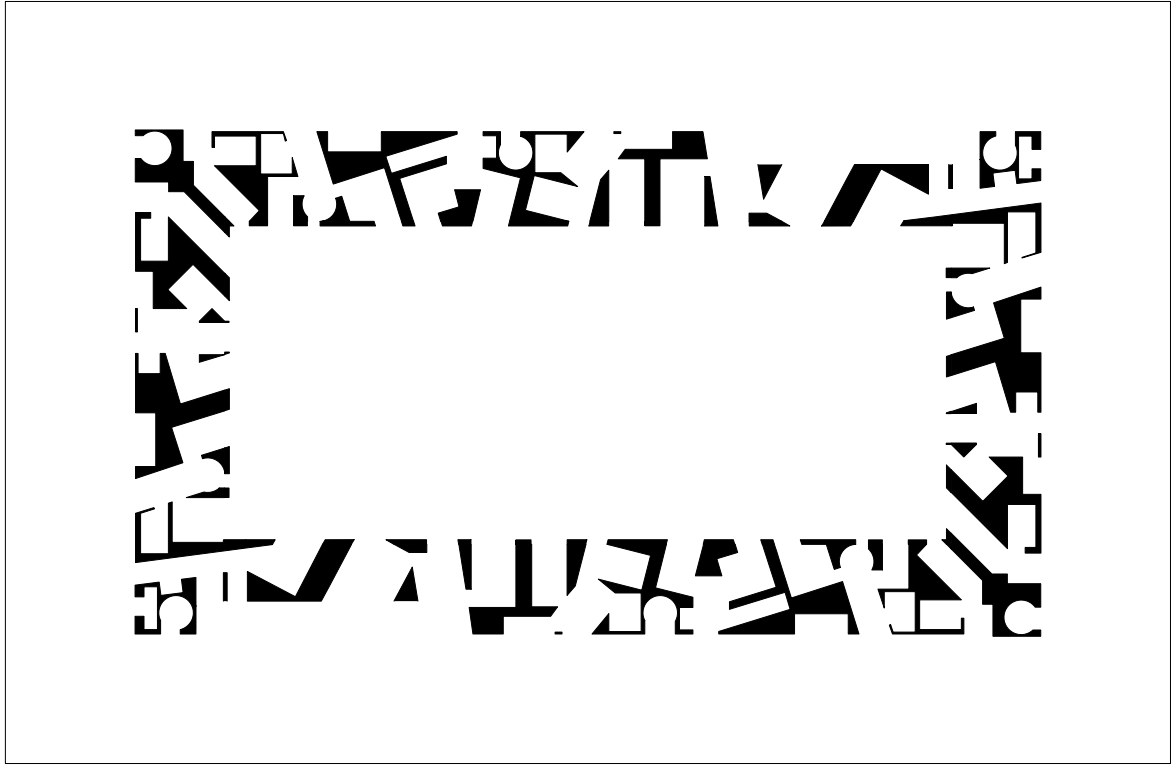
The life of ants is conducted in a very dense system of tunnels and rooms in the earth. When leaving their nest, they enter a world full of adventures and activity.

This concept represents the perfect balance between private, quiet, and enclosed spaces, and open, loud, and communal spaces. Given the very strict structure of the building, columns, cores, and two floor planes, we decided to divide the area in two. 50 % private and 50 % communal.

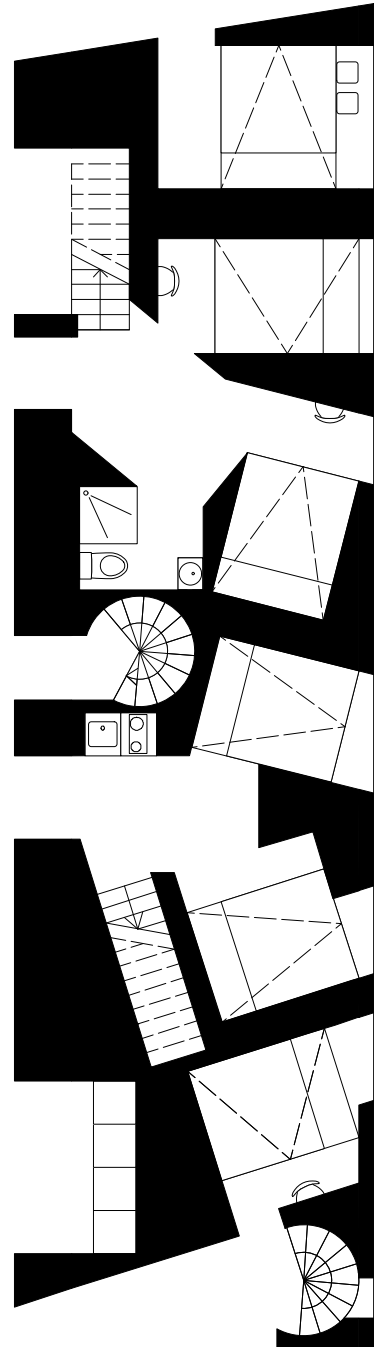
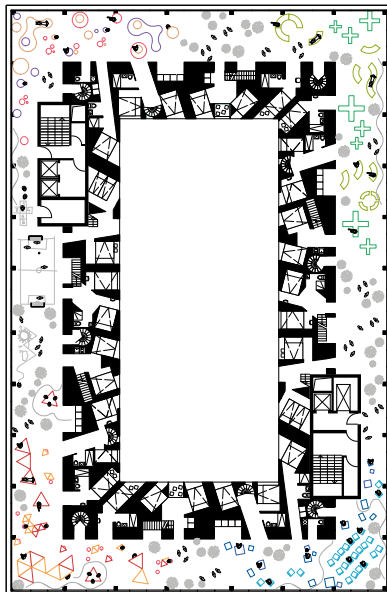
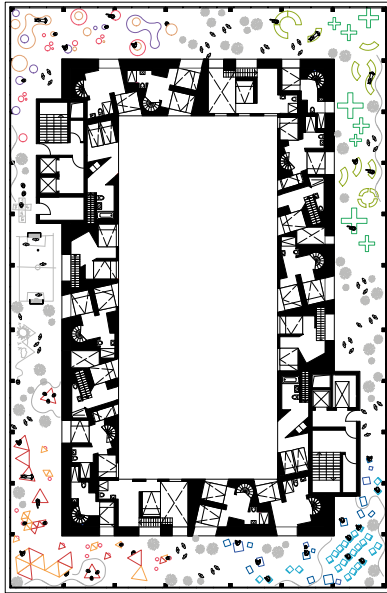
The wall faces toward the courtyard, reaching up two storeys, and contains the different apartment types for singles, families and short-term rentals. The rooms are carved out of the wall to create high density sleeping and sanitary areas. The sizes of the rooms are minimized to provide the bare essentials. Shelves, desks, closets, etc., are located in the periphery wall. The wall is white to create an empty canvas for the inhabitants to personalize their own homes. Separating the private and the communal area is the storage space, where the furniture for use in the communal space can be stored. The storage space not only acts as a sound barrier between the private and communal areas but is also a playful and colorful addition to the white wall.

The communal space, in contrast to the white wall, is filled with colorful furniture. Wood is the dominant material in this space, reflecting the structure of the building. The external façade incorporates 1.5 m wide windows that can be opened in the summer and panels that provide shade.

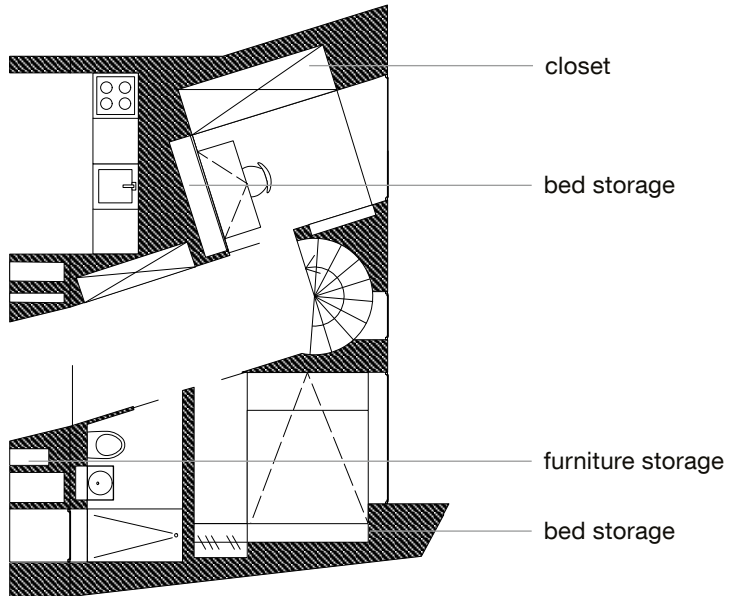
Section of living space



# Spatial diagram of a cluster

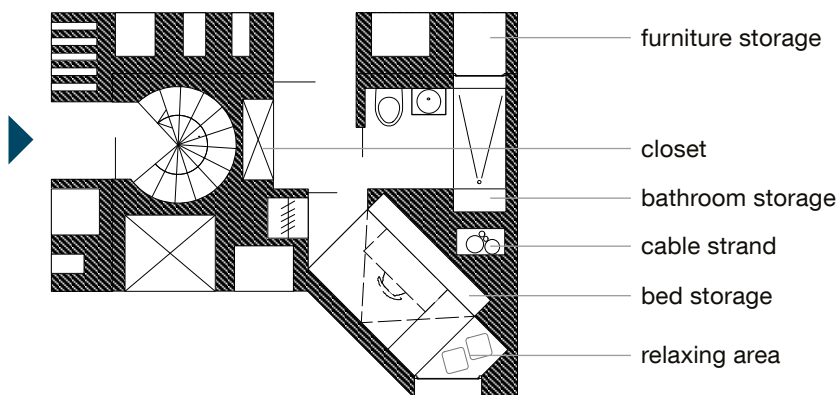


## Apartment clusters



### SHORT-TERM APARTMENT

4–5 people  
 amount: 4  
 total area: 30 m<sup>2</sup>  
 bathroom: 5 m<sup>2</sup>  
 bedroom / working room: 7 m<sup>2</sup>

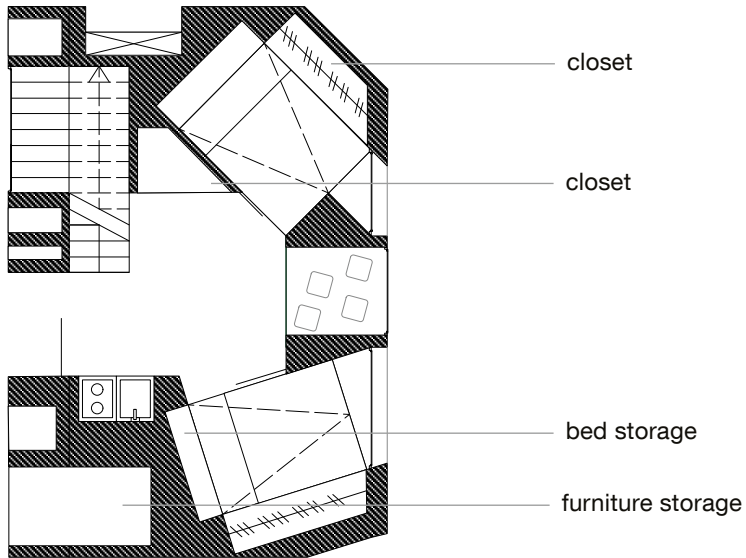


### SINGLE APARTMENT

1–2 People  
 amount: 11  
 total area: 10 m<sup>2</sup>  
 bathroom: 3 m<sup>2</sup>  
 bedroom / working room: 7 m<sup>2</sup>

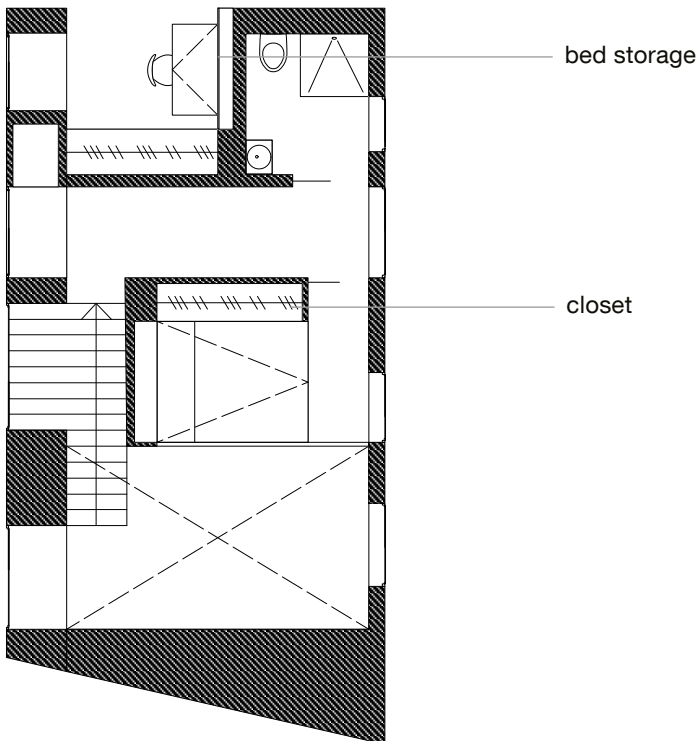


## Apartment clusters



### FAMILY APARTMENT

4–5 people  
amount: 8  
total area: 25–30 m<sup>2</sup>  
bathroom: 5 m<sup>2</sup>  
bedroom / workroom: 7 m<sup>2</sup>



## Cinema

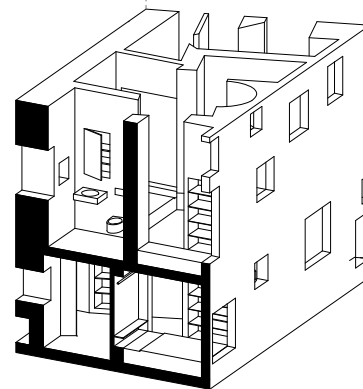
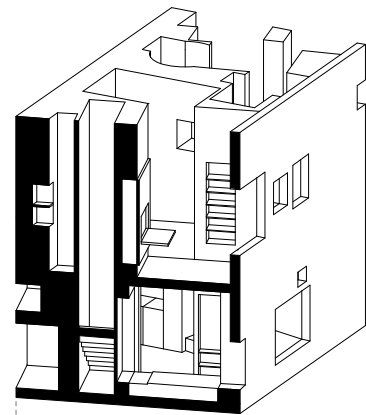
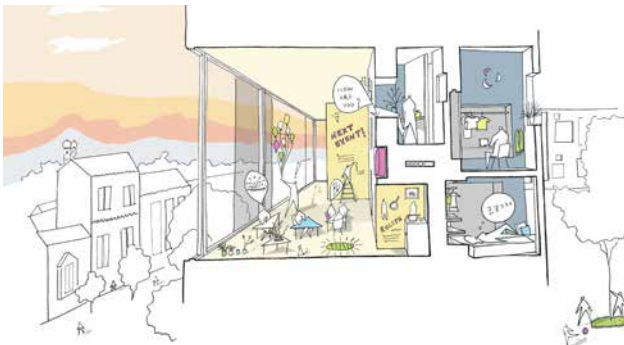


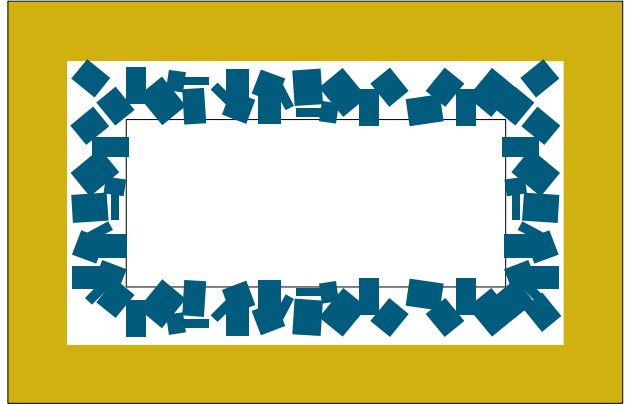
## Isonometric view of apartments

## Sport activities

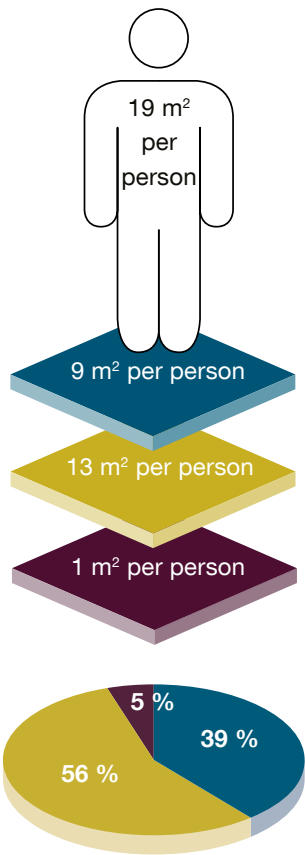





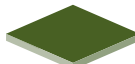
## Private space vs. public space





80 people



	private spaces	717 m <sup>2</sup>
	communal spaces	1,028 m <sup>2</sup>
	infrastructure structure /envelope	90 m <sup>2</sup>
	public spaces	



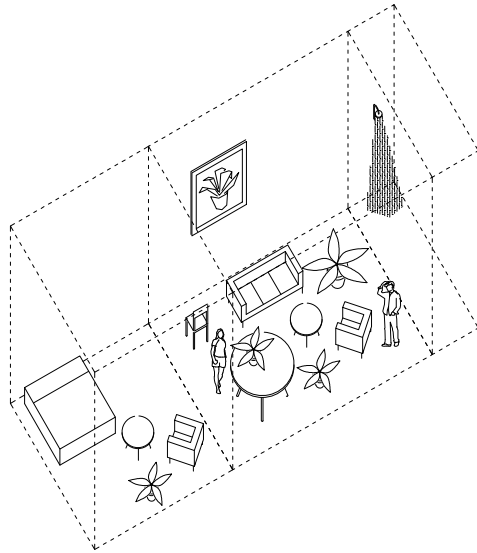
# POP-UP LIVING

Erik Juriševič, Manuel Sanchis

This proposal plays with expansion or contraction of spaces depending on specific needs. Flexible and transformable functions, possibilities for expansion and contraction. Differentiation between static and dynamic elements is essential in this project, where the only static elements are the existing structure and the bathrooms (the most intimate spaces). The rest of the spaces can be transformed and adapted. The spaces that are no longer used privately can be readapted to be part of the communal areas and vice versa; the inhabitants are free to decide.

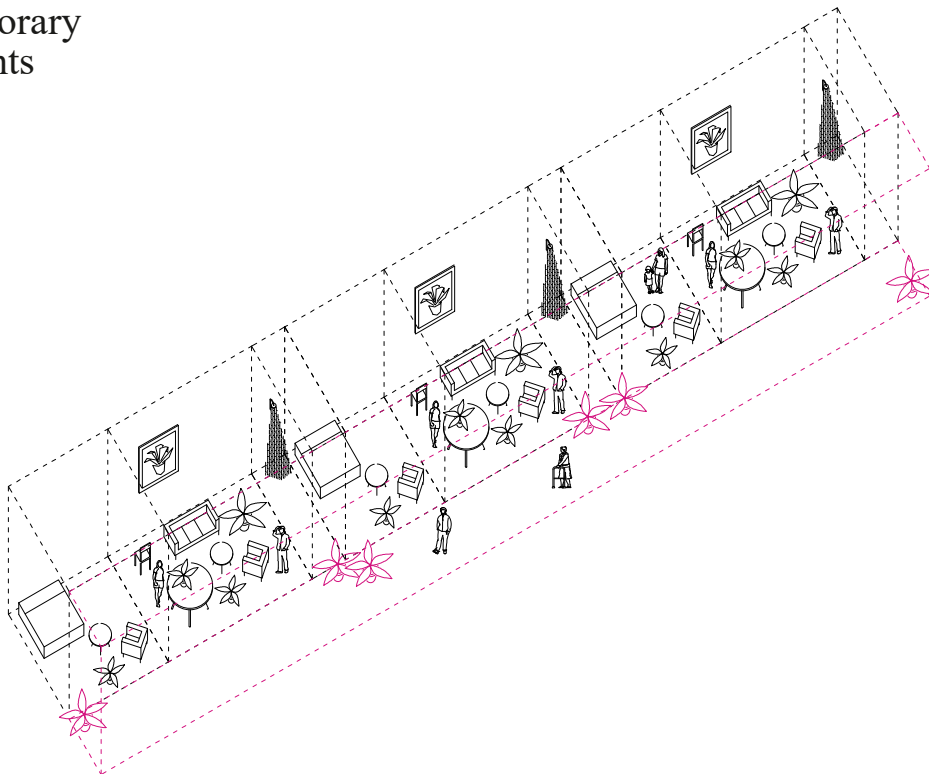
The winter garden is the main communal element. Circular staircases connect floors and make this space the focus of daily life. All communal functions are grouped within it, flexibility of use being the most important aspect.

## Apartment all-inclusive



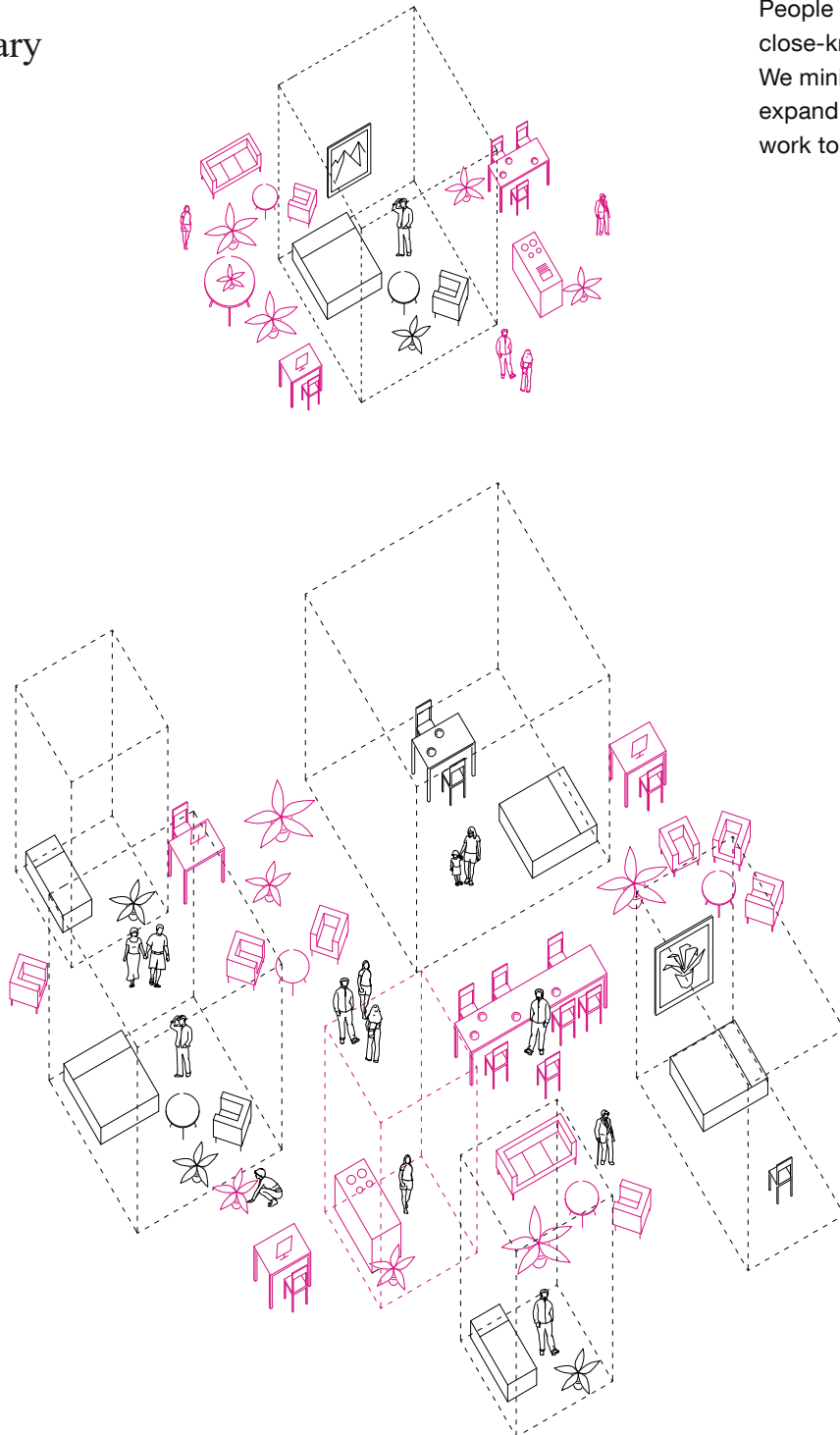
Current state of housing:  
Apartments are introverted,  
equipped with objects for its  
inhabitants' needs. Think of a  
single apartment block with  
50 apartments. How many  
same kitchen devices or other  
objects are there that we do  
not use all the time or maybe  
just once a week?

## Issues for contemporary apartments

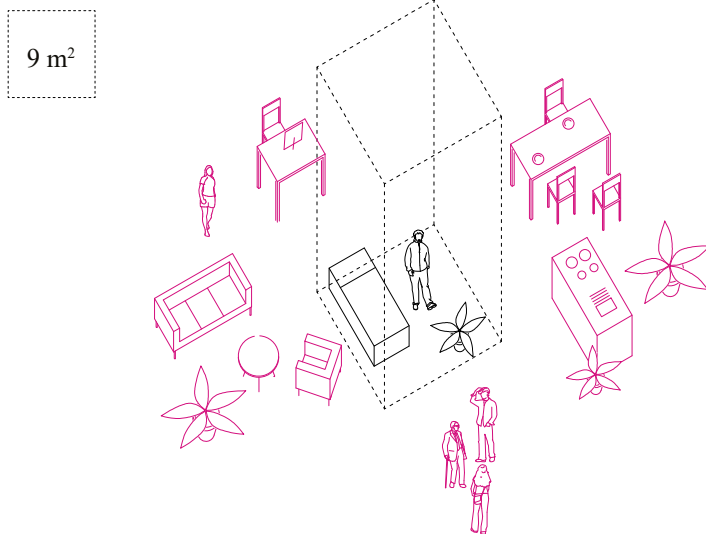


## Issues for contemporary apartments

People live together in close-knit communities. We minimize private and expand the communal that work to the benefit of all.



## Users and their needs

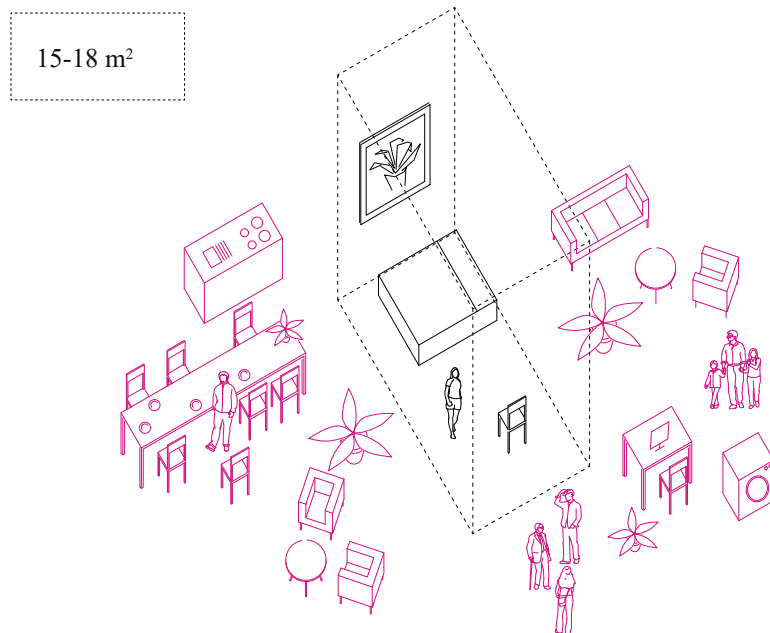


WHO?  
traveler, friend, visitor

PRIVATE NEED?  
bed, toilet, shower

COMMUNAL NEED?  
friends, kitchen, living room,  
working space

COMMUNAL SPACE  
PER PERSON:  
25 m<sup>2</sup>



WHO?  
student, young adult

PRIVATE NEED?  
bed, toilet, shower, personal  
belongings

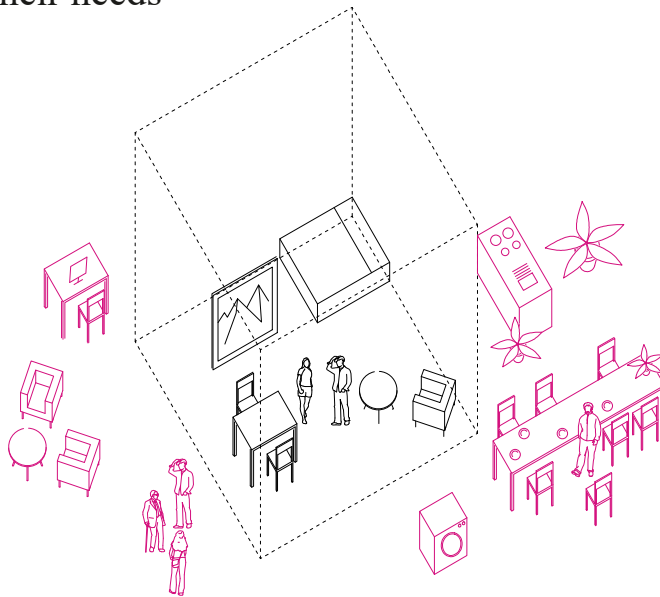
COMMUNAL NEED?  
friends, kitchen, living room,  
working space, laundry room

COMMUNAL SPACE  
PER PERSON:  
25 m<sup>2</sup>



## Users and their needs

30 m<sup>2</sup>



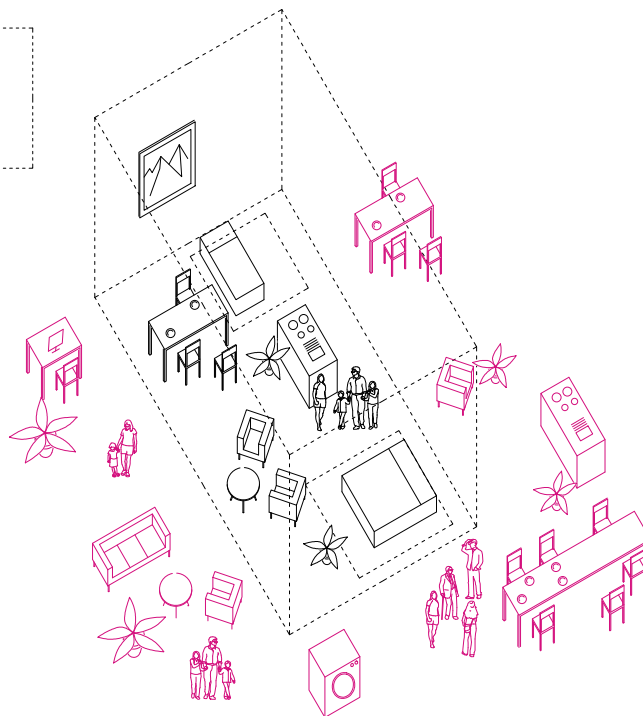
WHO?  
young couple

PRIVATE NEED?  
bed, toilet, shower, some personal things, table, 2 chairs, and maybe some sofa

COMMUNAL NEED?  
friends, kitchen, living room, working space, laundry room

COMMUNAL SPACE  
PER PERSON:  
15 m<sup>2</sup>

60 m<sup>2</sup>



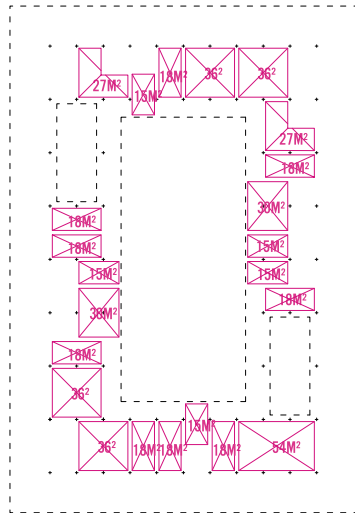
WHO?  
young family up to 4 members

PRIVATE NEED?  
bed, toilet, shower, some personal things, table, 4 chairs, maybe sofa, bedrooms, small kitchen, living room

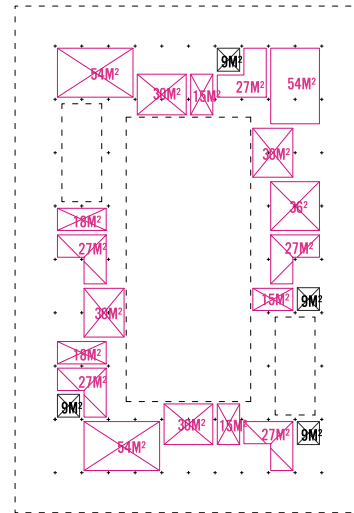
COMMUNAL NEED?  
friends, other children, bigger kitchen, working space, laundry room, playground

COMMUNAL SPACE  
PER PERSON:  
10 m<sup>2</sup>

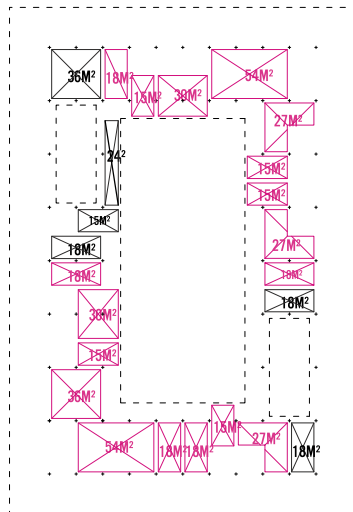
# Diversity of space



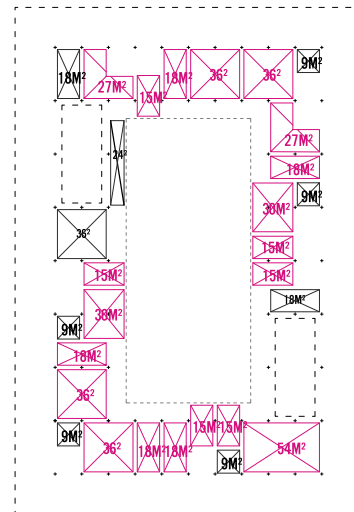
residential



residential  
+ temporary rent

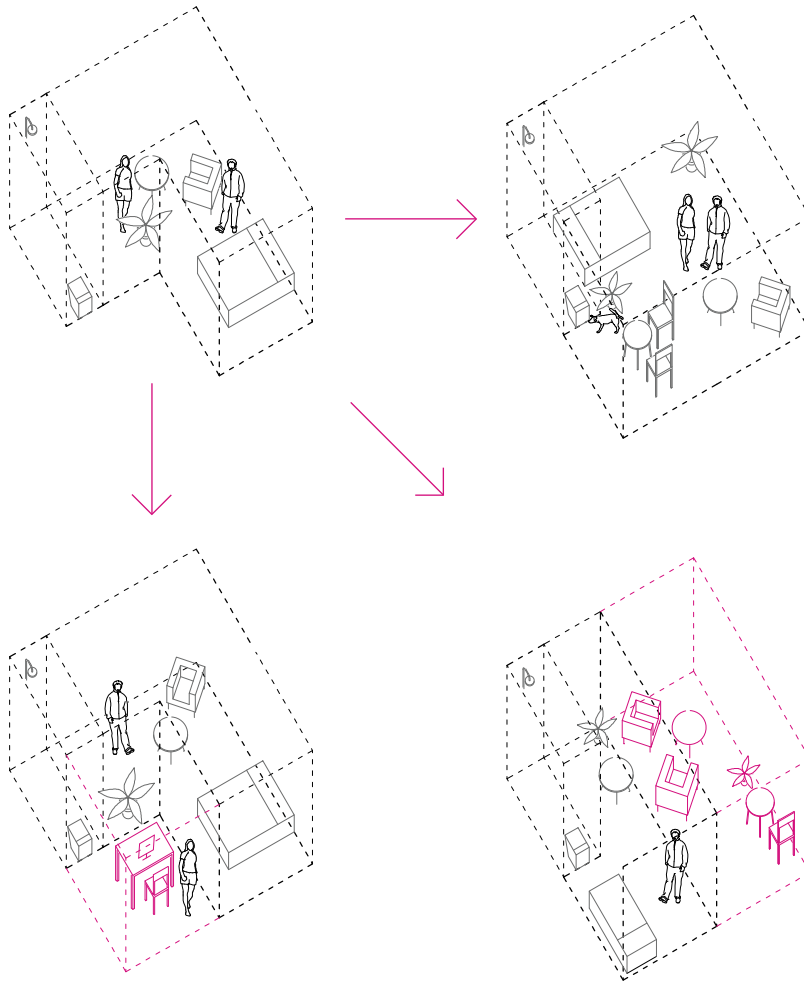


residential  
+ working spaces



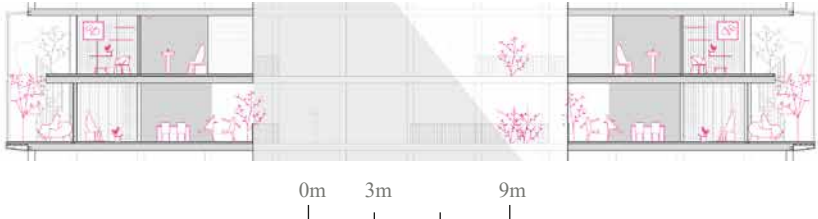
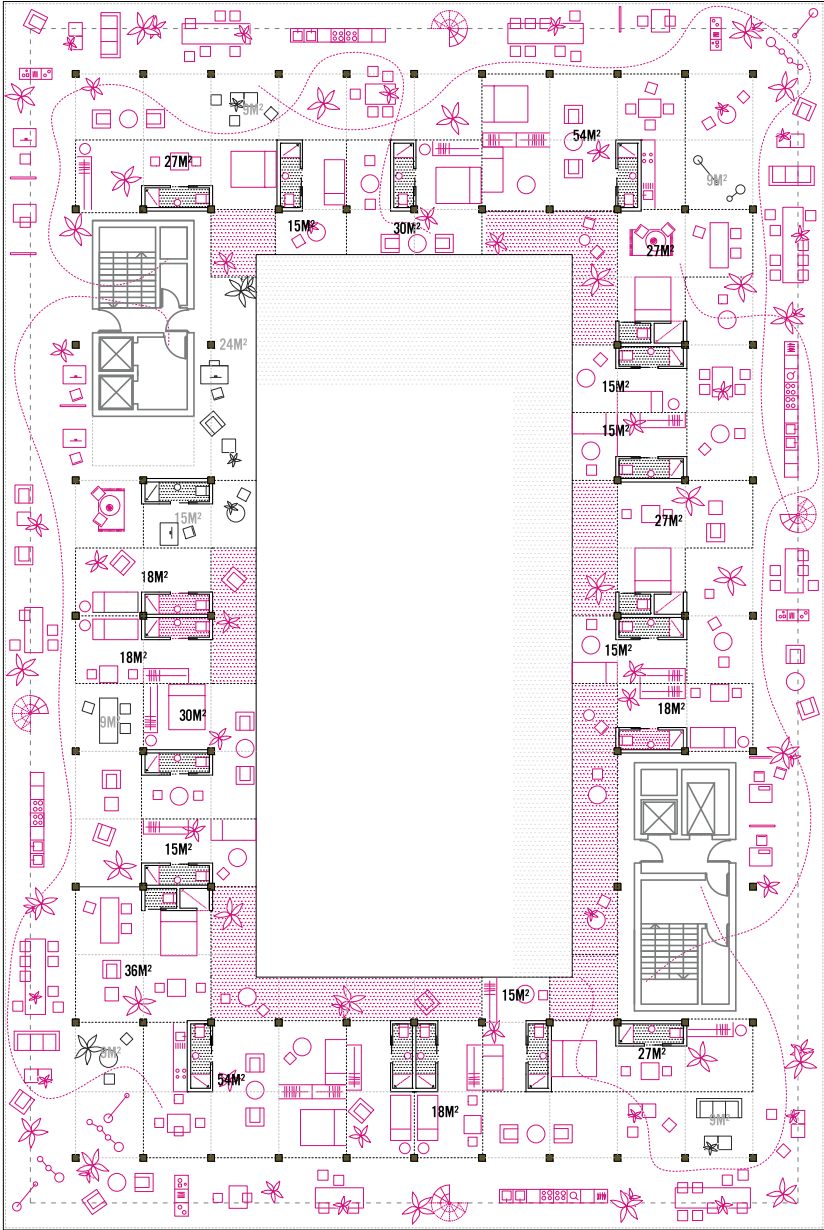
diversity of program

## Transformations of space

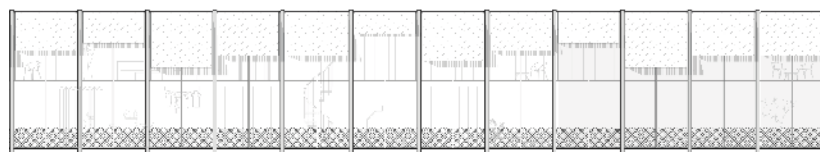
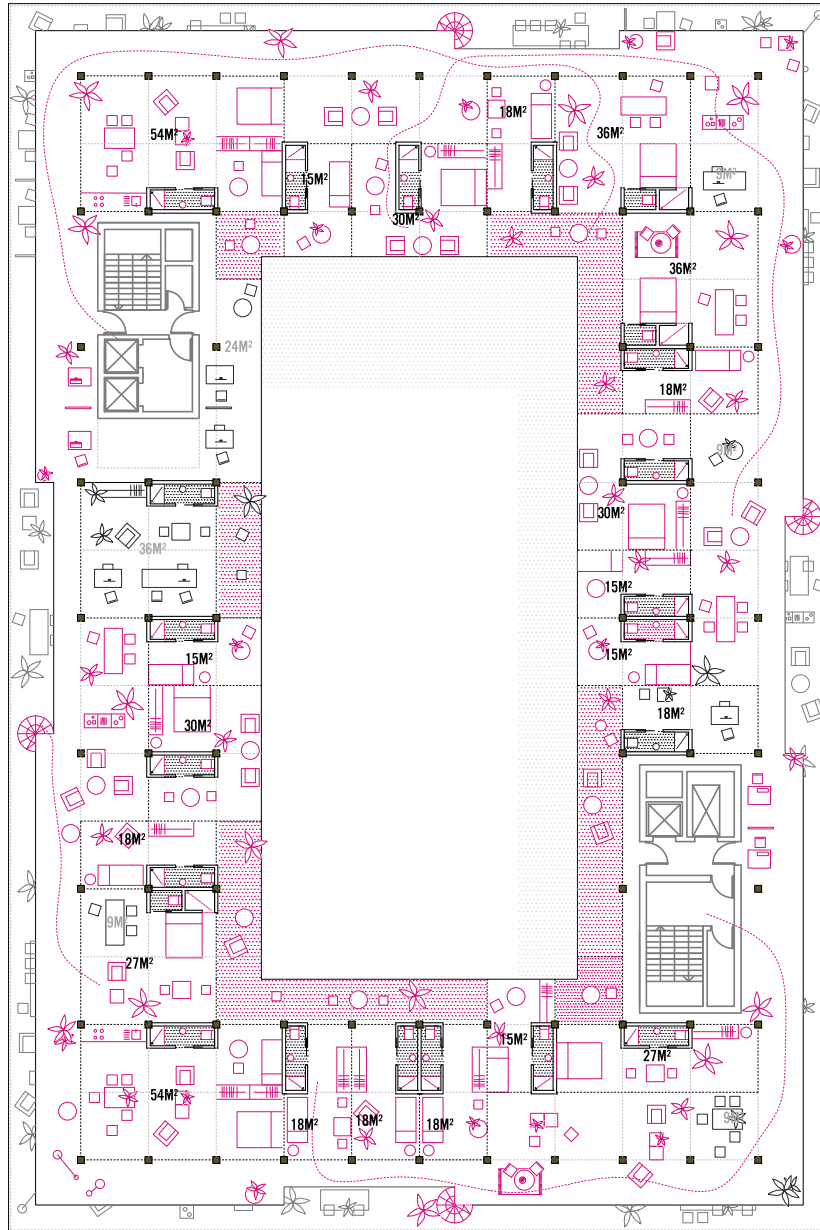


Different usage of space is achieved through the process of addition and subtraction; residential units, small short-term units and co-working space units.

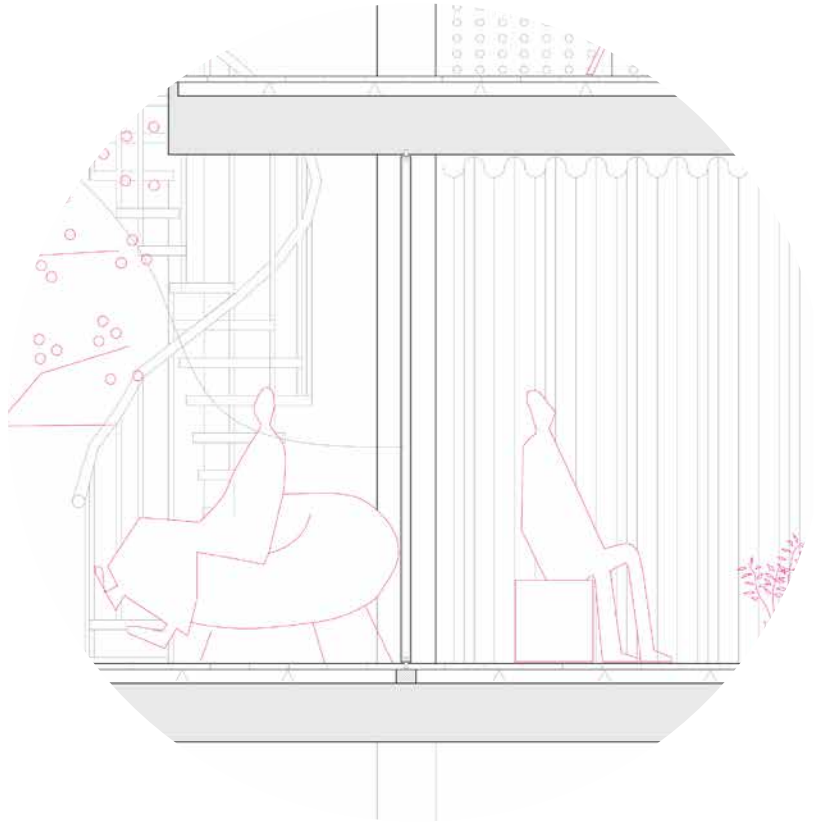
First floor

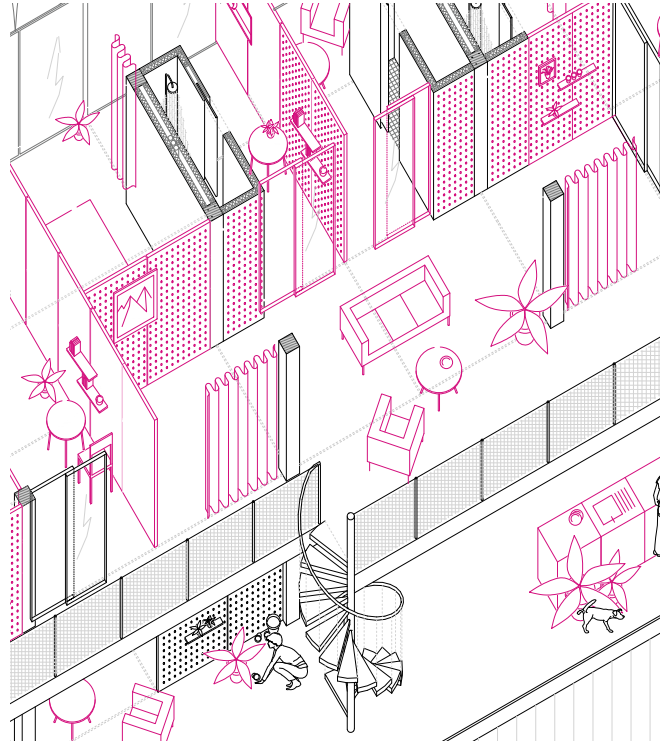


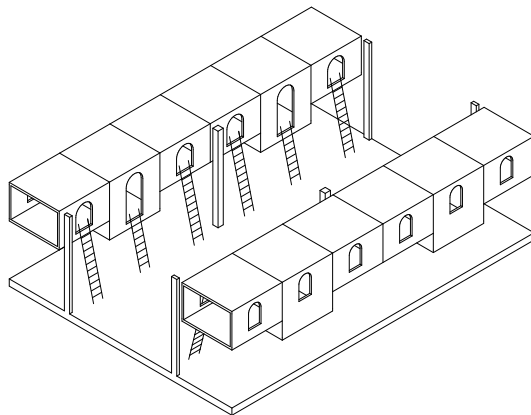
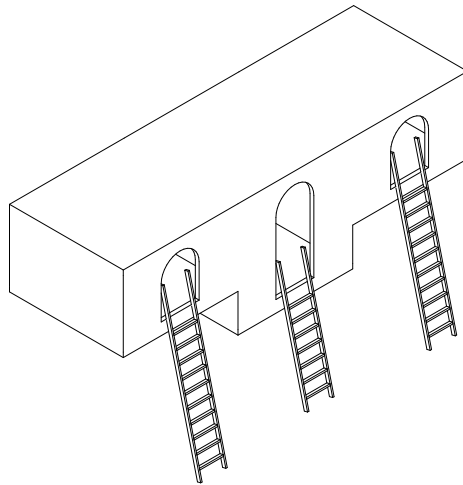
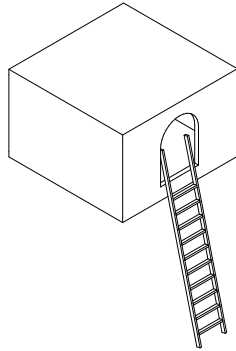
# Second floor



0m 3m 9m









# STAIRS

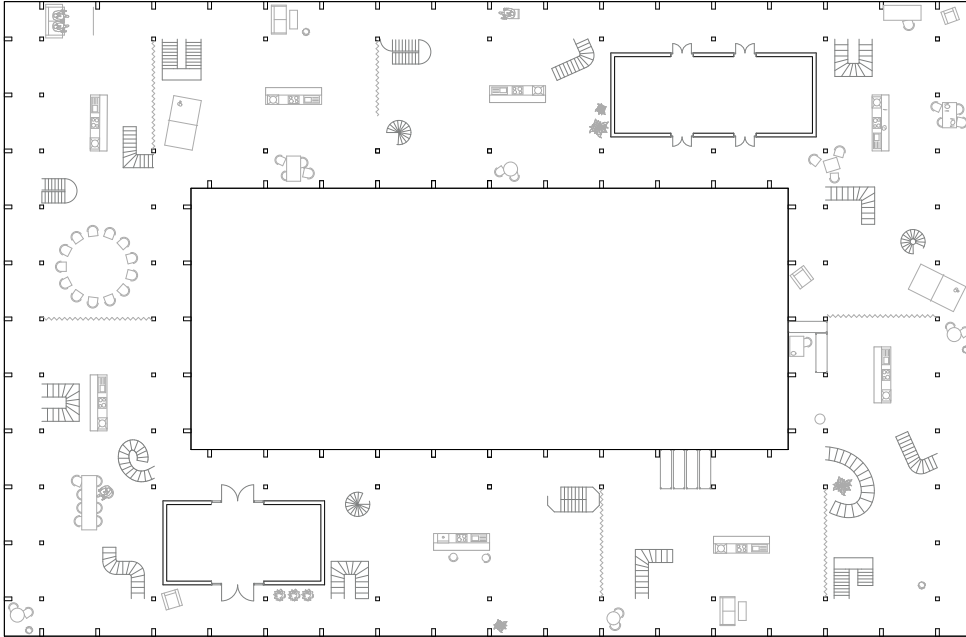
Lluís Dura, Jon Kasa

To many urban dwellers, one of the biggest challenges nowadays is living in spaces that were designed for completely different boundary conditions. While our society is undergoing seismic changes, we still live with traditional floorplans and housing concepts which are no longer conducive to our way of life. We explicitly challenge the trend towards private isolation and the retreating into one's own social filter bubble.

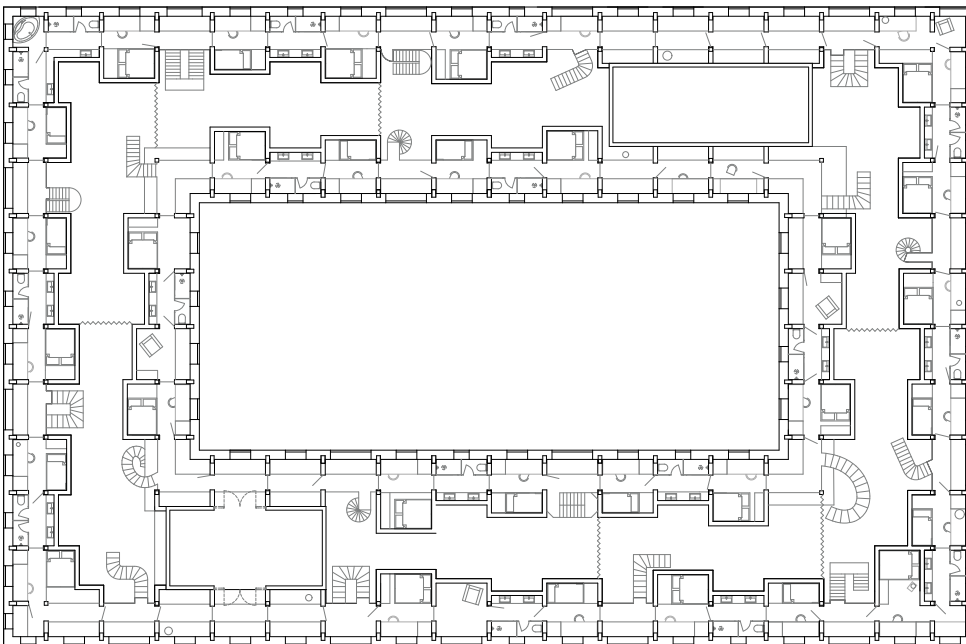
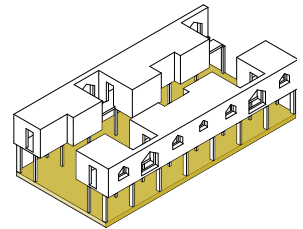
“A world constructed from the familiar is a world in which there's nothing to learn...”<sup>(23)</sup>

This design proposal undertakes a radical approach to our needs in the forms of shared living. Instead of hoarding possessions, everything is shared. Starting from the traditional living room, the dining table, the kitchen, up to and including the bathroom.

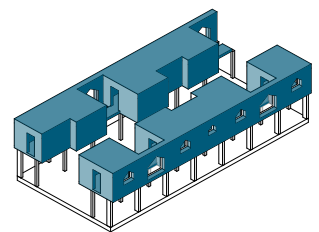
A storage space becomes a flexible wall. A kitchen island becomes the centre of social life. All these futures are reachable via a single element: stairs.



Floor plan /  
Communal  
space



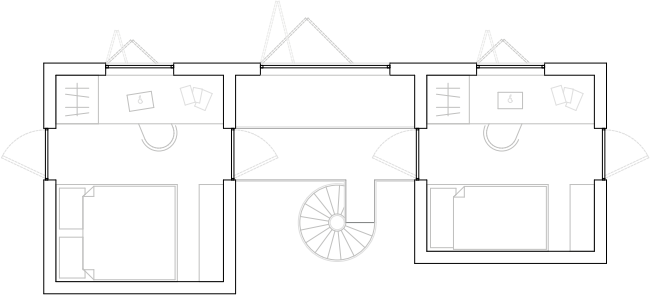
Floor plan /  
Private units



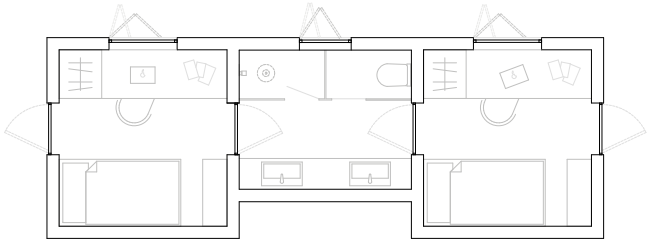
Floor plan /  
Different  
concepts



concept perspective / cluster

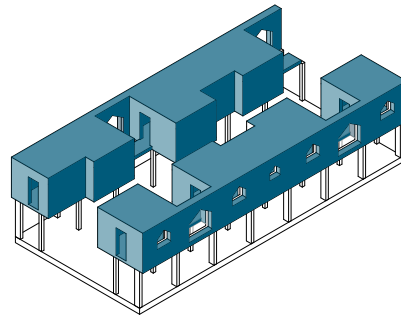
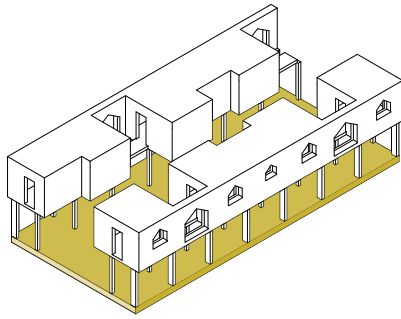


sharing concept / staircase

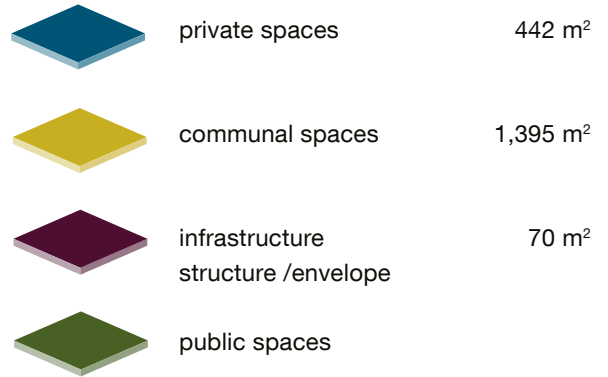
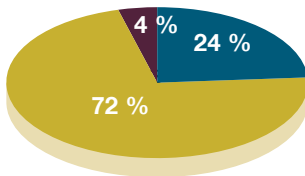
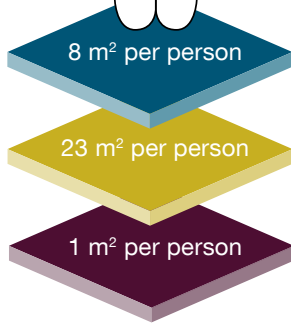
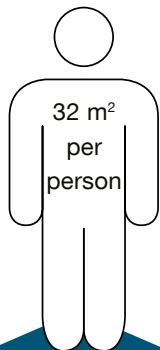


sharing concept / bathroom





60 people

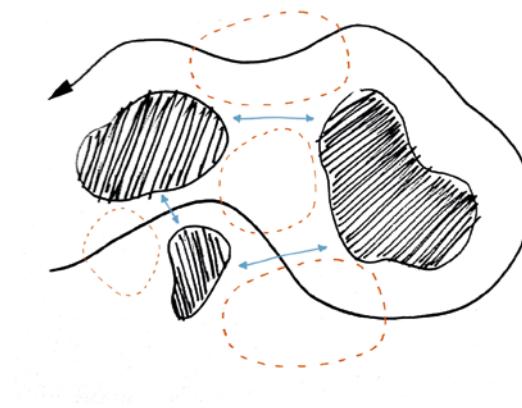




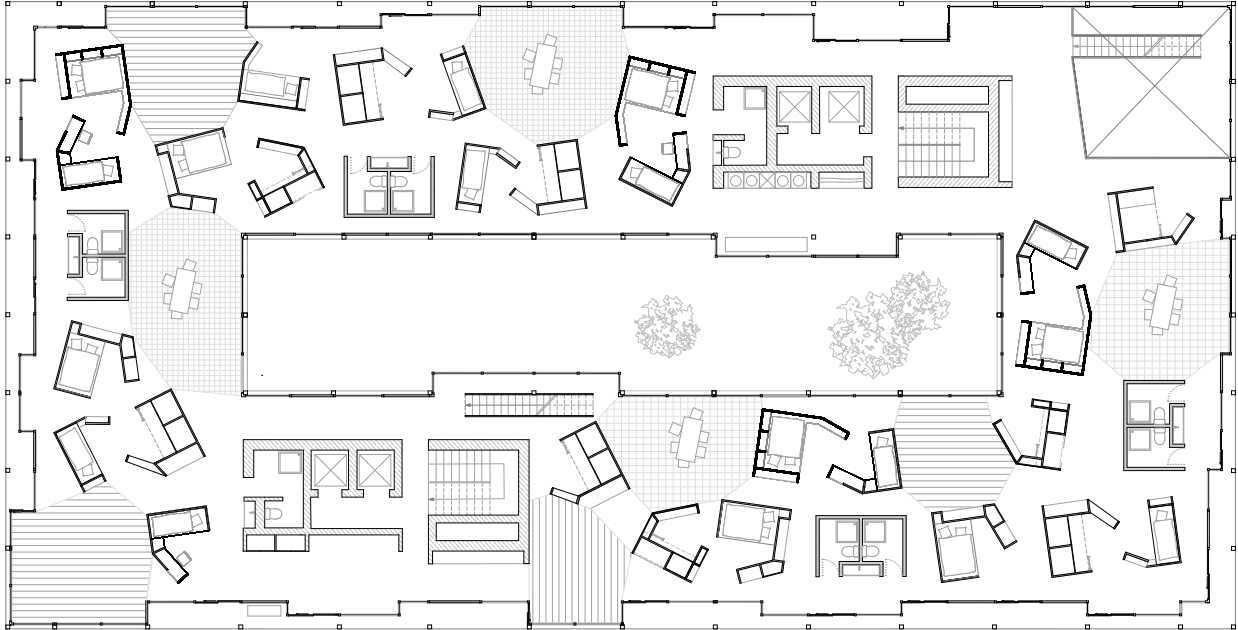
# CITY OF MINDS

Ineke Beysens, Michelle Hagenauer, Franziska Mühlbauer

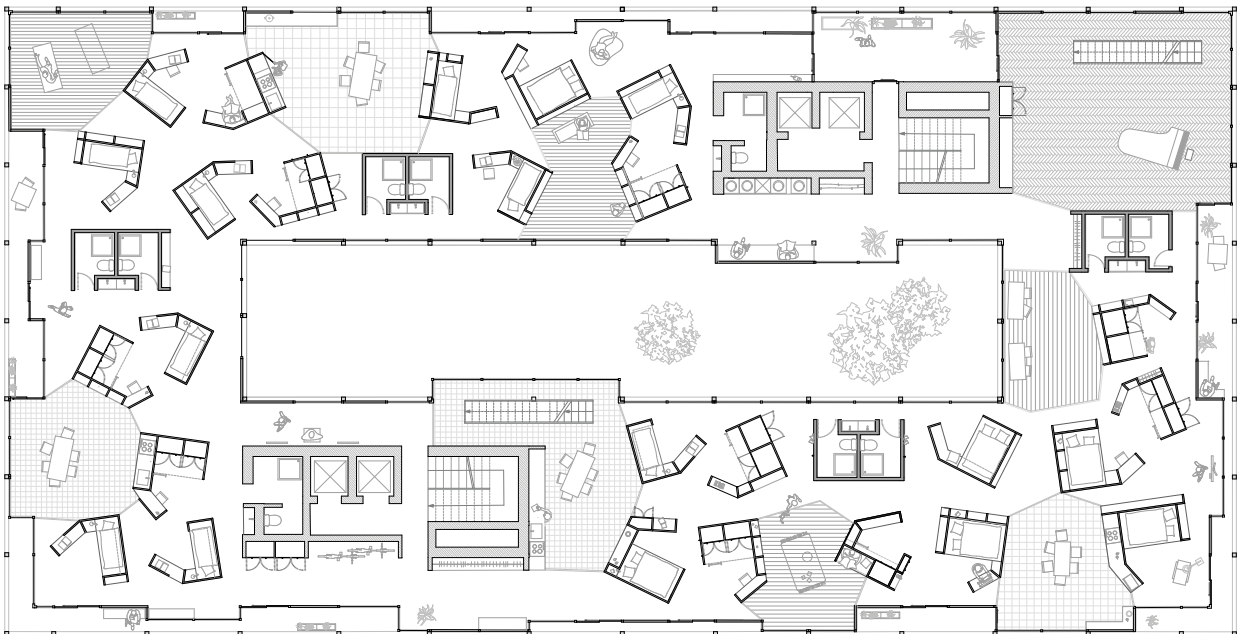
The project challenges the physical boundaries of communities. The idea of defining spaces through single elements, such as pieces of furniture interacting in an open space, questions traditional building elements like separation walls and doors. A precise spatial configuration of the modules creates diverse spaces for community and privacy as an open space living layout, fostering communication between occupants.



## Second floor



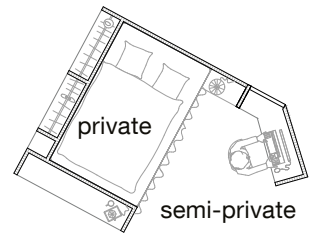
## First floor



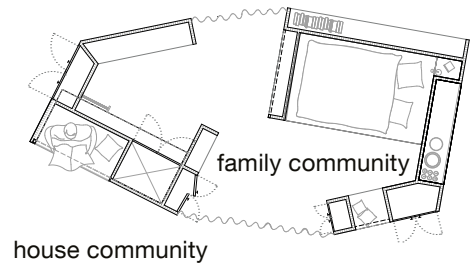


# Privacy created through different ways of closing

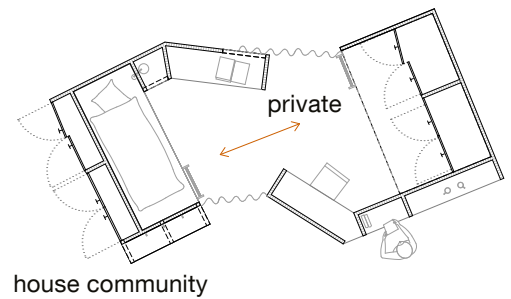
## Single unit



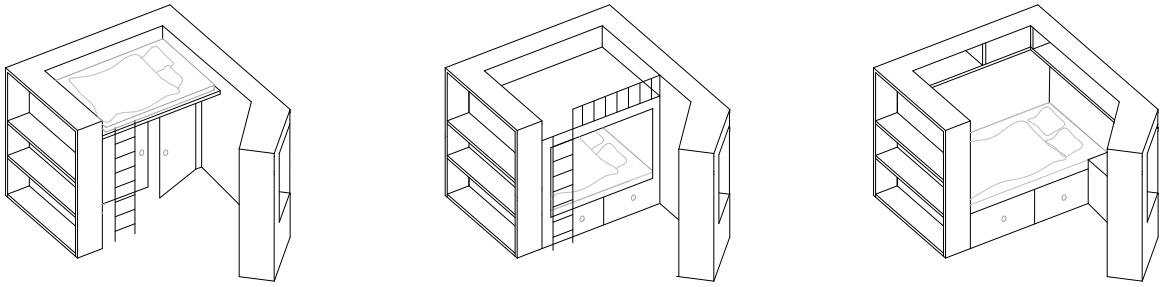
## Family unit

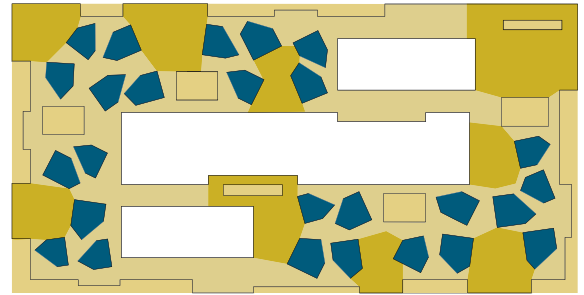
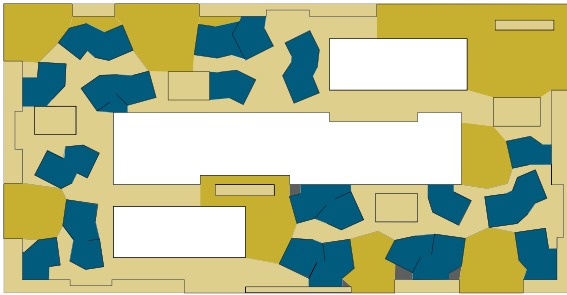


## Children's unit



Privacy created  
by different  
heights

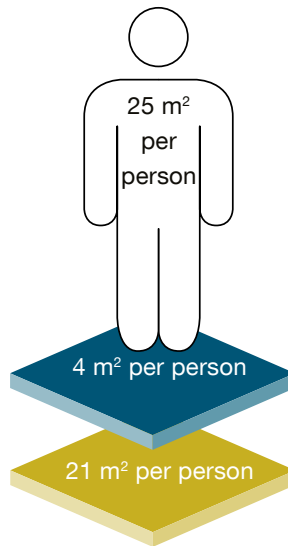
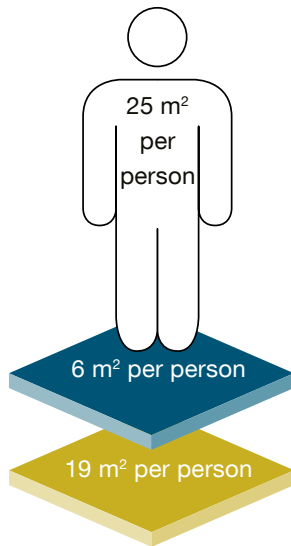


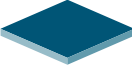
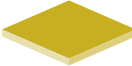
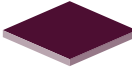
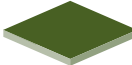


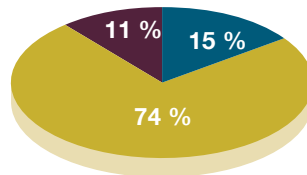
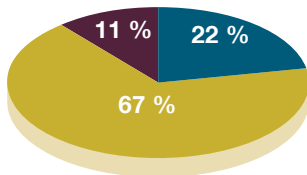
136 people

first floor

second floor



-  private spaces
-  communal spaces
-  infrastructure structure /envelope
-  public spaces



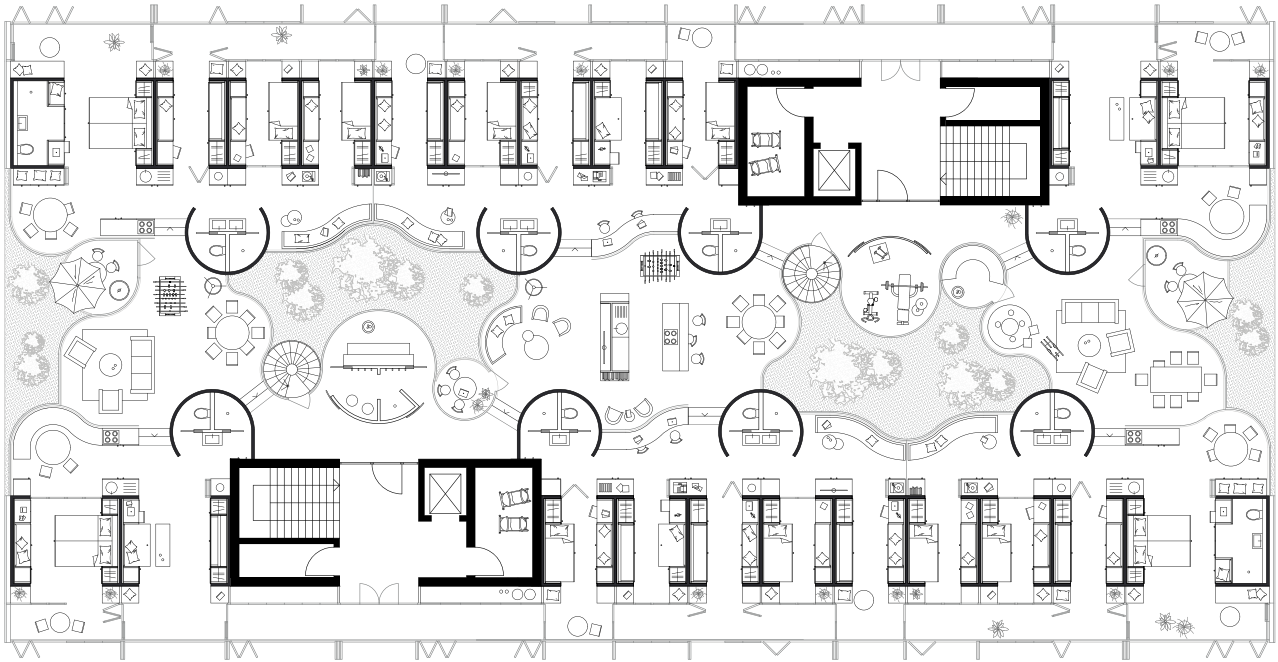


# INTERMEDIATE LIVING

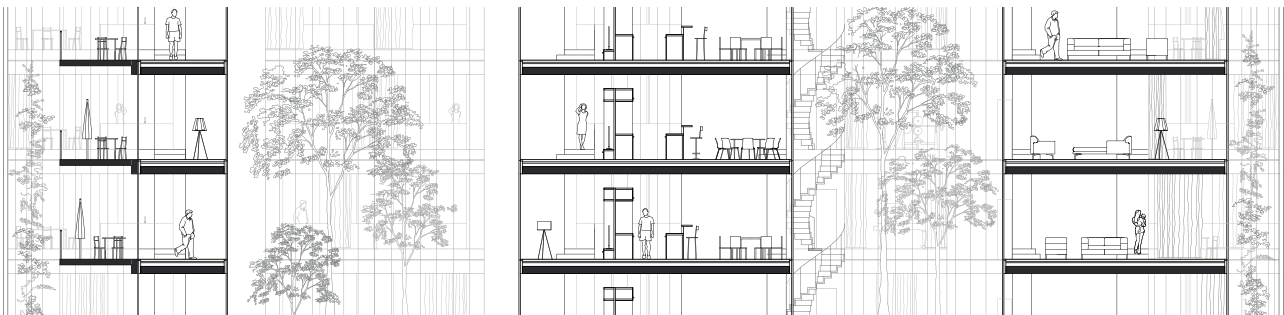
Damaris Kapp, Veronika Maier, Moritz Cappel

The spatial structure of this design proposal shows three different types of clusters for couples, single users, and families. The floor layout is organized in a succession from highly private zones towards diverse grades of communal space. The private and space efficient modules (designated “S”) offer the most important functions as a spatial furniture for one to two residents. The “M” modules offer more space and a private bathroom. The flexible furniture becomes part of the wall in a closed position, making these modules similarly efficient. By opening the folding elements of the rooms, the private space can be enlarged to the outside, where the boundaries between exterior and interior space dissolve. This dense and compact zone of private space is complemented by the buffer zone between the private and communal space, offering further functions to be shared with a smaller community of four to five persons. “Soft thresholds” are created by elevating the level of the buffer and private zones, providing the opportunity to retreat behind curtains or to open up the space to the community. The generous communal space located in the center of one cluster offers functions for a larger community of eight to ten persons. Communal functions for the entire building as well as inner courtyards connect the different communities of the clusters and levels of the building. Visual connections within the clusters, the levels, and the whole building set the focus on the communal, open spaces in the core, and therefore also on the community, intensifying the sense of living together.

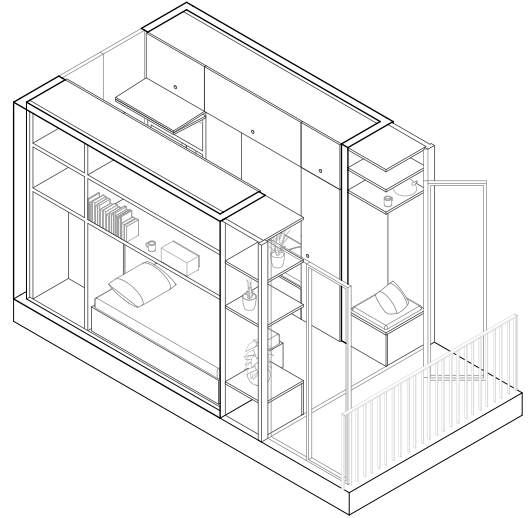
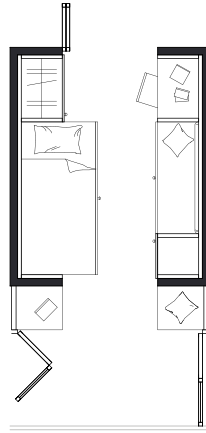
## Floor plan



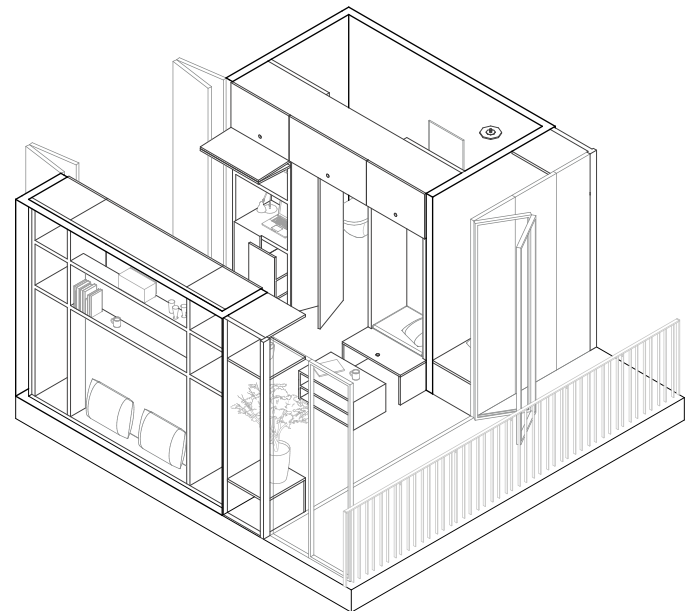
## Section



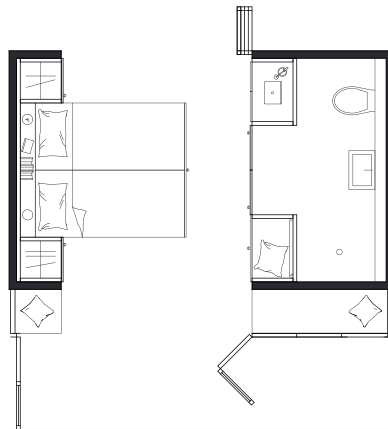
UNIT XS/ 9 m<sup>2</sup>



UNIT S/ 14 m<sup>2</sup>



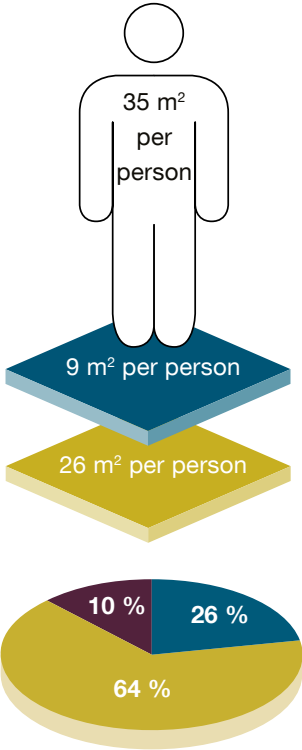
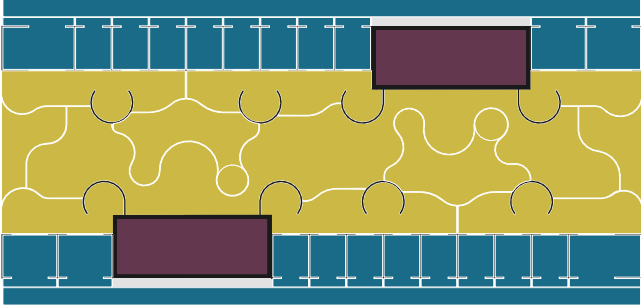
UNIT M/ 18 m<sup>2</sup>

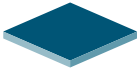
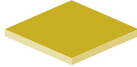
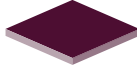
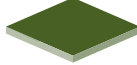










-  private spaces
-  communal spaces
-  infrastructure structure /envelope
-  public spaces

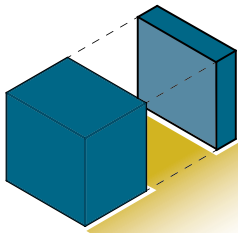


# TANGRAM LIVING

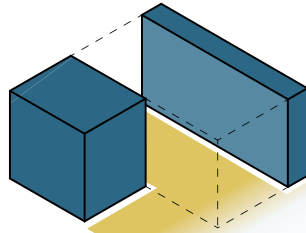
Alessandra Zanchi, Lubna Al Sammak, Luisa Bauernfeind

The concept was derived from traditional Japanese house, where the emphasis is on thresholds and flexibility as well as high adaptability to emerging social needs and so-called soft borders; functions change according to the current need of the user. The design, starting from the inside, includes a unit for one or two persons covering the occupants' daily needs: a spacious bed, sufficient storage space, a place to work or study and a functional bathroom. Based on this "Basic Suite" two other living suites are developed: the "Suite +" which also contains a kitchen and dining space and the "Flexible Suite +", a combination of two single "Suites" and a bigger kitchen with a dining space.

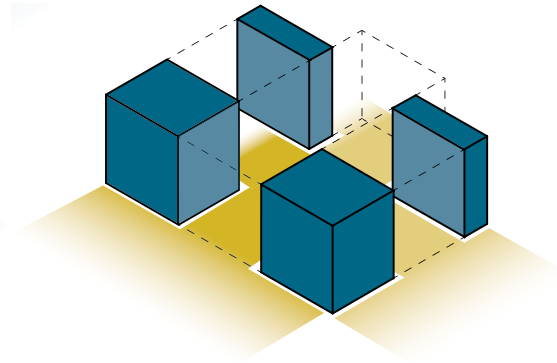
The entire floor layout can be used in multiple ways, depending on the user's needs. By storing the bed under the bathroom, the space is free to share with the community, welcome friends, or even to sub-let while personal belongings can be stored safely by closing doors and sliding wooden lattices to close off the closets and kitchens. Five different architectural elements shape adapted zones of privacy, either connecting or dividing adjacent rooms. A spacious communal space for several smaller communities features further shared spaces such as kitchen, living rooms, work spaces, a gym, etc. Some of them can also be rented for private use.



private = 6.5 m<sup>2</sup>  
 shared = 7.0 m<sup>2</sup>

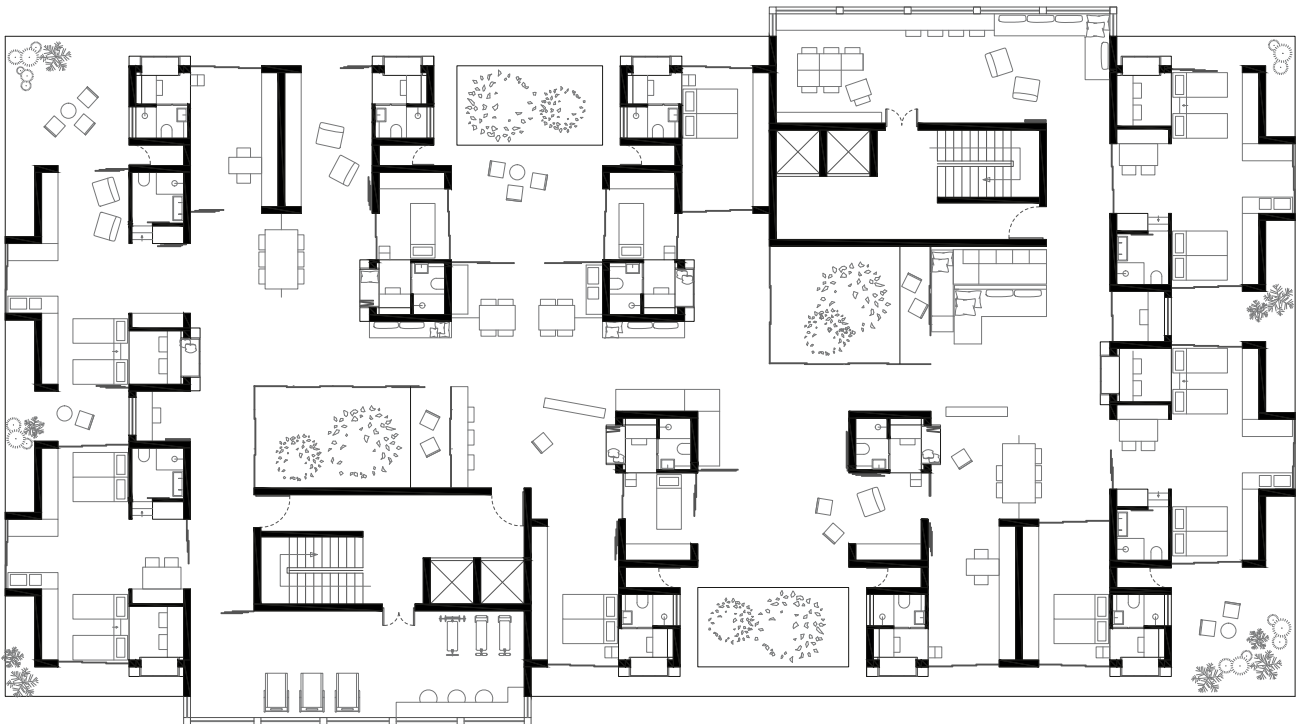


private = 8.0 m<sup>2</sup>  
 shared = 13.0 m<sup>2</sup>



private = 10.5 m<sup>2</sup>  
 shared = 33.5 m<sup>2</sup>

## Floor plan

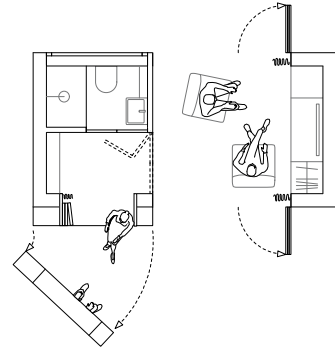
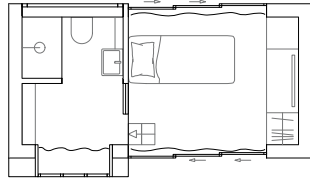


## Total privacy

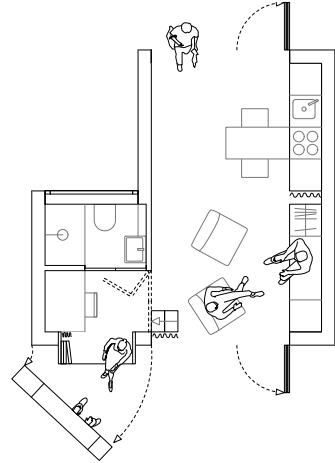
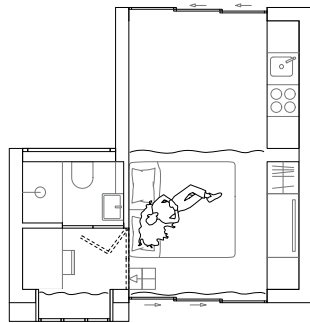
## Total openness



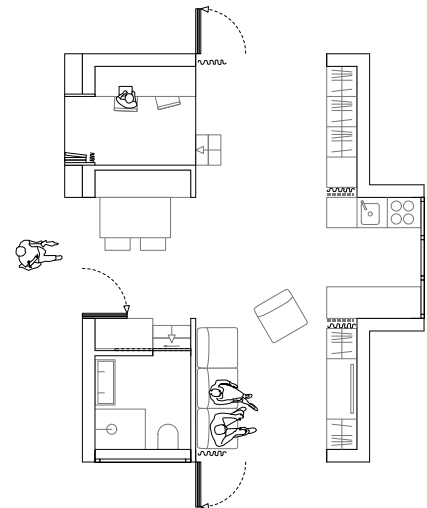
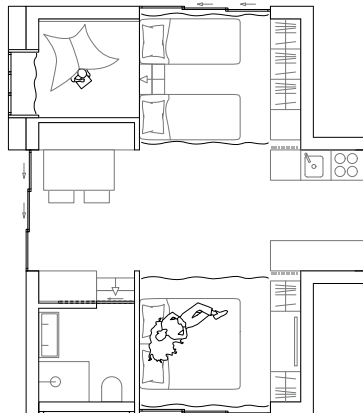
4 ×  
Suite



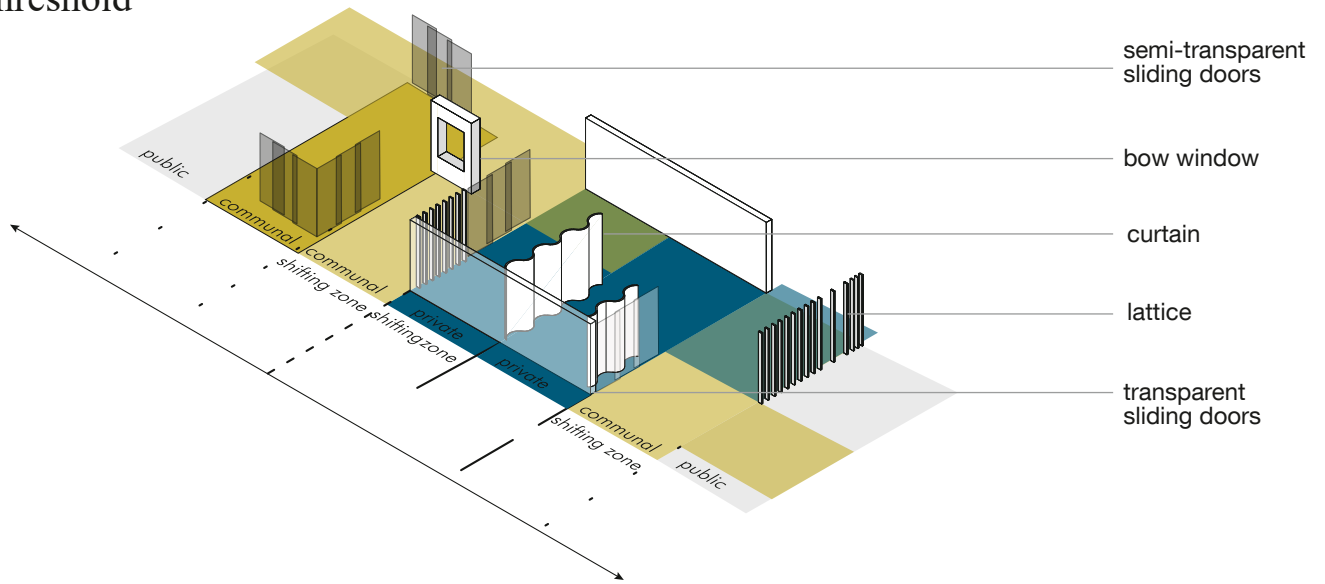
6 ×  
Suite +



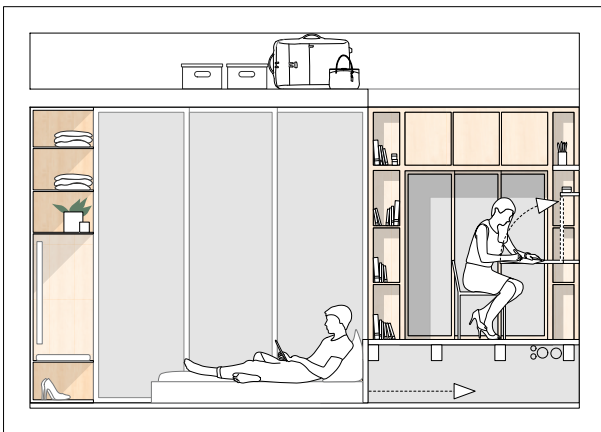
4 ×  
Flexible  
Suite +



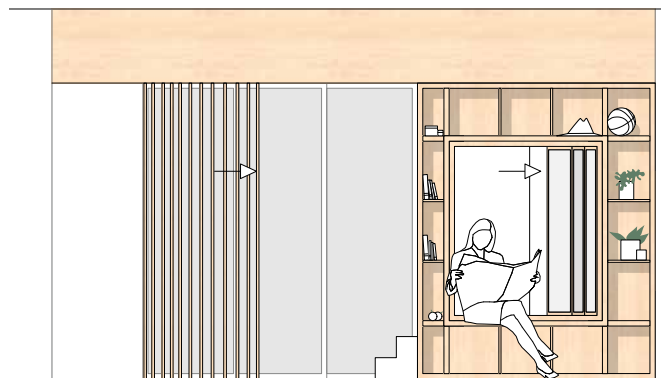
# Different architectural elements for creating soft threshold



Section



Elevation



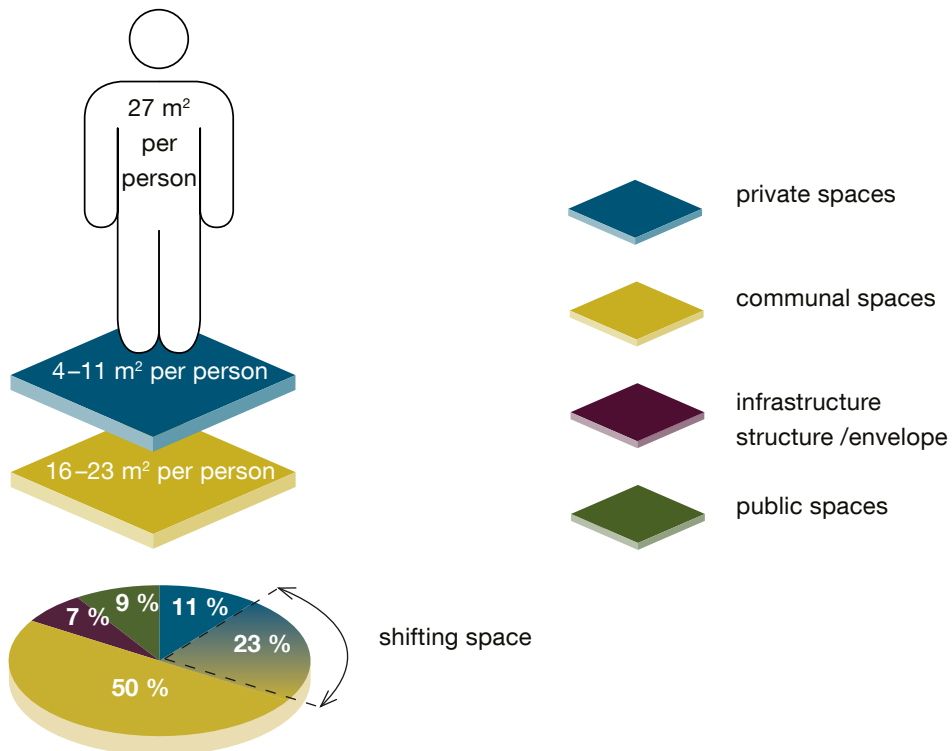


total privacy



shifting spaces

36 people







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illustrations: Sophie Razaire, Léo Gedebout. *below*: data: Sophie Razaire, Léo Gedebout, illustration: Elena Giannitsopoulos **p. 66**: *above*: illustration: Antonia Albrecht, Sofia Ruiz **p. 67**: Antonia Albrecht, Sofia Ruiz. **p. 68**: all illustrations: Antonia Albrecht, Sofia Ruiz **p. 69**: *above*: illustration: Antonia Albrecht, Sofia Ruiz. *below*: data: Antonia Albrecht, Sofia Ruiz, illustration: Elena Giannitsopoulos **p. 70**: illustration: Sophie Razaire, Léo Gedebout **p. 71**: all illustrations: Sophie Razaire, Léo Gedebout **p. 72**: illustration: Sophie Razaire, Léo Gedebout **p. 73**: *above*: photograph by Cameron Nordholm. *below*: Façade detail of Unité d'habitation Marseille: photograph by Uromano **p. 74**: all illustrations: Sophie Razaire, Léo Gedebout **p. 75**: *above*: Sophie Razaire, Léo Gedebout *below*: data: Sophie Razaire, Léo Gedebout, illustration: Elena Giannitsopoulos **p. 76**: illustration: Alexandra Huber, Ekaterina Vyrodova, Matjia Goljar **p. 77**: all illustrations: Alexandra Huber, Ekaterina Vyrodova, Matjia Goljar **p. 78** all illustrations: Alexandra Huber, Ekaterina Vyrodova, Matjia Goljar **p. 79**: *above*: illustrations: Alexandra Huber, Ekaterina Vyrodova, Matjia Goljar. *below*: data: Alexandra Huber, Ekaterina Vyrodova, Matjia Goljar, illustration: Elena Giannitsopoulos **p. 80**: Cecilia Collet, Runkang Shi, Haokun Wang **p. 81**: all illustrations: Cecilia Collet, Runkang Shi, Haokun Wang **p. 82**: all illustrations: Cecilia Collet, Runkang Shi, Haokun Wang **p. 83**: *above*: Cecilia Collet, Runkang Shi, Haokun Wang. *below*: data: Cecilia Collet, Runkang Shi, Haokun Wang, illustration: Elena Giannitsopoulos **p. 84**: Carolin Weber, Britta Dunning, Nora Hühnken. **p. 85**: all illustrations: Carolin Weber, Britta Dunning, Nora Hühnken **p. 86**: all illustrations: Carolin Weber, Britta Dunning, Nora Hühnken **p. 87**: *above*: illustrations: Carolin Weber, Britta Dunning, Nora Hühnken *below*: data: Carolin Weber, Britta Dunning, Nora Hühnken, illustration: Elena Giannitsopoulos **p. 88**: illustrations: Cecilia Collet, Runkang Shi, Haokun Wang **p. 89**: illustrations: Cecilia Collet, Runkang Shi, Haokun Wang **p. 90**: illustrations: Cecilia Collet, Runkang Shi, Haokun Wang **p. 91**: *above*: illustrations: Cecilia Collet, Runkang Shi, Haokun Wang. *below*: data: Cecilia Collet, Runkang Shi, Haokun Wang, illustration: Elena Giannitsopoulos **p. 92** Carolin Weber, Britta Dunning, Nora Hühnken. **p. 93**: all illustrations: Carolin Weber, Britta Dunning, Nora Hühnken **p. 94**: all illustrations: Carolin Weber, Britta Dunning, Nora Hühnken **p. 95**: *above*: illustrations: Carolin Weber, Brit-

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