

CO- LIVING:

A strategy for the future city housing

Laura Vanazzi

Al professor Gennaro Postiglione,
per avermi seguito e accompagnato durante questa importante fase del mio
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Relatore: prof. Gennaro Postiglione
Correlatore: prof. Stefania Sabatinelli

Studente: Laura Vanazzi (matricola: 873900)

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ABSTRACT

This research is inspired by the studies in Politecnico di Milano at the department of Architecture and Urban Studies about the evolution of dwellings practices and the need of new spaces, policies and processes, in the **contemporary housing scene in Italy**. What emerges is a widespread of co-living practices, which do not regard only Italy but the entire world. Stimulated by these previous analysis, the thesis explores the topic of the co-habitation in order to construct a solid panoramic view and propose a design strategy for a co-living apartment.

The word **co-living** means unrelative people living together in one apartment, where each family (call nucleo) has his own private unit independent to each other and connected by a common big space with shared facilities. The rising of multiples typologies of family, the creation of a new social class characterized by people in an economic and work instable situation, the rising of delocalisation of jobs are some of the main causes of the housing revolution: the research of affordable houses, suitable for their mutable work and family arrangements. The possibility of renting a room in a shared apartment became then one of the solution that answer to these types of problems. However, the practices proposed show that not all the sharable apartments are able to answer the needs of their residents, since in most of the case, the privacy is not respected or space are not adequate, the consequence is that most of the co-habitation practices are **uncomfortable living situation**.

What emerges from both the theoretical research and the practices is how the phenomenon of co-living do not regard only the youngsters or teens, but people from all ages. It also emerges that even if co-habitation has exploded recently, it is a housing form that **exist since the born of human being**: through history many populations all over the world in different period of times designed settlements or houses where people were living together. In some countries the phenomenon is well consolidated from many years, like in Denmark, Netherlands and Sweden.

These are reasons that encourage architects and entrepreneur to developed many models of co-living as living services, like the Apart-hotel, the student houses or the service apartment; but also, different new projects of co-living houses all over the world. The selection and the analysis of co-living case studies, together with the studies of the practices, helped to understand the positive and negative side of a co-living apartment and its strength and weakness.

It was then possible defining the rules of co-living apartment's design and applied it to a case study. The aim of the project is to find **rules and strategies**

that will be applicable to every building for designing the co-living apartment of the XXI century. The case study choose is from the city of Milan, a place where the request of rentable apartments or sharable room is rising quickly year by year and which do not find an answer in the housing market of **Milan**. The case study choose is **Grattacielo Baselli** located in Moscova, in the centre of Milan. The choice of develop the project inside an existing building was not casual, since satisfying the market request means starts from reconsider the existing buildings, starting from the interior of the apartments. The project was developed on the floor type of the tower with the aim of creating a comfortable and pleasant shared living environment for the residents: seven units of four different typologies are inserted, with the possibility of being joined one to another or adding areas from the common space. An **affordable and flexible co-living apartment** that offers space of interaction and socialization without losing the privacy of each family.

A PANORAMIC VIEW

HOUSING DEMAND: THE CAUSE OF A NEW DYNAMIC

ECONOMICAL AND WORK ISSUES

From the 1970s, Europe started to face a deep change in the solid welfare model of the so-called “**golden era**”, the stable economic and demographic situation of the previous decades, which was replaced by growing instability both in economic and social terms.

It is hard to define what marks this important passage, but the starting point can be identified with the GDP growth rate: the continuous economic expansion that had amplified the welfare programmes and the salaries of the citizens gave way to a slow GDP decrease caused by higher energy and labour costs, together with higher international competition and inflation. To put it simply, the **economic market was unstable** and less competitive compared to the past. One of the main reason of this was that the tertiary sector had grown more compared to the secondary one, and being a sector less connected with production, created a slower economy and more uncertainty. The industry workforce decreased from 25-35% in the 70s to 13-22% in 2000, coupled with a 60-70% growth in the tertiary sector. However, the large number of vacant jobs in this sector were not connected to better work positions or an income increase: if during the golden era there had been a reduction of social inequalities, the new decade amplified the divergence between high and low income, with an increase of the relationship between the richest 10% of the population and poorest 10%. At the same time the public economy changed with a high increase of tax level and public spending. Some countries were not able to support this and remained consequently deeply affected.

The economic changes led to a **high level of unemployment** that was almost absent during the golden era; many people remained unemployed until the second half of the 1990s, when the economic situation started to recover. The organization of a new production system that became more flexible and organized, brought to the development of temporary job contracts which doubled in percentage from the seventies. What was an important revolution, that impacted not only the job market but also the demographic and social sphere, was the big number of women who started to work, an important passage in the society from the “male breadwinner” model to a “**dual adult worker” type of family**. (C. Ranci, E. Pavolini, 2015)

Ranci, C. and Pavolini, E.
(2015). *Le politiche di welfare*.
Bologna: Il Mulino, pp.13-41;
75-109.

SOCIOLOGICAL AND DEMOGRAPHIC CHANGES

Parallel to the economic changes, there have been other transformations that affected the demographic and societal structure.

The first big visible change was the **progressive ageing of the population**: data reported by EuroStat shows how in sixty years the age bracket over 60 will increase from 86 million in 2010 to more than 161 in 2060, while the over 80 will increase from 23 million in 2010 to more than 61.4. The worrying data is that the total population in Europe will be almost the same. Now set at 499 million people, it is due to increase to 506 in 2060, while the composition by age will deeply change, with a profound imbalance towards older age brackets: the over 60 will increase from 17.4% to 30% and the over 80 will reach 12.1% from 4.7%. The forecast is that in the future there will be more old people than under 15: today the ratio between them is calculated to be 1:3 but in fifty years it will become 8:10. (Sgritta, G. and Deriu, F., 2011). This means that with every passing year there will be more inactive or retired population than active workers: estimates calculated that by 2060 there will be approximately 67 million retired people against 50 million active one; numbers that will deeply affect the economy and the work system. This problem will also have repercussions on the social field: in 2010, 42% of people aged over 85 were living alone, most of these would probably need assistance in their daily life activities as they become more vulnerable, both in terms of finances and health; but due to current work and education migration phenomena, together with modern day full employment, they may not have any children or relatives who can take care of them. (Sgritta, G. and Deriu, F., 2011). The phenomenon is particularly critical in Italy, the second country in the world for percentage of old population: people aged over 65 account for 22.6% of the total population, compared to the 13.4% accounted by the youngest generation (between 0 and 14 years old), and the disproportion will progressively grow year by year.

If the population will progressively age, it is also because **people are having less children than before**: from 1964 until 2016 the number of live births in Europe decreased from 7.8 million to 5.1 million; with the highest live births per woman registered in France (1.92) and Sweden (1.85), while the lowest in Spain and Italy (both at 1.34) (EuroStat, *Fertility Statistics*, 2018). This was accompanied by an **increased age of entering parenthood**: if during the sixties women were having their first child in their early to mid-twenties, now they tend to wait until their late twenties – early thirties. Moreover, women used to have more than three children, while now it is more common for a family to

Sgritta, G. and Deriu, F. (2011). Housing Matters: invecchiamento, politiche abitative e innovazione. *La rivista delle politiche sociali*, pp.409-445.

EuroStat. (2018). Fertility Statistics. [online] Available at: https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Fertility_statistics [Accessed 29 Dec. 2018].

2050



2100



2050



2017



1990



JAPAN



ITALY



PORTUGAL



AGEING OF POPULATION IN THE WORLD

* Space 10 (2018). IMAGINE: explore the brave new world of shared living. Space 10.

*Haider, F. (2017). Countries With The Largest Aging Population In The World. [online] WorldAtlas. Available at: <https://www.worldatlas.com/articles/countries-with-the-largest-aging-population-in-the-world.html> [Accessed 24 May 2019].

have one or two child maximum; with more women and couples that decide not to have children. Lastly, while in the sixties only 10% of children were born outside marriage, this percentage has now increased to 50%. Different causes have brought about this radical change, but one of these can be found in a new approach towards life, more individualistic and independent from believes held in previous decades.

The consequences are well visible in the new familiar arrangements, where the traditional family has now given way to many family typologies, hard to define and categorize. People are getting married later on, they may prefer co-habitation to marriage, whilst divorces and separations are on the rise, with many divorced parents with children choose to create a new family with another divorced parent with children as well. If marriage was considered, by the law of different country, as the formation of a family unit; today legal alternative to marriage, like registered partnership, have become more widespread and national legislation has to change in order to grant more rights to unmarried couples. “A family ‘nuclei’ is constituted when two persons (of either sex) choose to live together as a married couple, in a registered partnership, or in a consensual union, whether or not they have children; single parents with children also constitute a family unit, while people living alone do not, nor do groups of unrelated people who choose to share a house together (for example, students).” (Ec.europa.eu. *People in the EU*, 2019).

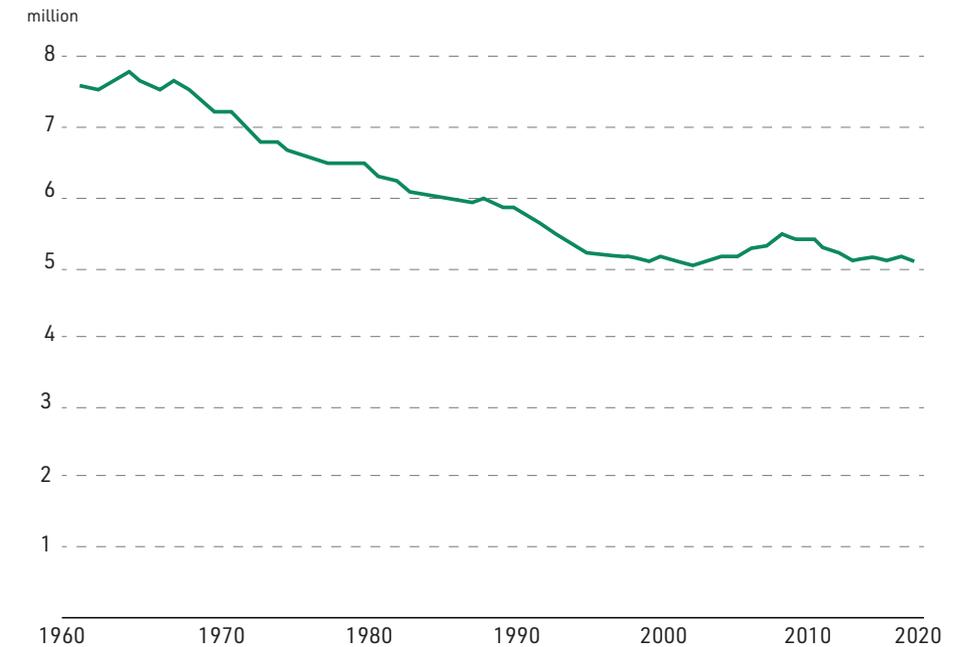
The data provide by Kreider and Ellis (2011) shows in fact a decrease of traditional families from 85% in 1970 to 65% in 2009; while at the same time 10% of children were living only with their mother in 1970 and by 2009 this percentage had increased to 24%. In fact, the crude marriage rate diminished from 7.9 to 4.2 per 1,000 inhabitants between 1964 and 2014, with an average age of 30 years old, 5 years more than in the past; at the same time the crude divorce rate stood at 1.9 divorces per 1,00 inhabitants in 2013, compared with a rate of 0.8 divorces per 1,000 inhabitants in 1965. However, even if **marriages are reducing**, they are still the widespread institution: in 2011 almost three quarters of all European families were married couples, precisely 71.2%, and 55.8% of them had children who were still living at home in the parental house. The remaining 28.8% was composed by 14.8% of other types of union and the 16% by single parents (13.4% of which were woman and 2.6% man), with a percentage of children living at home around 44% (Ec.europa.eu. , 2019).

This new situation has led to the **increase of family typologies**, which are particularly vulnerable in terms of family income and work-life balance and time

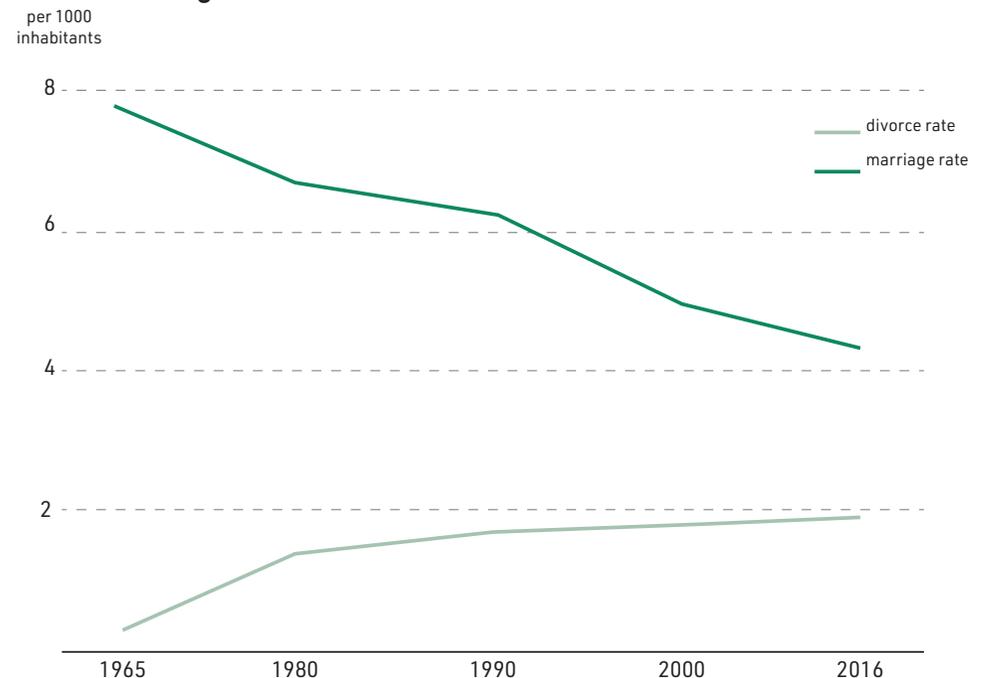
Ec.europa.eu. (2019). People in the EU - statistics on household and family structures - Statistics Explained. [online] Available at: https://ec.europa.eu/eurostat/statistics-explained/index.php/People_in_the_EU_-_statistics_on_household_and_family_structures#Single-person_households [Accessed 22 Feb. 2019].

Kreider, R. and Ellis, R. (2011). Living arrangements of children 2009. Washington, DC: Census Bureau.

Number of live births per year in EU



Crude marriage and divorce rate in EU



*Ec.europa.eu. (2019). Fertility statistics - Statistics Explained. [online]

*Ec.europa.eu. (2019). Marriage and divorce statistics - Statistics Explained. [online]

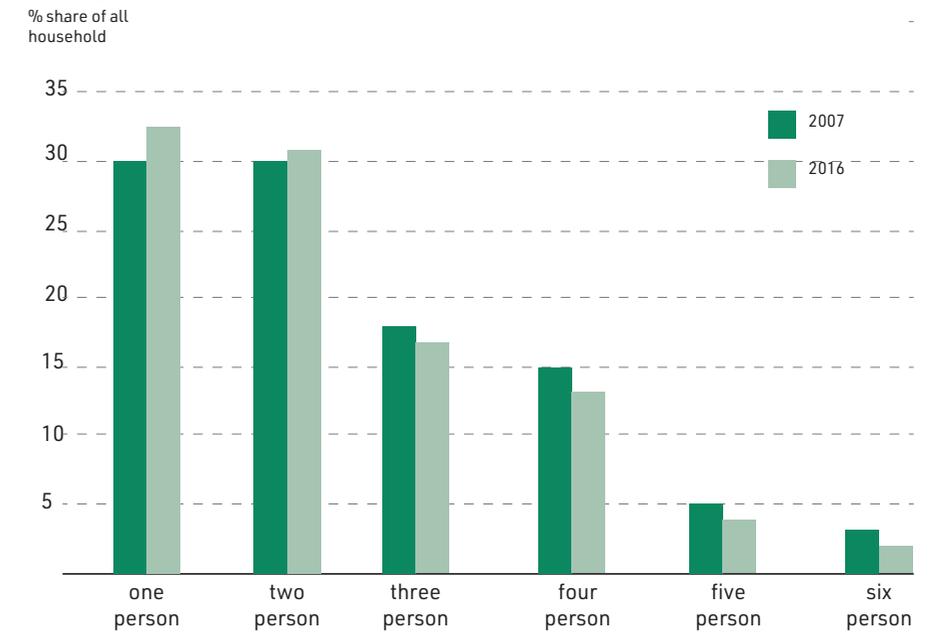
management. They are also exposed to higher social risks and need new protection and support by the welfare system. A type of family that is increasing and seems that will continue doing so in the future is the LAT family (Living Apart Together): we are talking about couples, married or not, who for personal or external reasons, do not share the same household but both of them have their own, in which they live together alternatively over the course of a week. This type of couple has two households and two different residences. We can thus describe the new composition of households in Europe: in Scandinavian, western and German-speaking countries the most common type of households is the single one, due to early home-leaving of young adults and high rates of divorce; this include young adults, divorced and elderly. They are then followed by couples with and without children and lastly we find extended households, which are distributed not homogeneously as they can be found in German and Anglosaxon countries more than Scandinavian ones. In southern countries the most widespread household is the couple without children, followed by couples with children and extended families; singles on the other hand are quite rare, due to the late home-leaving of young adults and a lower rate of divorce. The majority of single households in these countries are characterized by the elderly. Finally, in central – eastern Europe countries there is a homogeneous proportion of single households, families with and without children and extended families (Oláh, 2015).

Sz. Oláh, L. (2015). Changing families in the European Union: trends and policy implications. Stockholm University: Research Gate.

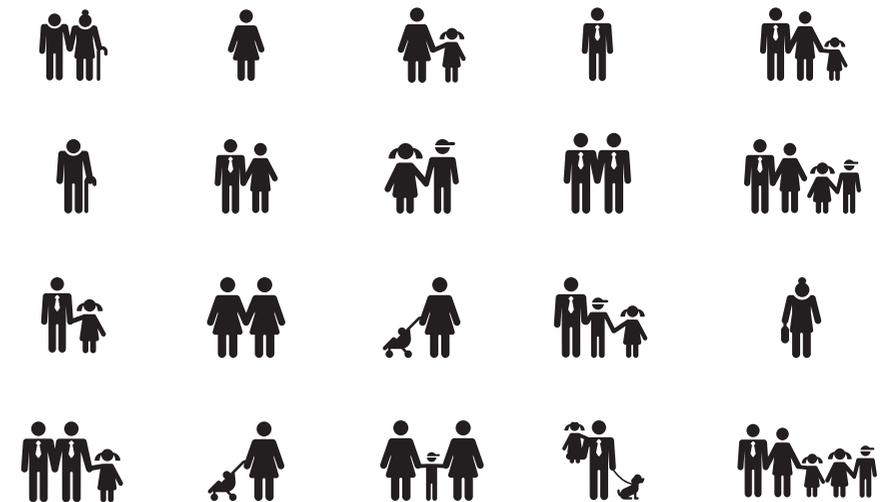
Ec.europa.eu. (2019). People in the EU - statistics on household and family structures - Statistics Explained. [online] Available at: https://ec.europa.eu/eurostat/statistics-explained/index.php/People_in_the_EU_-_statistics_on_household_and_family_structures#Single-person_households [Accessed 22 Feb. 2019].

What is considered as one of the main causes of this family transformation is the **increasing women independence** and their presence in the workforce in Europe. Even if women are not active in the same percentage in all countries (in Scandinavian countries their rights almost mirrors those of men, while in southern countries there are still many goals to achieve), women who have a full time job may not have time to create a family or for this reason they prefer not to have children in order not to compromise their career, even if there is still quite a strong difference in terms of salary between men and women (women received from 16% to 21% less than men). Italy is one of the countries that is still behind in offering equal opportunities to men and women: the 2017 ISTAT report shows important differences compared to other countries in the EU. Even if there are more women in higher education than in the past and numbers for men have declined (in 1974, the female to male ratio in university enrolment was 45 per 100 graduate students, whilst now it is 60 per 100 graduate students; and the figures for men have lowered from 55 and to 40), their studies are not well paid in work: with a difference in retribution ranging from 15 to 30% less, their rate of employment is 50.6 %, twenty points less

Changes of the household in EU



* Ec.europa.eu. (2019). People in the EU - statistics on household and family structures - Statistics Explained. [online]



than men and 14.4 points less than the European average. If we continue the comparison with Europe, Italian women are those who spend more time occupied with family duties: 19.2% percentage of hours for women and 7.4% for men. It is clear to see why women are forced to accept part-time work or jobs with less responsibilities, and as a consequence, their working hours are payed o average only 6.60 Euros compared to the 13.20 Euros of men (Istat, 2017).

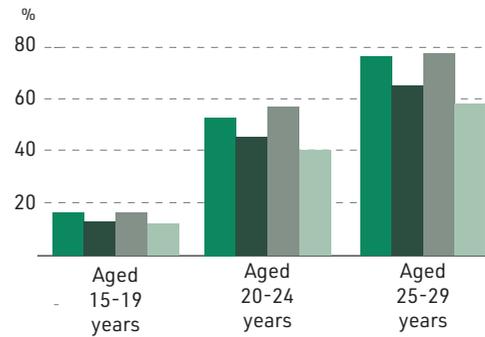
Today's society is experiencing a new phenomenon, which is strictly connected to the evolution of families: a **longer transition into adulthood for the younger generation**. Due to three main causes, namely the housing market, the labour market and the existing social policies, finding a house today, a moment that marks the independence from one's family, is harder than in the past. The instability and temporary jobs of today are not helping young adults, who are leaving their family home progressively later on. This is an important step in life, since it coincides with the beginning of adulthood: it means having completed the educational steps, having started a career and having the possibility of developing a new family. This moment is conceptualised differently from one place in Europe to another: in the norther countries the passage is quicker, since school students are used to work and study part-time from a young age. They are also pushed and helped by their parents to leave the household as soon as possible, plus they can benefit from more advantages than in other countries because the government provides them with numerous forms of renting house schemes, social housing or public housing and income support. On the opposite pole of the spectrum, in southern countries people tend to work only once they have completed their studies; the first house is thought not as a temporary solution, but a permanent one, i.e. the house where their new life starts, and a new family is born. This means that until they will have a salary that allows them to live independently, they will not be able to leave the parental house; it must be noted that the vast majority of houses are owned, while renting is a rare and social housing a scarcely available option (Filandri and Bertolini, 2016). As reported by the EuroStat data, the age of the people leaving the parental house has slightly increased from 2009, with Montenegro in first place when it comes to the highest age of leaving the family's house (32.5 years old), followed by Malta (32.2) and Croatia (31.9); while the youngest to leave are in Sweden (21), Denmark (21.1) and Luxemburg (21.0). (EuroStat, 2018) At the same time, the percentage of young people who are still living with their parents between the age of 18 and 24 reported in 2017 mirrors the data reported above: the average is higher in Croatia (73.2 %), Slovakia (70.9%) and lower in Denmark (19.2 %) and Finland (18.7%) (EuroStat,2018). Italy has been reported to be one of the countries with young

Istat (2017). Che genere di differenze?. [image] Available at: <https://www.istat.it/it/archivio/197687> [Accessed 13 Oct. 2018].

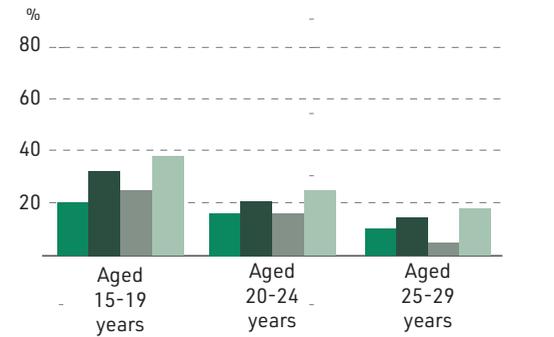
Filandri Marianna and Sonia Bertolini (2016). Young people and home ownership in Europe. *International Journal of Housing Policy*, 16:2, 144-164,

EuroStat. (2018). Estimated average age of young people leaving the parental household by sex. [online] Available at: http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=yth_demo_030&lang=en [Accessed 29 Dec. 2018].

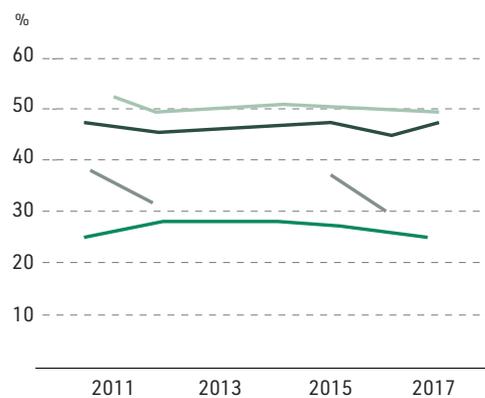
Employment rate EU (15-29 years old)



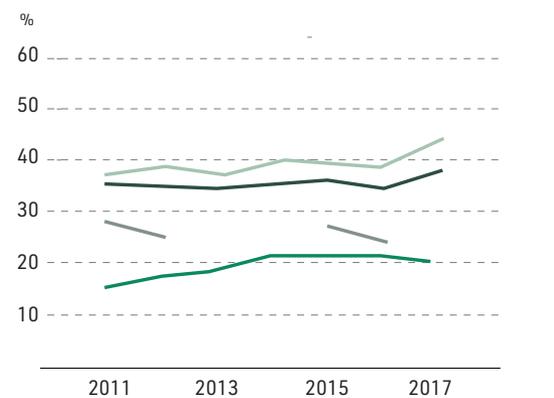
Unemployment rate EU (15-29 years old)



Social exclusion rate EU (15-29 years old)

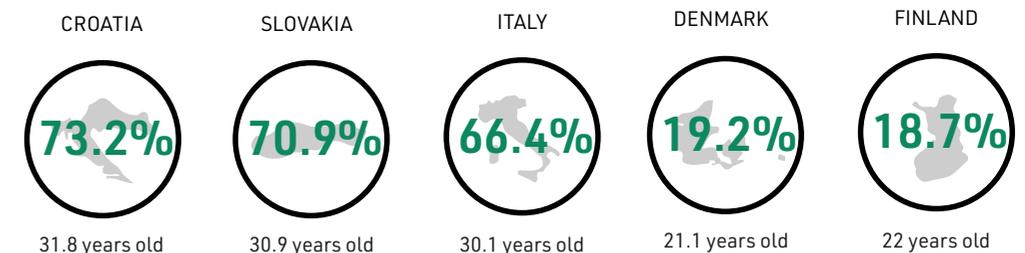


Risk of poverty rate EU (15-29 years old)



■ native born ■ foreign-born ■ EU born outside the member state ■ non EU born

Youngers leave parental house (18-24 years old)



*Ec.europa.eu. (2019). File:Unemployment rate for young people, EU-28, 2017 (%) YP18.png - Statistics Explained. [online]

adults that leaves home later: 66.4% of young adults is still living with their parents between the age of 18-24; and the average age of leaving the family house is set at 30.1 years old. Italy is therefore one of the top five countries where people leave their family house later on in life in Europe, but this can be easily explained considering the economical background and the instability that characterises the job market.

Finally, the last big social change can be identified in the **migratory fluxes**; a phenomenon that has abandoned its temporary characteristic and turned permanent, growing by the day. This unprecedented flux of migrations that characterized our century has had refugees and workers move from a country to another, with the consequent mutations and variations in terms of social and economic integration. The total number of people who migrated to one of the European Union countries during 2016 was 4.3 million, with at least 3 million migrants; this data are reported by EuroStat (Ec.europa.eu, 2018) and it refers to migration from outside and inside of Europe, within the 4.3 million, 2.0 million are non-EU citizens, 1.3 million are EU citizens who have migrated to a different country and 929 thousand people have migrated to an EU member state of which they hold citizenship. To this number the number of refugees must be added, i.e. people who stay in a country for generally a year and then they need to move in another one inside Europe. There is no definite number for this part of the population, and they are subject to specific policy programmes in order to firstly reduce the societal risks that they can face and secondly increment the integration within their new country of residence. The countries that are hosting the highest numbers of migrants in 2016 were Germany (1,029.9 thousand), United Kingdom (589 thousand), Spain (414.7 thousand), France (378.1 thousand) and Italy (300.8 thousand); All these countries have also the highest numbers of people leaving the country: Germany (533.8 thousand), United Kingdom (340.4 thousand), Spain (327.3 thousand) and France (309.8 thousand). Since the start of the XIX century, Italy has experienced a high outward migration flux towards the centre and north of Europe, North and South America, and Australia as well as interregional movements from the south of the peninsular towards the north. However, from the mid-1980's Italy became a host country to millions of people and for some of them their definitive residence. At the beginning this was a moderate phenomenon, with migrants coming mostly from North Africa, Sub-Saharan countries and the Philippines; but with the fall of the Berlin Wall in 1989 migration became more significant and started to involve people from ex-communist countries, like Albania and Romania. In this way, by 2008 the number of migrants had reached 4.4 million (illegal migrants including), that is to say over 7% of the

Ec.europa.eu. (2018). Migration and migrant population statistics - Statistics Explained. [online] Available at: https://ec.europa.eu/eurostat/statistics-explained/index.php/Migration_and_migrant_population_statistics#Migration_flows:_2_million_non-EU_immigrants [Accessed 22 Feb. 2019].



WHY?



EMIGRANTS

LEFT ONE OF EU STATE



WHERE?



* Ec.europa.eu. (2018). Migration and migrant population statistics - Statistics Explained. [online]

total population. (Barban N. and Dalla-Zuanna G, 2017). More recent figures establish the same number at 5.144.440, and estimates for the end of 2030 see it rise to 6 million; they are 2.672.718 women and 2.471.722 men; most of them came from Romania, Nigeria, Pakistan, Morocco, Albania, China, Bangladesh, Brazil and India (Istat, 2017). The report on the demographic changes and development shows that the annual intake of migrants will slightly decrease, going from 337 thousand per year to 271 thousand per year in 2065; during this period, it is calculated that 14,6 million of people will migrate to Italy. At the same time, Italians moving abroad will decrease from 153 thousand in 2017 to 132 thousand in 2035, with a fixed increase of 130 thousand per year from 2035, amounting to 6.6 million people who will leave the country during this period.

The new era must face these deep changes and the existing welfare system needs to adapt: containing the growing cost of the “old risk in society” without interfering with the people’s satisfaction and the legitimation of public institutions; adapting the new welfare system to the new social risks and the changes of the old; adapting model of govern and governance in a more complex environment. Most of the interventions made by the government were done to support and prevent the new social risks, with the aim of facing the new policies of the welfare system; but also to solve the inconclusive old risks. In general, we can identify four categories of interventions related to the old social risks: **retirement, unemployment, the health system and the educational system**. In the retirement sector, policies that offered a less generous perspective for the new generations were applied: higher retirement age, increased relationship of deposit tax and work performance, reduction of the replacement rate. The reduction of the average age at risk of unemployment led to these consequences: a homogeneous allowance between people who are depending less on their previous work condition; a categorization of the risks, public policies that are becoming similar for unemployed and young workers, and the activation of support interventions for the unemployed, helping them to find and get a job. In the health system the availability of free services decreases: a paid service (or an increase in the prices) applied to medicines, hospitalizations and clinical services; a reduction of the service offer with a maximum budget per hospital and a more organized and reductive system for day hospital procedures, medical staff and clinical services. As for the education system, the new policies try to focus on the structure of schools and universities with a particular attention to the relationship between university and labour market. New interventions related to new social risks are enlarging the welfare systems, including a bigger attention to the housing policies and the inclusion

in the society of migrants. First of all, there have been created financial supports and helps in finding a job for the people in a weak economic situation, including the marginalize social classes but also workers and other people who are facing social or economic problems. Policies related to help coincide the work salary with the care of the children, a support for the mothers and their children; but also interventions that helps disable and old people, increasing the health care services but also supporting the families with financial helps. There have also been supports and helps for the accessibility of the house, with economic financing regards the families or the market. Finally, the increase of migration flux in the European countries increase programmes in order to facilitate the integration of foreigners in the country, with the developing of local institution, scholastic and employment integration programmes (C. Ranci, E. Pavoluni, 2015).

Since the demographical changes can be deemed responsible for the creation of categories under social risks, the welfare intervention policies were trying to face and limit future problems of this new categories of people: a support for the new poor class, characterized by minimum wage, integration between the work system and the professional and educational systems, proportion between work income and care system for the family, intervention to support the disabled and the elderly who need assistance, policies that will foster access to private housing and interventions that support the integration of foreign people in society (C. Ranci, E. Pavoluni, 2015).

HOUSING MODELS

Housing policy can be defined as “interventions that guarantee the access of a family to an adequate house, in terms of quality and dimensions, depending on the numbers of the family members; this must be guarantee to all the nuclei that cannot afford a private house for economic reasons: absence of money that guarantees the accessibility to the house or in case the income of the family will be damaged in providing a house by the condition of the housing market” (C. Ranci, E. Pavoluni, 2015, p.143). Housing policies are always the most unstable ones in terms of welfare interventions since they need to deal with both population and demographic conditions, which of course present a number of situations that are hard to define and categorize, especially in the 21st century.

Every country’s approach in this respect is different. If France and Denmark are substantially investing in houses, with respectively 227 Euro and 208 Euro per capita, Italy’s investment is one of the lowest with just 6 Euro per capita. The housing policies that were applied in the past can be divided in four groups, as per the consideration made by Kurz and Blossfeld. Firstly, **the liberal regime**, focused on the private property and on guaranteeing access to houses for everyone, especially for the weaker social class; the housing market has a central role in this policy and is typical of anglo-saxon countries. Secondly, **the social democratic and collectivist regime**, guaranteeing access to a house to every family despite their working position; the state had a central and strong role in this policy, using allowances, social housing and economical supports, paying attention both on owned and rented houses; this system is typical of the Scandinavian countries. Thirdly, **the conservatory corporative regime**, which can be defined as the middle ground between the democratic and liberal regime, where the rental system is privileged more than in the democratic regime but without the collectivisation and the public task of the social democratic one. In this case the family has a central role in guaranteeing access to a house to a member of the family. Lastly, **the south European system** (typical of Italy and Spain) is characterized by a central role of the original family in helping the member to have a private house, that is also often self-built. Public policies are less developed, as as renting and social housing are. On the other hand, there are other policies that support property, with measures that reduce the housing loans and the cost of inheritances and house donations within the same family (C. Ranci, E. Pavoluni, 2015).

Housing policies went through different **steps in history**. Until the seventies,

in fact, the good economy allowed for the reconstruction of the war damage cities had suffered and the construction of new houses. Moreover, fixed prices of ownership, housing allowances and standard loans allowed more people to be able to provide accommodation for their families. For almost fifty years, the favourable economy allowed most families the possibility of owning a house, so much so that this became the standard form of housing. At the same time, new housing allowance and interventions were introduced in order to provide people with social housing or renting accommodation. Starting from around 1975, European countries were subject to a period of revision of the political programmes and an increase in the inflation rate, and, in different measure, they all started to reduce the production and the investment in social housing, with less interest in terms of renting policies: as a consequence, people who would have been the beneficiary of public social houses faced a strong selection. United Kingdom, for instance, was one of the most affected countries: a big decrease in production of social housing and the introduction of the “right to buy act”, which sold social rentable apartments to families who needed them at a lower price, brought about important changes for the British people. The eastern countries, especially the ones that were under the communist regime, saw an increase of ownership form in the stock of the apartments available, until 80% of the population owned their house. The final phase of this change is actually the current situation: started back in 2000 with a period of instability, its bigger consequences were brought about by and after the economic crisis of 2008. What governments have been trying to do is to decrease their intervention in terms of renting policies and new constructions, and on the other hand, increase policies that will help people own their apartment, all of this considering that the affordability of apartment has decreased due to higher prices and the social changes that require new forms of housing.

Italy has undergone the same changes as the other countries, and until the seventies its bigger focus was on the construction of new accommodations to be sold as property, and long term plans like INA-casa (l. n. 43/1949) and GESCAL (l. n. 60/1973) put popular housing on the market, where they were known as “house services” and “supplementary district”. During the seventies three main important changes characterized the housing policies: the law for house reformation, l. n. 865/1971, that set up public housing, l.n. 457/1978 that entailed the recovery of abandoned public buildings and historic districts, and finally l. n. 392/1978 that applied a maximum amount of money for the housing ownership and renting.

During the 90's, housing policies were focused on urban requalification, with a particular attention to the suburbs and the renovation of abandoned areas (l. n.179/1992 and l. n. 493/1993). Subsequently, the attention shifted to the residents themselves, with a law that supported the affordability of the apartments (l. n. 431/1998), establishing a national fund to support the housing lease. After this period new funds were created: one for constructions with special budget and another to facilitate the access to a first house for young couples. At the same time, in order to support the lease market, ln. 240/2004 introduced five new typologies of contract, with direct contributions and tax incentives. It is from 2008 with Piano Casa that new policies about the living space are adopted, incrementing the housing stock with ERP and ERS housing for the weaker social class. L. n. 47/2014 wanted to find new housing solutions in order to solve the emergency of housing crisis afflicting the middle class that cannot afford a house; the increase of appropriation on the national funding to support the rentable apartment and the tenants in arrears; tax reduction, the introduction of measure to dismiss the ERP housing and the installation of granting for the ownership of the first house and more investments and advantages for social housing, in new constructions and favourable contract for the investors.

The shift from a traditional family to multiple kinds of families, with a lot of single and divorced individuals, requires a **new type of accommodation**, more affordable in terms of price and flexibility, which is unfortunately hard to find and provide to people. Moreover, the richer economy of the golden era led people to choose ownership contracts, creating the idea that owning a house is the most available form to get private accommodation, even if they don't really need to. The consequence is the creation of an overcrowded living space and an excessive spending that negatively impacts the income of a family. The overcrowding is present where there is at least one room for the central couple of the family and a room for the other members of the family (children under 12 years old are counted to be in one room, same for teenager of the same gender); while an excessive spending for housing happens when the expense is higher than 40% of the family income. This is the case for one out of ten families in Europe, while one out of six is living in an overcrowded living space. The offer has also changed, as today we have more houses available for a sample of 1000 people: in 1980 there were 380 houses available for every 1000 people, in 2012 this number had risen at 470. The reasons for this are the decreasing dimensions of the house, the spreading of second households and stronger building activities. However, the relationship between demand and offer is not equally balanced: the demand for a house in the metropolitan

area is higher than in the country side, with the consequence that in the cities demand cannot be satisfied, while in the country side some houses are even left unused.

The balance between **demand and offer finds multiples solutions** in the housing policies, that can be mainly divided depending on whether we look at a renting or ownership scenario. In order to support the housing offer, renting can be applied according to three policies: 1) social housing apartments for rent, 2) allowance to the private constructor, in order to give part of the built accommodation to the lower tier of renting; 3) financial incentives to help selling houses at an affordable price. Cecodhas defined **social housing** as “the assemble of activities that create affordable houses to specific families who cannot afford a house for the market condition, that can be economical or private”. Social housing provides apartments that are 20-30% cheaper than the normal market price, which can be conceptualised as apartments for everyone but with a lower price, or as apartments for a particular target of people whose earnings fall under a specific threshold and do not allow them to provide a house for themselves. In case of ownership what will happen is that allowances are given to construction companies with the aim of selling these houses at a lower price. However, this last policy does not have positive effects, since the available public housing risks being more expensive when they are not supported by cheap rental schemes and are plagued by low funding availability. Moreover, social housing buildings were used in order to compensate for the houses that are more difficult to sell. On the other hand, in order to satisfy the request of housing, the principal aim is to reduce the costs for tenants and owners using three methods: housing allowances, favourable taxes and allowances for a loan (C. Ranci, E. Pavoluni, 2015).

THE LAST DECADE: RECESSION AND AUSTERITY

The economic crisis has had a deep influence on the **housing market** in Europe, with the consequence of a crisis of residential holdings management, the reduction of real estate value and the reduced purchasing power of families and their possibilities to access ownership.

The **reduction of real estate value** is clearly demonstrated by the prices of houses, which have plummeted since the crisis. Today, the situation is heterogeneous: countries like Greece, Cyprus and Slovenia are still affected and house prices are still low; whilst the UK, Sweden and northern countries have seen an increase of the prices, and Denmark alongside Germany have not had a great increase or decrease, and they were actually the countries less hit by the crisis (Pittini, Ghekière, Dijol, Kiss, 2015). Reduced investments in housing system, together with high construction costs, has been influencing the affordability of houses. The report by Housing Europe titled “The state of housing in EU 2015” underlined that in 2013 22% of the disposable income of the population was allocated to housing costs and it reached 41% for people who were facing risk of poverty and were ‘overburdened’ by housing costs. The highest spending was found in Greece, Denmark, Netherlands, Germany, Romania, Czech Republic and Sweden, while the lower was in Austria. The highest expense was found among tenants in the private sectors, between who paid a reduced rent, owners with mortgages and outright owners; while among household types, people living alone and singles with dependent children were the burdened by housing costs the most (Pittini, Ghekière, Dijol, Kiss, 2015).

According to the European Mortgage Federation, the **total outstanding residential debt** to disposable income of household records has increased from 66.4% in 2004 to 81.8% in 2014; the gross residential lending in EU in 2012 was 48.8% higher than the amount recorded in 2007: a group of countries including Belgium, Sweden, Denmark and France has seen a positive trend for the gross lending, while another group has seen a downward trend and we are referring to Ireland, Italy or Portugal. The high level of debt linked to housing is also a worrying phenomenon, and in particular the high level of mortgage indebtedness combined with the impact of the crisis on the housing markets resulted into negative equity and defaulting mortgages in a number of countries of the EU, most notably Ireland and Spain. The share of population with arrears on mortgage/rent is much higher among those earning a low income, and particularly in Greece, Hungary, Bulgaria, Cyprus, Croatia and Romania

Pittini, A., Ghekière, L., Dijol, J. and Kiss, I. (2015). The state of Housing in EU 2015. 1st ed. Brussels: Housing Europe, the European Federation for Public, Cooperative and Social housing, pp.14-27.

(Pittini, Ghekière, Dijol, Kiss, 2015).

The **deepest changes in house policy** that had an impact on the families’ living conditions were mainly the reduction of public funds, a deregulation in the rental market, together with new dynamics of living and housing conditions. These brought a reduction in social housing investments, less affordable housing projects, an increase of the rental price, a reduction of people who can afford a private house and a stronger selection for the people with economic difficulties. All these factors had important consequences for housing policies, which can be briefly summarized in five points: the increase of people living in owned accommodations; a lack in the production and investment in social housing; a reduction of housing cost credits, both for the investors in social housing and for the private buyers; acute difficulties in paying loans and rents, and a stricter selection of those entitled to social housing.

Social housing in Europe is a heterogeneous subject, as previously said there are different policies regarding the provision of social housing: first of all, there are big disparities in the number of social houses. We can generally say that the Northern countries have bigger social housing stocks compared to the south of Europe: the highest numbers are to be found in the Netherlands (35%), Austria (25%), and Denmark (21%), while the lowest are in Italy, Spain and Greece, where social housing is almost absent. Despite the numbers, it is noted how European countries do not invest much in this type of accommodation, even if demand for public housing is high and increasing every year: for instance, the number of households on waiting lists in Belgium have increased from about 140,000 to 186,000 between 2008 and 2012; from about 1.2 million in 2010 to about 1.7 million in 2012 in France; and from 600,000 in 2008 to about 650,000 in Italy today (Alquati, Marchesotti, 2012). Approaches and policies in each country are different, and they can be run by local administrations, private tenants or no profit associations. The following examples refer to the social housing policy in the Netherlands, England, Sweden and Austria. In the Netherlands most associations are non-profits, the “woning corporaties” correspond to 99% of the total: the state retains the function of organization managing the rights of the house, while the administrative part is left to the cities. Principles, fees, support and rules are decided by the social housing associations. In England, the public sector is less relevant in terms of funds, control and intervention, while a more decisive role is held by the non-profit sector, which co-operates with the Housing Corporation. In Sweden, the state controls and manages the general rules of social housing distribution, while the actual distribution and management of local accom-

Pittini, A., Ghekière, L., Dijol, J. and Kiss, I. (2015). The state of Housing in EU 2015. 1st ed. Brussels: Housing Europe, the European Federation for Public, Cooperative and Social housing, pp.14-27.

Alquati, F. and Marchesotti, C. (2010). RUSE: Residential Urban Social Equipment. MArch. Politecnico di Milano.

modation is in the hands of local associations. In Austria, social housing is controlled by municipalities or non-profit associations without any access to public subsidies, both controlled by the not-for-Profit Housing Act, which regulates 490,000 rented houses and 240,000 owned houses, equal to 17% of the houses available. The country has seen an increase in the construction of social houses, especially following the migration phenomenon. The funds have been allocated through the “Finanzausgleich” scheme, controlled by the central government and the federal state. In recent years the countries with a lack of social houses have also started different programmes: Bulgaria is developing a project for vulnerable individuals and minority groups, Czech Republic is focusing on temporary housing for emergency situations, social housing (socially targeted) and affordable housing for people below the poverty threshold. Italy established a new housing plan, however limited, for the renovation of public social housing and a possible increase of social houses, while Spain, with the new Spanish State Housing Plan 2013-2016, started subsidising the creation of public social rented housing as well as supporting the tenants with lower incomes. Together with social housing policies, the European Parliament adopted a Resolution on an EU homelessness strategy in early 2014, in order to “develop social and affordable housing adapted for the most vulnerable individuals in order to prevent social exclusion and homelessness” (Alquati, Marchesotti, 2012).

The changes that deepen social inequalities and their reproduction are one of the new focuses of the **new welfare regime**: a house is not only one of the primary needs, but it can also be a source of income; the typology, the quality, the level of overcrowding and the economic impact of the house on the family’s everyday life are all elements that count. Social class and overall income are deeply influencing the access to accommodation, especially for young people. It is also important to underline the role of the housing market, the state and the family play in the accessibility of the house, as different types of interaction between the three forces can be described: in liberal and social welfare systems the state and housing policies play a pivotal role, while in Mediterranean countries access to the house is mostly given by the family. The economic crisis and the lack of investment in housing policies have created critical conditions of living for the weaker social classes, including the one composed by single adults with or without children: 30% of families in Spain, Italy and Germany is put in a difficult situation by the excessive amount of money they have to allocate to housing. It is clear that the number of families living in overcrowding situations or in houses with a lack of basic facilities is increasing year after year: 15.7% of Europeans declare to be living in a house

Alquati, F. and Marchesotti, C. (2010). RUSE: Residential Urban Social Equipment. MArch. Politecnico di Milano.

lacing in facilities, particularly in Portugal, Cyprus, Latvia, Slovenia, Hungary and Italy; while 17.1% of people, especially in Hungary, Romania, Poland, Latvia, Greece and Italy are living in an overcrowding situation. The highest rate is in Poland, where 60% of families is living in this condition (Pittini, Ghekière, Dijol, Kiss, 2015).

This new century has not only witnessed demographic and economic changes, but also a **new dynamic in the labour market**: technology and the Internet have affected employment so deeply that it can be argued that we are experiencing a fourth industrial revolution. Smartphones, together with the ease of access to the Internet, allow people to be connected to their workplace 24/7 and give them the possibility to learn ever new skills through resources on the web. This constant connection created new jobs, contractual forms and changed the traditional working hours, bringing about a situation which can be hard to define but that represents the future of the workplace. The report “The Future of Work: Jobs and skills in 2030” (2014) shows what are the consequences of the relationship between technology and work: first of all, a cooperation in the same place of people coming from different backgrounds in terms of sex, age and ethnicity; a desire of a harmonic balance between work and personal life; an increase in technology in all aspects in the workplace, together with a digitalization of the production and an increase in long-distance work. In the future, jobs will be characterized by a strong adaptability and flexibility in terms of space of work and type of job. Within the same workplace four generation of people may converge and the interaction between them may not be guided by a hierarchical structure but by teams and projects. These new working models have consequences on the workers themselves: thanks to social networks it will be easier to get in touch with them and probably it will be easier to get a job than in the past, but at the same time there will be some unfavourable changes in work contracts and hiring: people will be hired on shorter contracts or by project, and the depreciation of their skills will reflect in a decrease of their salary. These conditions will create weaker social classes, made up by new young workers who will still be depending on their families, single adults and families with a lower overall income if not on minimum wage.

Pittini, A., Ghekière, L., Dijol, J. and Kiss, I. (2015). The state of Housing in EU 2015. 1st ed. Brussels: Housing Europe, the European Federation for Public, Cooperative and Social housing, pp.14-27.

Oitcenterfor.org. (2019). The future of work : jobs and skills in 2030. [online] Available at: https://www.oitcenterfor.org/sites/default/files/file_publicacion/thefutureofwork.pdf [Accessed 22 Feb. 2019].

These new dynamics, together with the effect of the economic crisis of 2008, are not improving the **welfare of European families**. First of all, the rate of unemployment is still high: in 2007 the percentage of unemployment was 7.2% in EU-28 and 7.5% in the Eurozone, rising today to 7.6% in EU-28 and 9.1% in Eurozone. It must be noted that during this decade the percentage increased until 2013 (the levels were respectively 10.9% and 12%) and

then slightly decreased. The most worrying situation is to be found in Greece, Spain and Italy, with **unemployment** percentages amounting respectively to 19.5%, 15.1% and 10.4% (Ec.europa.eu, 2019). Second of all, the youth unemployment rate is extremely high. In September 2018, the youth unemployment rate was 14.9% in the EU-28 and 16.8 % in the Eurozone, compared to respectively 15.8% and 15.6% in 2007. In September 2018, the lowest rates were observed in Czech Republic and Germany (both 6.3%) as well as in the Netherlands (7.5%), while in 2007 it was register in Iceland (7.1%), Norway (7,3%) and Denmark (7.5%). The highest rates recorded in 2018 were in Greece (37.9% in July), Spain (34.3%) and Italy (31.6%). These countries with the exception of Greece (back then at 22.7%), had the highest records in 2007 as well, right above Croatia (25.4%), Poland (21.6%) and Portugal (21.4%) (Ec.europa.eu, 2019). Taking Italy as an example, the Italian generation in the 18-34 age bracket has difficulties both in finding a job and completing their studies: Italy is reported to be one of the country in Europe with the lowest percentage of university graduates: 18.7% compared to the average 31.4% in Europe; the percentage of people inside the country who left school before reaching a secondary level of instruction is also high, of which 22% of men and 24.7% of women were unemployed; while 39.8% of women and 33% of men were inactive (Alquati, Marchesotti, 2010). Thirdly, the **work contracts are changing**: alongside the open-ended contracts, there has been an increase of short-term or temporary contracts. Particularly hit by these unfavourable conditions are once again the youngest: once they finish school, it may take years for them to find a long-term contract that will guarantee some stability work-wise and financially. Without stability, in fact, it is almost impossible to start an independent life. Helped by families, young adults are generally forced by their unstable situation to rent a house or a room. In the Mediterranean countries this is even more true, and family's contributions are fundamental: for instance, in Italy parents will help their sons to buy a house, and this is mainly due to fact that in the Italian culture the first house is the one where a new family will start. Italian young adults are also the ones who are leaving home later compared to their European peers: 42.8% of those between 25 and 34 years old live with their parents, 22% live in rented apartment and the 35.2% owned a house. Those who are leaving earlier than the average are generally students or workers who have had to move because of their job or studies. Even if these people are looking for a single room, the high demand of rooms or small apartments in a university area or a powerhouse like Milan creates a **speculative market with higher prices than the actual standards**. In cities like Milan or Rome renting a room in a university area can cost even more than 500 euro per month (Alquati, Marchesotti, 2010).

Ec.europa.eu. (2019). Unemployment statistics - Statistics Explained. [online] Available at: https://ec.europa.eu/EuroStat/statistics-explained/index.php?title=Unemployment_statistics#Recent_developments [Accessed 12 Jan. 2019].

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However, the support of the family is sometimes not enough to start a new independent life, or it may well not be available. The increase of divorces and single adults with children, together with the unstable economic and work situation, creates situations at the limit of the poverty threshold, with an elevate **risk of objective poverty**. This new social profile is characterized by people with low income who cannot afford an acceptable standard of living anymore and have to sacrifice and reduce their standards of some fundamental services in life, one of which is the house. What they are forced to do is to rely on public and social housing, low quality houses, allowances or mortgages that can help them to have a house that will overburden their income. Houses for this kind of people are unfortunately conceived more as accommodation than homes, as temporary solutions with often low standard and inadequate conditions. In addition, there are other weak categories: homeless individuals, people who live rough without proper dwelling (this includes a high number of nomads, since only a small percentage of them lives in acceptable conditions), homeless and poor migrants who can nonetheless be integrated into society and the migrants from the latest migrant influx who temporary live in camps or temporary dwellings, waiting to continue their journey to other countries (Tosi 2008).

Taking the **Italian situation** as an example, we can easily understand why families with an unstable economic situation are increasing: "In Italy home ownership represents 67.2% of the total housing stock, private rental accounts for 16.3%, and social rental 5.5%, the majority of which are dwellings owned by local entities and managed by public companies usually referred to as 'ex-IACP'" (Pittini, Ghekière, Dijol, Kiss, 2015, p.62). The rental lease average amounts to about 5.3 euro for m2 per month, which translates to Euro 400 pm for a 75 m2 apartment. For people who have an annual income of Euro 10,000, the effect rent/income depends on the income and the site of families, it is between 24% and 47%, a high percentage considering that 30% is the maximum limit where a family enter in a financial crisis . Data from 2010 shows that around 750,000 apartments in Italy were annually rented and the effect rent/income is increasing every year of the 8%. The average total rent is about 26%, with peaks of 52% for families with an income of Euro 10,000 and 31% for incomes between Euro 10,000 and Euro 20,000. At the same time a high number of evictions, increased by 14.7% between 2008 and 2011, highlights dramatically the difficulties of many Italian families. There is an estimated 2.5 million people who are considered in housing needs, but since 2000 the average production of social housing has not increased, remaining at 6000 dwellings per year which is not enough to satisfy the 650,000 families who have requested

Tosi, A. (2008). Le case dei poveri: ricominciare ad annodare i fili. Milano: Triennale Electa, pp.151-162.

Pittini, A., Ghekière, L., Dijol, J. and Kiss, I. (2015). The state of Housing in EU 2015. 1st ed. Brussels: Housing Europe, the European Federation for Public, Cooperative and Social housing, pp.14-27.

public housing. Statistics published by ISTAT (2018) report that 1.8 million families and 5 million individuals live below the poverty threshold. During the last three years, 33,000 families put a claim forward for a public house in Milan, but 15% of them was not officially eligible since their income resulted higher than the maximum established. In Rome the requests accepted amount to 26,500, while those for a house certificate are 17,000 (27% of the requests came from elderly and disabled and 16% from migrants). There have also been 5,000 evictions and 1,873 executive evictions. The situation is bleak in minor cities as well, with approximately 2.2% of the population in each municipality requesting a public house (Alquati F., Marchesotti C., 2010).

Italy is one of the countries that was hit the most by the difficulties that affected the European welfare state system after the “golden age”: since the nineties there have been many interventions in the welfare system in order to control the sociological and economical changes, and the especially aimed at tackling high public debt and issues with social and political functions. The main interventions concerned the pension system, which was deeply changed from the past and is difficult to access, with little to no differentiation in the pensions paid; the work system was also targeted with unemployment allowances and active policies alongside flexible typologies of contracts were fostered. Notwithstanding, Italy was not able to provide answers to the new social risks and the weaker social classes, from families to young people and the elderly. However, the economic condition of the Italian families and the new typology of families, economically weaker, often does not guarantee legal access to the house in terms of construction and typology of contract. As reported by Poggio (2009), in Italy 1/3 of the salary of a worker or employee is necessary to pay a month of rent, while during the seventies only 1/6 was needed. If previously mortgages could be repaid in 6 year, now it takes at least 14 years.

The economic and socio-demographic transformations of the last decades brought about important changes in the society and in people’s life. The increase of unemployment, the instability and delocalisation of jobs which affect young adults in particular, are all factors that contribute to a longer transition into adulthood for the younger generations. People are getting married later, they are leaving the family house later and creating a family became a problem due to the economic instability, job mobility and business trips required when in employment. Together with the decrease in births, people are living longer, and the oldest brackets of the population are increasing in size compared to the youngest (0-14 years old). Finally, the meaning of family itself changed: the traditional family is no longer the widespread norm: singles, divorced peo-

ple, single parents, single elderly and LAT couples are just but some examples of categories of the new families. The last social phenomena to consider in the XXI century society are the increase of people living just above the poverty threshold, together with the economic and work instability. These, couple with an increase of single individuals forming a family, are deeply afflicting these new categories, and makes it difficult for them to support themselves and their household. The fact that all these changes are deeply affecting the housing condition is remarkable, with people looking for affordable houses and residences suitable for their mutable work and family arrangements. This demand does not seem to find answers in the housing market: both the housing system and policies, such as national social housing programs and national welfare states, are having **problems in providing solutions for the new concepts of “home” and “family”**.

Istat (2018). Rapporto annuale 2018. La situazione del paese. Istat Istituto Nazionale di Statistica

Alquati, F. and Marchesotti, C. (2010). RUSE: Residential Urban Social Equipment. MArch. Politecnico di Milano.

Baldini, M. and Poggio, T. (2013). The Italian housing system and the global financial crisis.

II.

PRACTICES

WHAT ARE THE PRACTICES ABOUT?

The literature proposed show a **re-emerging of shared living** as consequence of the sociological and economical changes of the new century and at the same time, a necessity of new housing policies for the actual living practices. In order to understand deeply the phenomenon and have a wide view of the reality of shared living, I decided to introduce a chapter composed by real people living in un-conventional situation. **Un-conventional situation** means people who lives in condition different from the stereotyped of the traditional family: heterosexual couple composed by a man and a woman with their biological children. The case reported are taken from a research made in Politecnico di Milano from the international class of Thematic Design Studio in 2018; the bachelor students were guided by the professors Massimo Bricocoli, Rodrigo Pemjean Munoz and Gennaro Postiglione; with the assistance of the tutors Martina Bovo, Tommaso Raimondi and Tommaso Vacchi. The studio was called **“Re.Co.De 2018!”**, the final purpose was to convert a traditional Milanese apartment building in two or more shared living apartment; the users were chosen by the un-conventional families mapped during the studio, with the aim of studying the relationship between these people and their household. The users were one for each student, they had to be people coming from their affective network, so that they will be interviewed and it will be possible visit and make a survey of the house. This work had the aim of track the daily-life of the household chosen, underlining the relationship between the life of the residents and their activities, the problems, the positive aspects and the behaviour due to the organization of the space. It was then necessary translate this information into diagrams that shows the use of the space at different times during the day, the levels of privacy and overcrowding and specific characteristics that explain the un-comfortable living for each apartment (if present). The students were also in charge of taking different pictures and producing a plan and a section which represent the real space in which these people were living: it means that all the furniture and relevant objects inside the house were inserted in the drawings in order to understand how really the residents were interacting their life with the space.

The mapping produced a real panoramic of what is the living situation today and how different the housing realities are, confirmed what was emerging in the literature: there are people from **different generations and not blood-related who lives together**. Important is also to notice that since the class was made by international students, the mapping of the case studies came from **all over the world**, showing that the co-habitation as intergenerational and blood-related is a worldwide phenomenon. The cases show at the same time how people must adapt their social, work and economical situation to their living condition or in some case, adapt the social or working condition to their household. There are elderly living alone in space too big or too small and

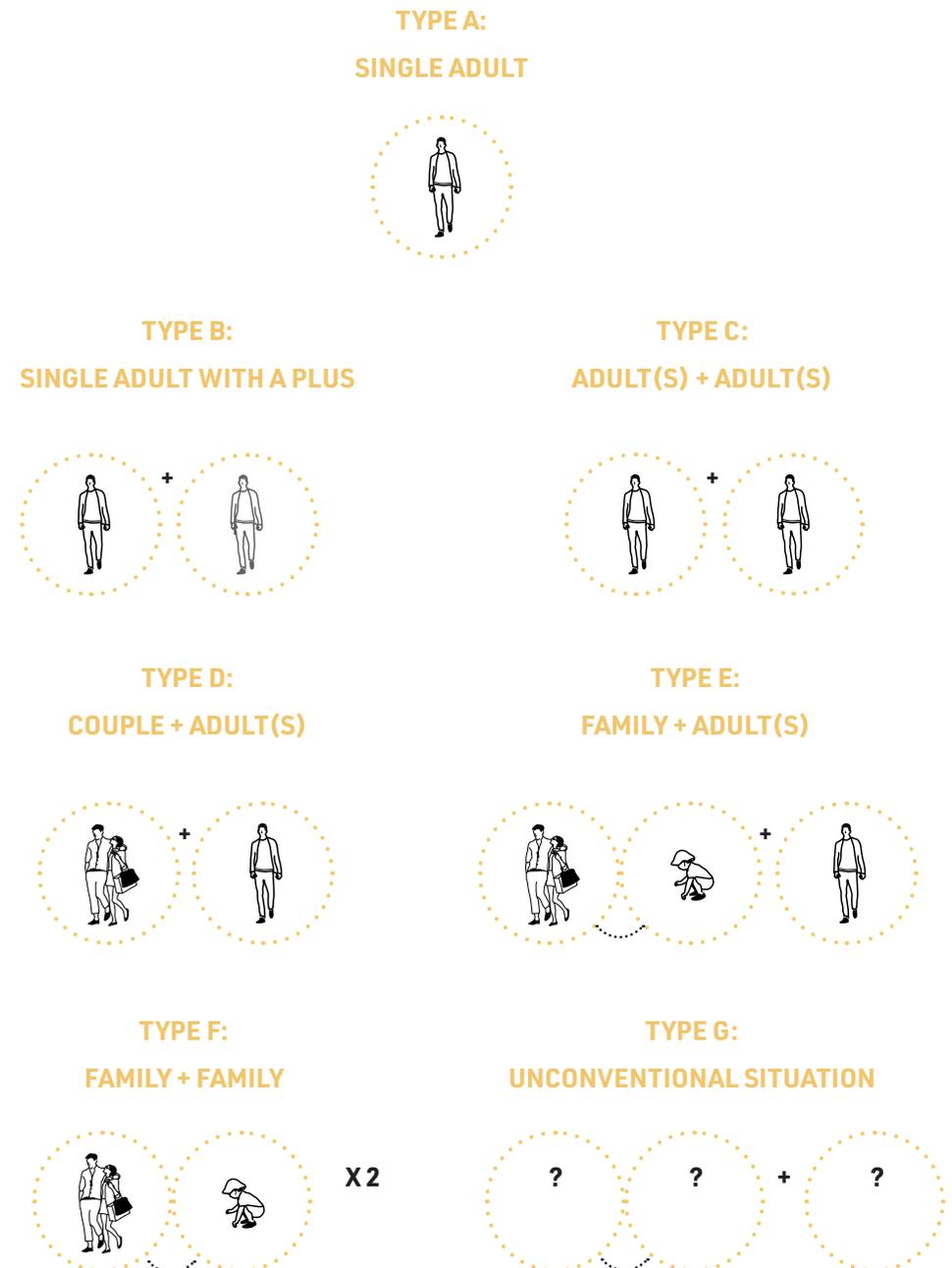
Postiglione, G., Sabatinelli, S. and Bricocoli, M. (2018). RE.CO.DE: REDESIGNING CONTEMPORARY DWELLING- INSIDE THE CITY. AUIC School and Department of Architecture and Urban Studies - Politecnico di Milano.

without the possibility of being adaptable, elderly hosting a caregiver that can help them, people renting vacant rooms to students, workers or tourists, families who owned two household since the parents are living in different cities; but also people whose workplace coincide with their household or different families who lives in the same place.

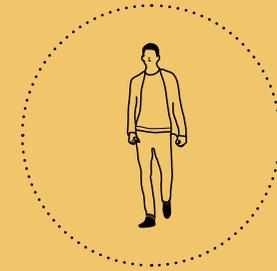
There are about **100 different case studies** of different living, for this reason they were classified in different groups due to the similarity of their conditions. The housing typologies defined are the following:

- **Single adult:** composed by people living alone
- **Single adult Plus:** composed by two single adult person who lives together as a temporary or long-term solution and often blood-related or connected by familiar relationship.
- **Adult(s) and Adult(s):** made by two single adult person who decided to live together as a permanent decision, not blood-related and with an independent life.
- **Couple + Adult(s):** composed by a couple without children who decided to host another person (family related or not) as a long-term solution or temporary.
- **Family + Adult(s):** made by a family (couple or single parent with children) hosting an adult. This extra person can be blood-related with one of the family member, he/she can stay permanently or temporary.
- **Family + Family:** composed by different families living in the same household, each family can have or not children.
- **Family in unconventional housing conditions:** the category is made by people who lives together and they can not be classified in any of the previous category, since they are a mix of two or more of them. The category can include really different situation one to another.

The mapping wants also to confirm how these houses, designed years ago for traditional families, are not suitable for them anymore. The social and familiar changes require new kind of apartments, characterized by a layout that can be adaptable for any changes in life due to work, studies, familiar and economic reasons. Starting from the following questions “What profiles of inhabitants of the cities need to live in more than one home and/or to be temporarily accommodated? What are their conditions and needs? **How to provide them with appropriate and affordable housing solutions?** How to transform existing structures in order to respond to unmet need?” the students of “Re. Co.De 2018” gave an answer at the end of the Thematic Studio proposing a project of new homes for some of the users selected.



TYPE A: SINGLE ADULT



The category includes people who for personal reason or external forces are living alone; they can be students, workers or retired people. Their houses are not suitable for themselves for many reasons: students for saving money are force to live in apartments that are too small, with a bad layout designed that create an uncomfortable environment. Workers may have apartments that are too small for host their sons (if they have them) or they may have apartments that are not suitable in terms of their habits. The retired people on the contrary, are obligate to live in their life house which is generally too big for they needs, since their sons have left and the other partner may be pass away; the house also may be object of an intense modification in order to make it comfortable and safe for an elderly to live.

CONNIE

Student,
21 years old



Urbino, IT

Costanza, better known as Connie, is a 21 years old girl. She is from Milan, but at the end of the high school she decided to move in Urbino (Marche, Italy) to study History of Art. Connie is a positive person, very creative, in good vibes every day of the year. She enjoys cooking and eating, especially bakery products, she has many books about it and she likes to experiment when she has some free time. She lives alone, but sometimes she host some friends during the week, even if the space is really small. She has a pet, a rabbit called Lea, which moves free inside the apartment. She stays in Urbino for the whole semester and during holidays she came back to Milan.



1 room apartment
17 m²



Bedroom
14 m²



Bathroom
2,5 m²

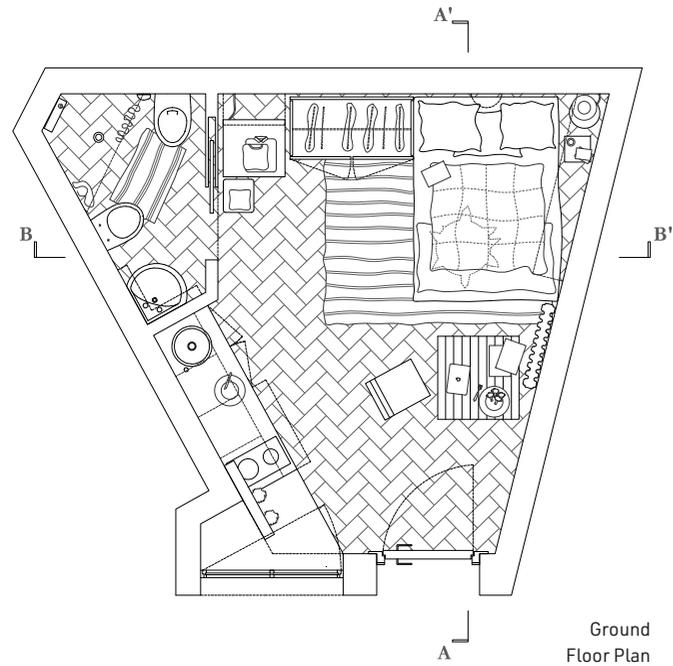


Living room
14 m²

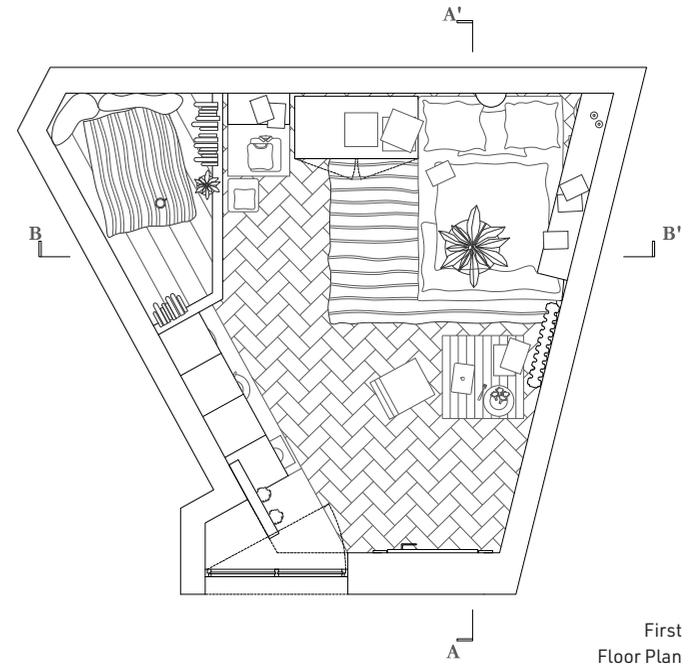


Kitchen
14 m²



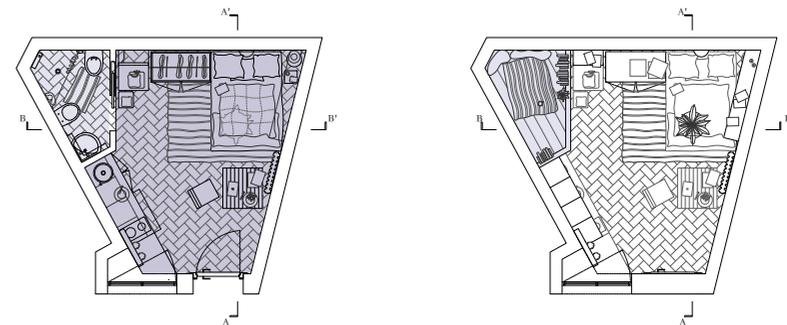


Ground Floor Plan

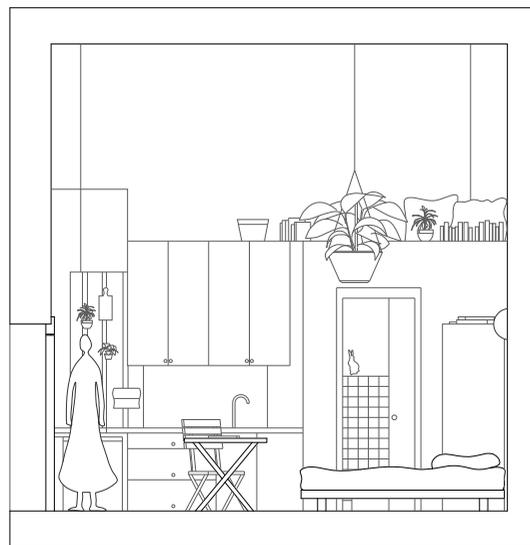


First Floor Plan

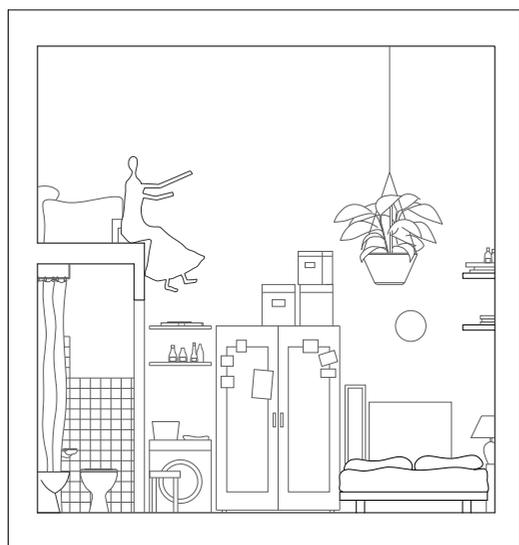
Privacy levels



- Less privacy
- More privacy

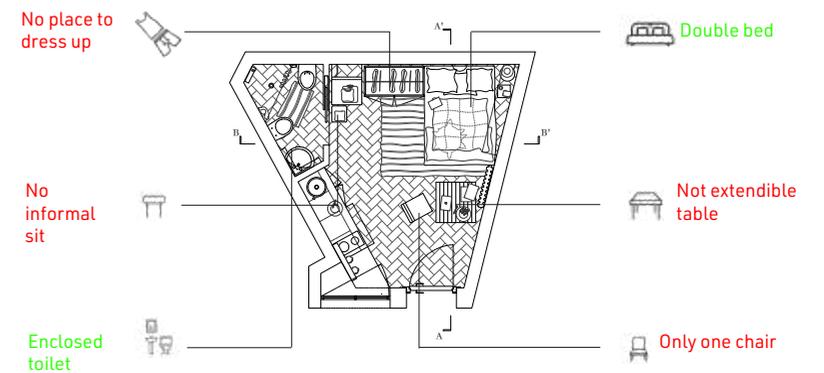


Section AA'

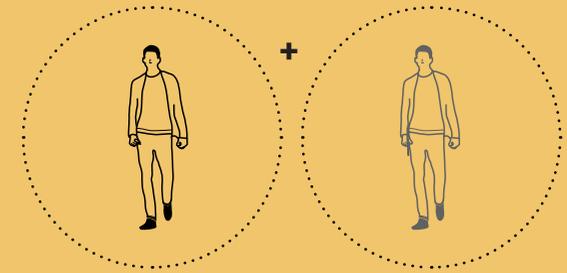


Section BB'

An uncomfortable space



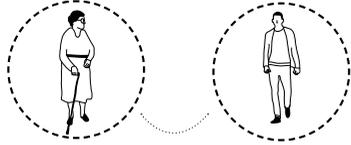
TYPE B: SINGLE ADULT WITH A PLUS



This category consists in single adult people living together. They may be blood related, siblings, mother and adult son or grandmother and nephew; but they can also be strangers or being one of the household for a LAT couples without children. These people are sharing an apartment and they may find some problems in the respect of their space and their privacy. They have different ages and habits and this have to coincide with the space that the house offers. Some of this people, are forced to have guest, like the elderly: obligate by the family or by their physical condition, they need the assistant of a caregiver who lives with them. Other people are also single parents with adult children that are permanently living together or just some days por week. It can also include conditions like a grandmother living with her nephew: reasons may be different but the choice of living with a member of the family help the members to support and take company of each other.

CLARA & NICHOLAS

Housewife, Worker
68 years old, 24 years old



Arezzo, IT

Nicholas is a head machine in a coffee factory, during his few free times he likes to go to the gym or spend time with his friends. Clara is a modern grand-mother. she is energetic, active and open-minded. She likes travelling and doing many homes duties and activities related. Her and Nicholas have a strong relationship and this help them to live together. Nicholas spend the most of his time in his bedroom, while Clara in her bedroom and in the living room, the only common space in the house. Sometimes is hard for Nicholas to invite friends at home for her grandma presence, she also has to adapt her activities in consequences to Nicholas. They complain that the house is too small for two people with different needs.



2 rooms apartment

73 m²



Bedroom
14 m²



Bathroom
5 m²



Terrace
7 m²

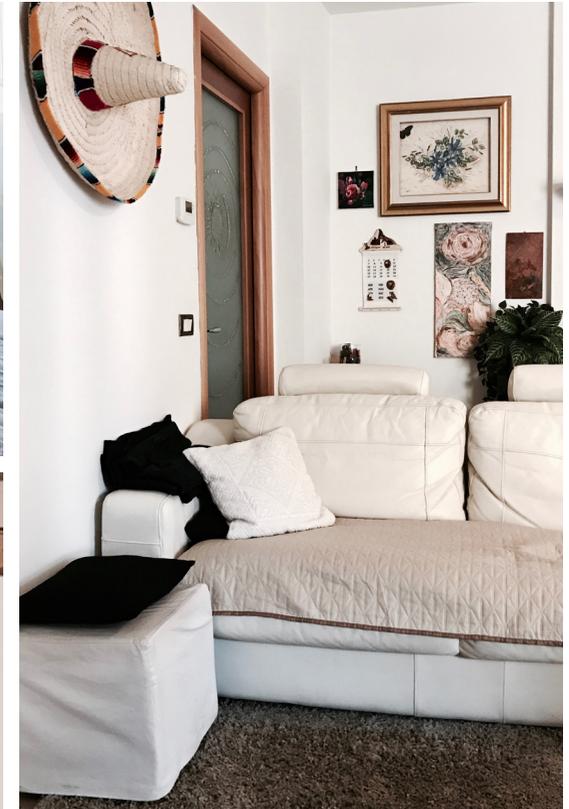


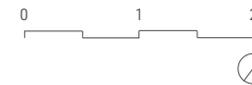
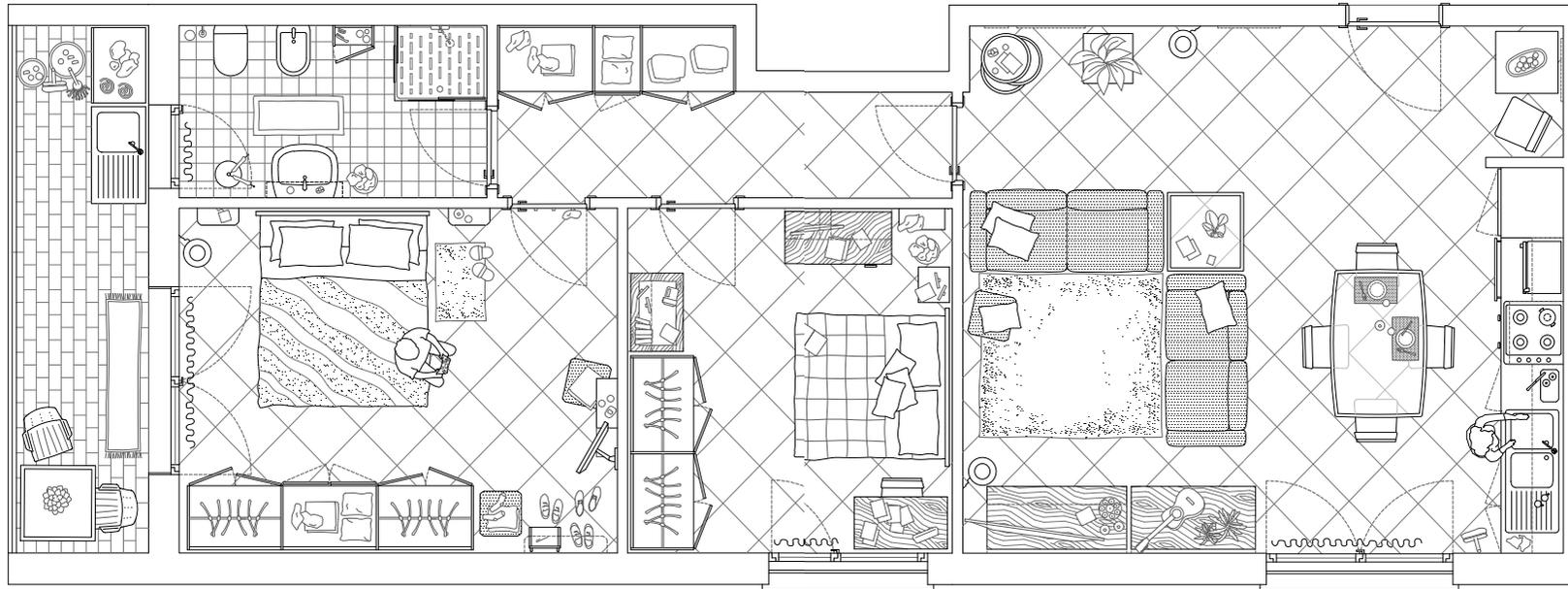
Living room
17 m²



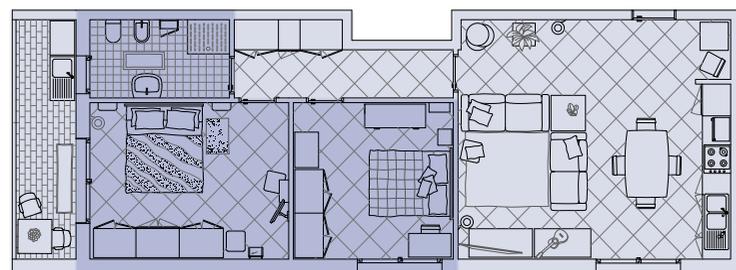
Kitchen
12 m²

Bedroom
11 m²



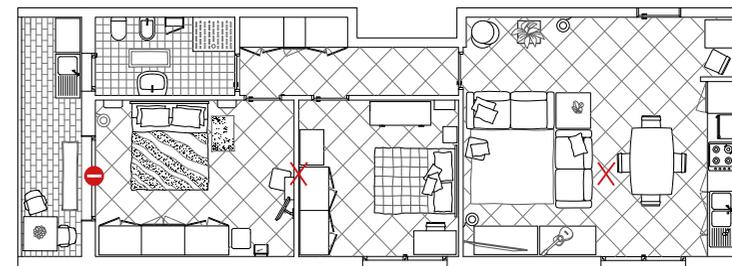


Privacy levels



more
less

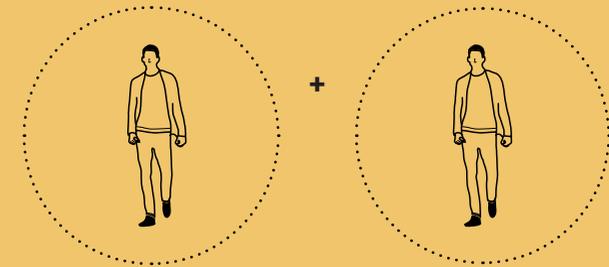
An uncomfortable space



Reduced accessibility
Close spaces

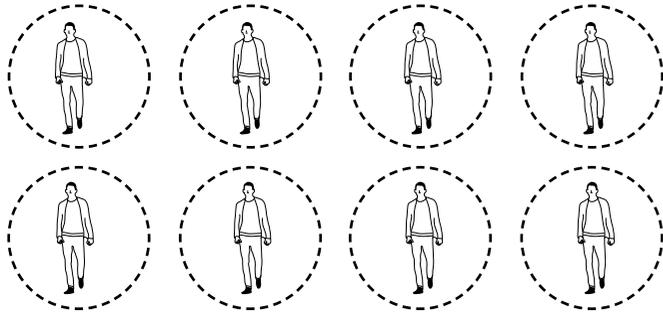
Too close spaces: reduced accessibility and no total freedom on movement → Lack of spaces for second need, different from the basic and primary one

TYPE C: ADULT(S) + ADULT(S)



The category contains single independent adults that decide to live together. In most of the case they are not blood - related, but they can be blood-related as well, like brothers and sister or parent and adult son. The difference with the category Adults with a plus is that in this case the members of the households have an independent life one to another; moreover, they are living together as a common and definitive decision, while in the other case members may not have an independent life from one another and they may be forced to live together. In the typology of adults + adults the presence of an uncomfortable space and the lack of privacy are affecting deeply the living conditions of the house in most of the case.

RELIGIOUS COMMUNITY



Milan, IT

The eight men decide to live together for their religious duties: they are part of the order of the Memores Domini, a catholic order of consecrated laymen. They are consecrated because they make a profession of faith. They are layman because they can live their vocation through their job and a normal life. In the house they have moments of religious activities that are done in a common room used as a chapter but also dinner and lunch space. Three by three they share the bathrooms, but each of them has his own private space that is the bedroom. The residents are: Giovanni (54 years old) an architect, Paolo (48) a smith, Paolo (68) math teacher in university, Nicola (42) professor of technics in secondary school, Alessandro (51) nuclear doctor, Andrea (48) economist, Massimiliano (38) marketing, Riccardo (44) a construction engineer



8 rooms apartment

200 m²



Bedrooms
109 m²



Bathrooms:
18 m²



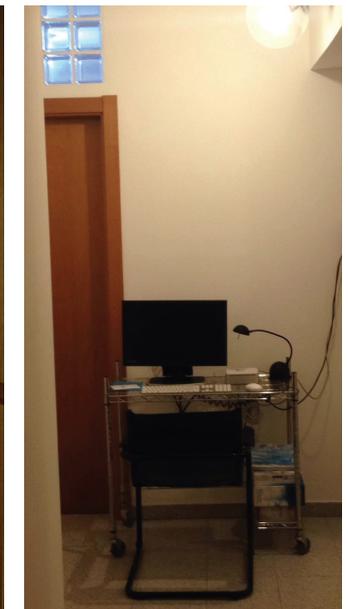
Living room
18 m²

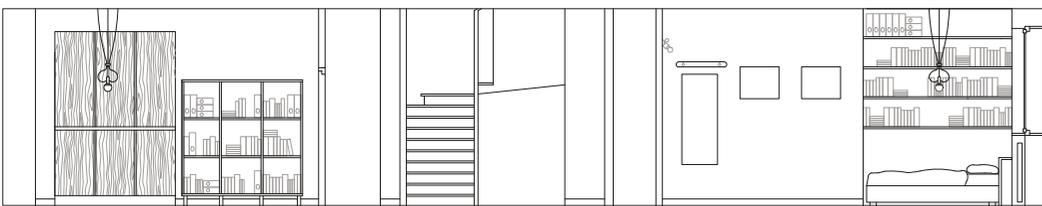
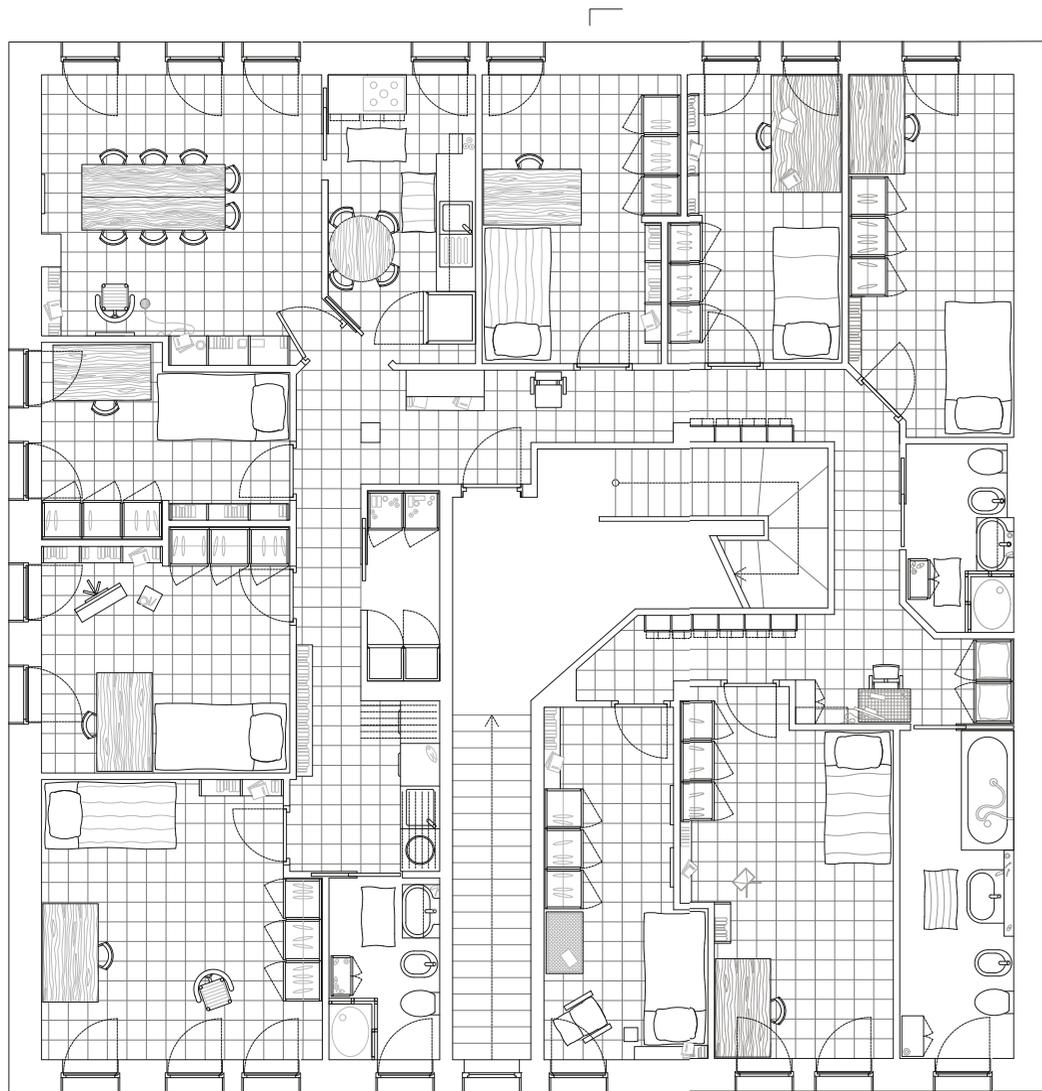


Kitchen
10 m²

Giovanni 18 m², Paolo 10 m²
Paolo 14 m², Nicola 13 m²
Alessandro 12 m²
Andrea 13 m², Riccardo 12 m²
Massimiliano 17 m²

I Bt: 5 m²
II Bt: 8 m²
I Bt: 5 m²

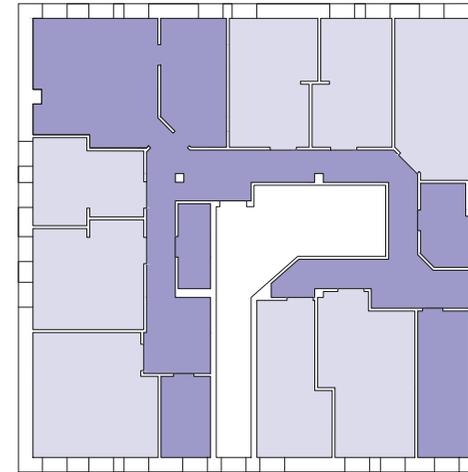




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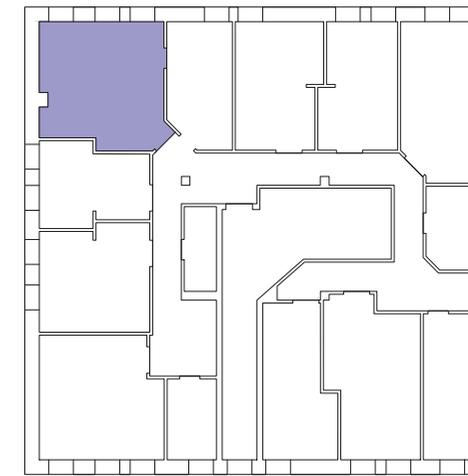


Privacy levels



Lower privacy
Higher privacy

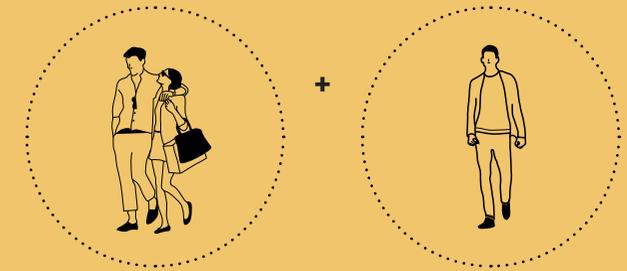
Community space



Space dedicated to the life of the community (18 mq)

Other spaces:
Bedrooms: 109 mq
Services: 28 mq
Distribution: 45 mq

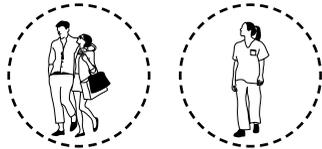
**TYPE D:
COUPLE + ADULT(S)**



The category contains a couple without children that host another person in their households, in most of the case the adoption of an extra person in the household is a temporary solution. We may find grandparents who host their little nephew or a caregiver, but also couples who host a friend of a family member. The privacy is generally keep, except in case of a child presence which change the layout inside the house. In the other cases the presence of an adult can be solved given them a personal room. The solution is generally temporary, when the adult will be able to find an accommodation for himself or find a convenient solution of living the co habitation can be over.

GIUSEPPE, DINA & CRISTINA

Pensionier, pensonier, pensonier
90 years old, 85 years old, 50 years old

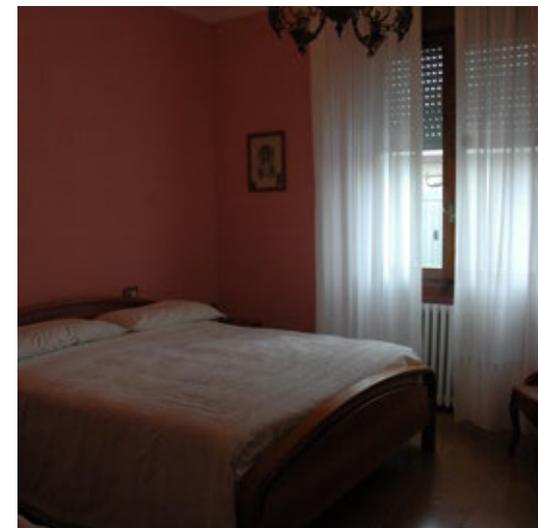
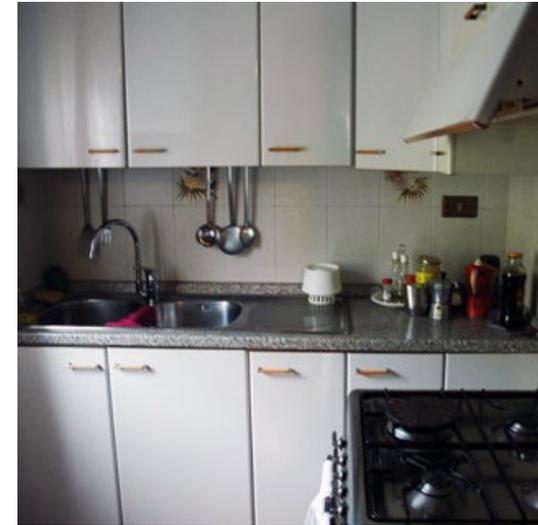
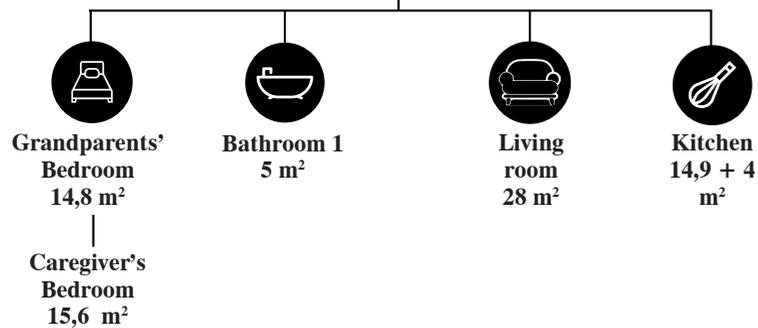


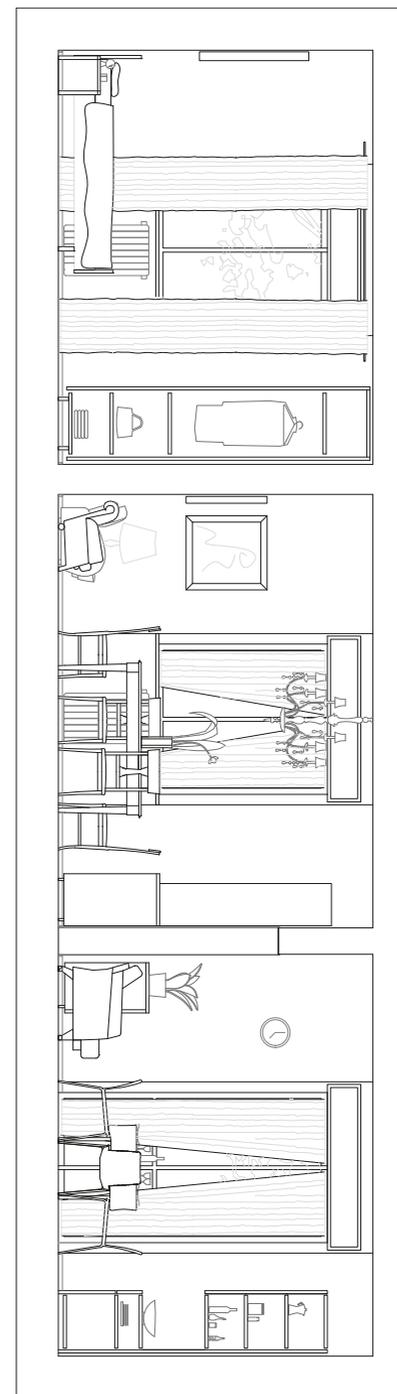
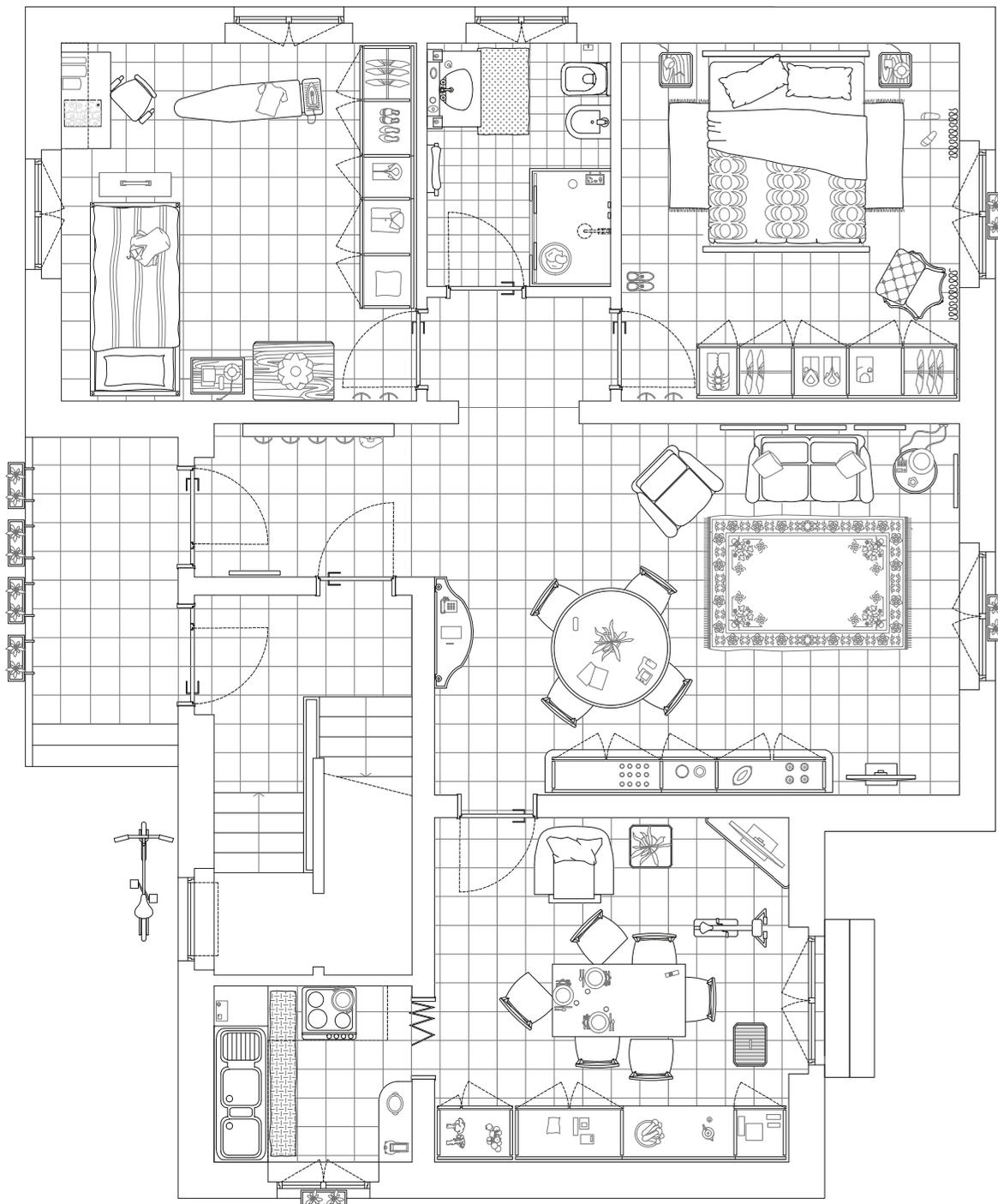
Treviglio (BG), IT

Dina and Giuseppe are husband and wife, they have three sons. They had a really active life, but now that they got old, they like to spend more time in the house: Dina spends a lot of time cooking or both of them like to receive friends and family in the living room. Because of their age and an accident of Giuseppe, they decide to hire a caregiver, who will be change every six months. Now they are hosting Cristina, a polish woman that worked in a bank in Poland. She speaks good Italian , she works all days of the week except during the weekend, where she spends some time with other polish friends. She helps them with house manners, she takes company and she helps Giuseppe to walk and does his exercises. They have a harmony life all together, the only problematic of the house that they found is that there are not furniture for disable that can help the couple to walk in house safely.

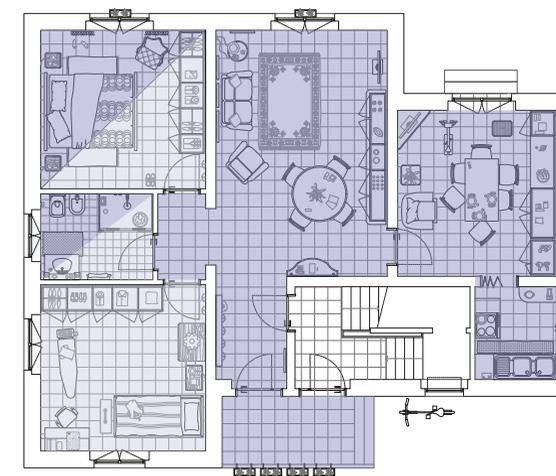


5 rooms apartment
87,4 m²



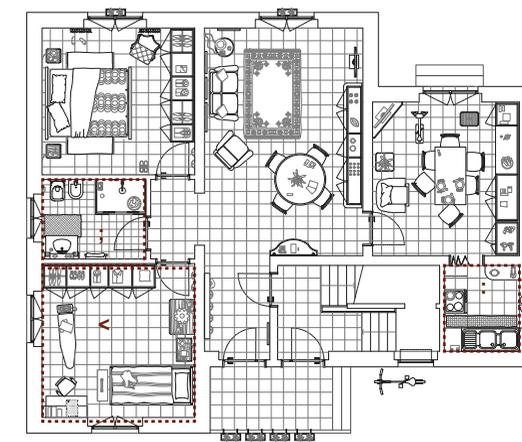


Privacy levels



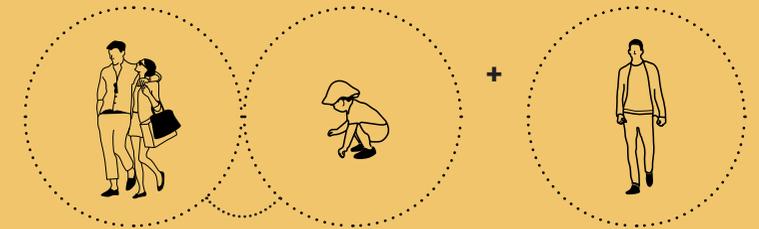
Less privacy More privacy

An uncomfortable space



1. Kitchen: the contemporary use by two people or more is complicated; furthermore when my grandfather with his walker goes to kitchen, he has difficult to move in the space
2. Bathroom: the presence of only a bathroom could generate a conflicts
3. Caregiver's bedroom: during her free time she cannot host her friends, because she has not a adapte space, To solve this problem you could put a sofa in his room and have a folding bed.

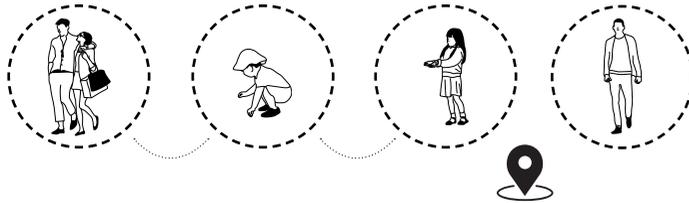
TYPE E: FAMILY + ADULT(S)



This typology is composed by families who are hosting single adults. In this case we can have multiple and different situations: a family who is hosting young workers, students or elderly. The adults may be blood related or not, in this case the person can be a friend or a stranger who is living in the house for a specific period and for a specific reason. He may teach to children english, he may work in the family as baby sitter or he can be someone that pay a specific rent, hosted for increase the monthly income of the family. The adult can be also a student, in exchange with some programme related to the biological children of the family, or a student that requires a room to stay. The family who are hosting these people can be composed by a married (or not) couple with children or a single parent with children.

DAVID, CRISTINA, MARIA, NOE' & FABIA'N

Firefighter, Journalist, 2 children, teacher
43, 40, 9, 5, 34 years old

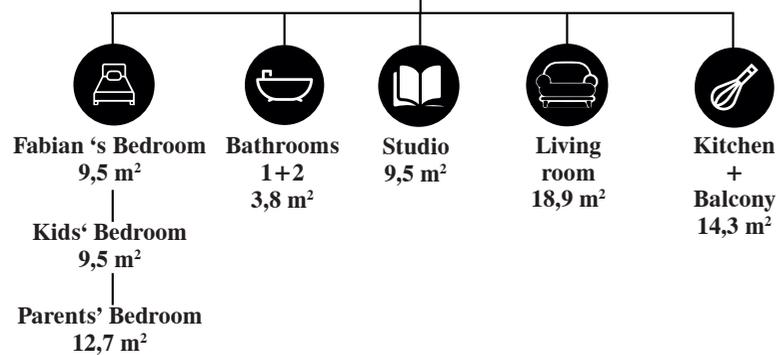


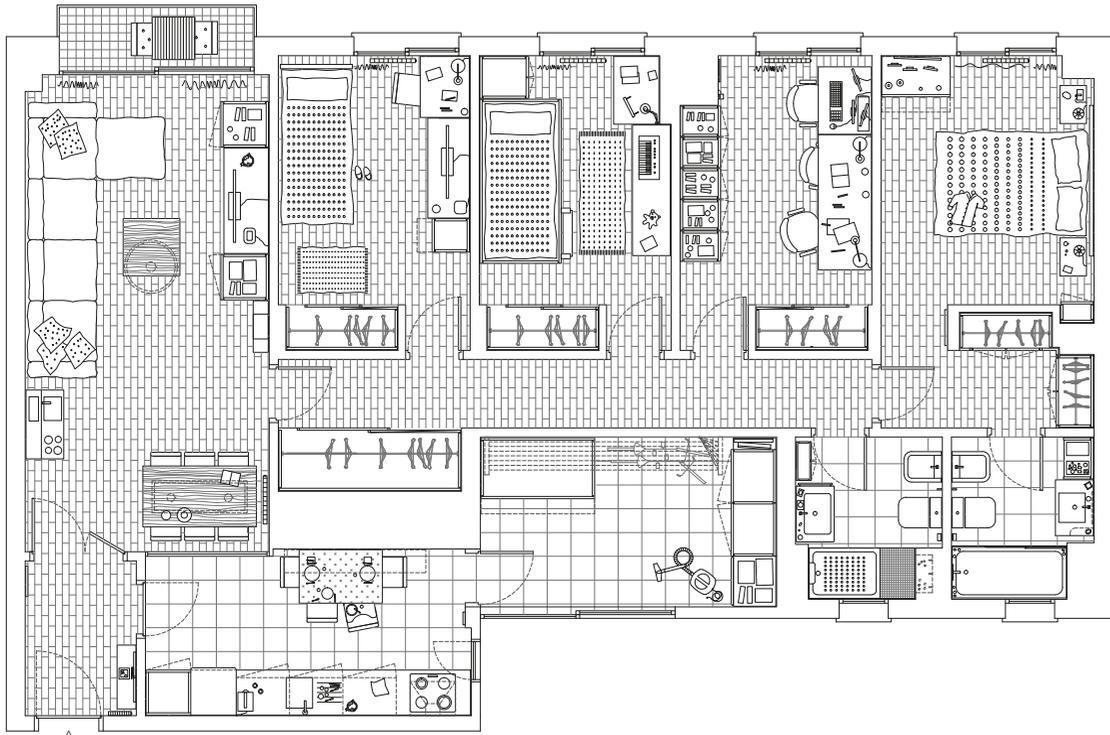
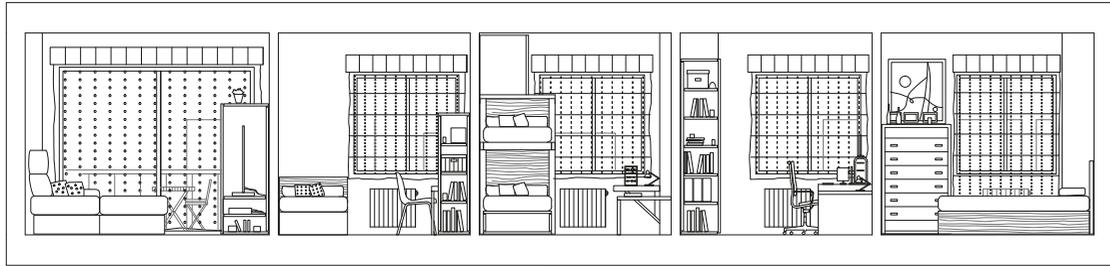
Madrid, Spain

The couple David and Cristina has two children, Maria and Noè. David works as firefighters and he has 24 hours on-call service; Cristina is a journalist in an important Spanish radio. When they are not working, they spend their free time with the family or doing sports. The children are both going to school and they are practising sports as well; Fabiàn a foreign au-pair from Mexico, is taking care of them and he is also teaching them English. He lived for almost all his life in the United States until he decided to quit his job for taking a gap year. In this gap year he is living with David and Cristina's family and during his free time he travels around Spain and Europe. Each of them has their own bedroom and the children are sharing one; there is also a studio that is using now by the children for playing. The living room is the most used space: for English lessons, for let the children play together and as gathering for the family.

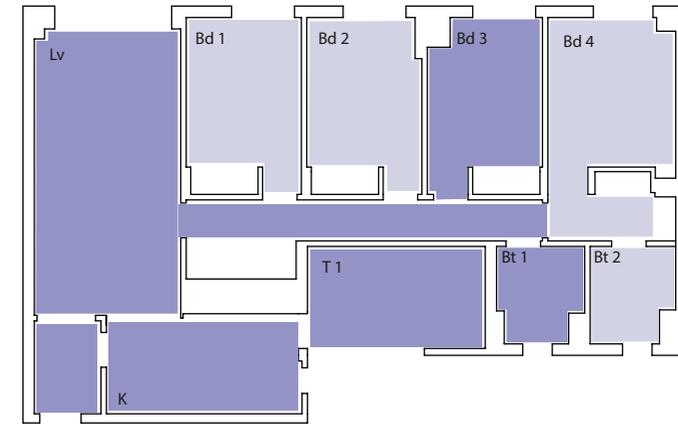


4 rooms apartment
93,9 m²



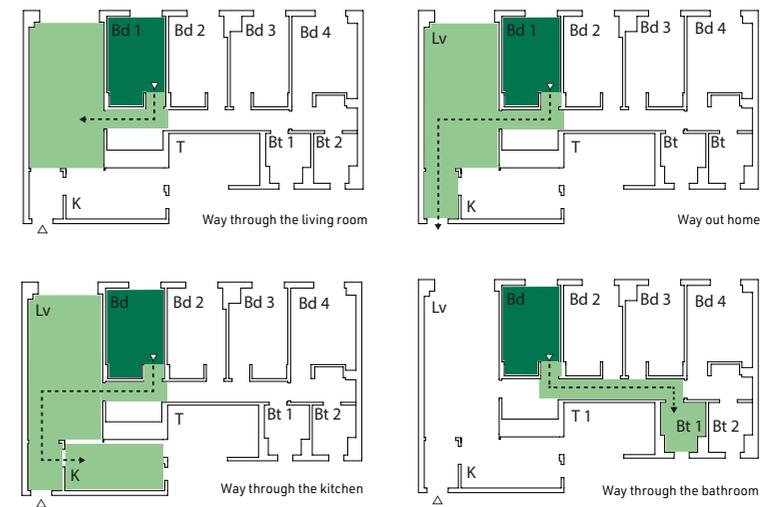


Privacy levels



- Less Private
- More Private

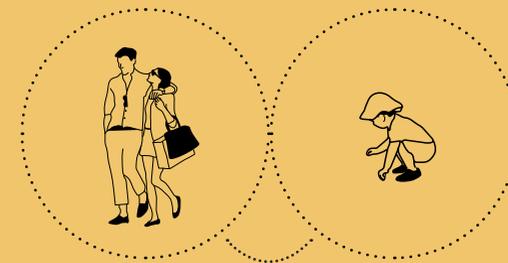
Usage of the space



Au-pair's use of the house

- Private space
- Shared space
- Way

TYPE F: FAMILY + FAMILY

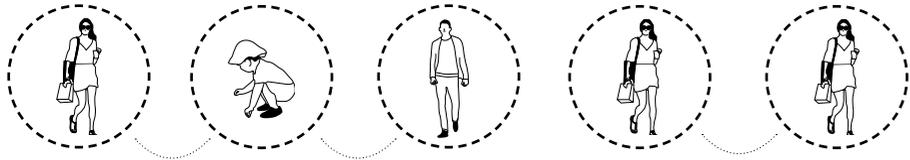


X 2

The category includes households composed by different families living in the same place. In the most of the case all the families have children, even if there are some exception with families without children. The co-habitation is more complicated: in order to create a nice living environment there is the necessity of a bigger space that can include bedrooms for everyone and a common space for each family. Unfortunately, sometimes this is not respecting the reality, in case of a Kommunalka building for instance, each family is forced to live in one bedroom and sleep all together despite their age. In other cases, the original nuclear of the family have the economical and space availability of hosting an extra family. This is the category where the cohabitation is used for saving money and have the company of other people.

ELENA, IGOR, VLADIMIR & SLAVA, YULIA

Worker, Student, Unemployed & Worker, Worker
35, 10, 31 & 42, 33 years old



Saint Petersburg, Russia

The two families are living in St. Petersburg in a Kommunalka building. They are sharing one of the four apartment available at the third floor; while with the other people of the building they are sharing the heating system, electricity, water, internet and tv. The apartment has only two bedrooms, each family is sleeping all together in one room. The first family is composed by Elena, her husband Vladimir and their son Igor. Elena is the only one who is working, she is working in an insurance agency, while Vladimir is currently an unemployed. The other family is composed by Slava and Yulia a couple that teach flamenco for work.



2 rooms house

51 m²



Bedroom 1
18 m²

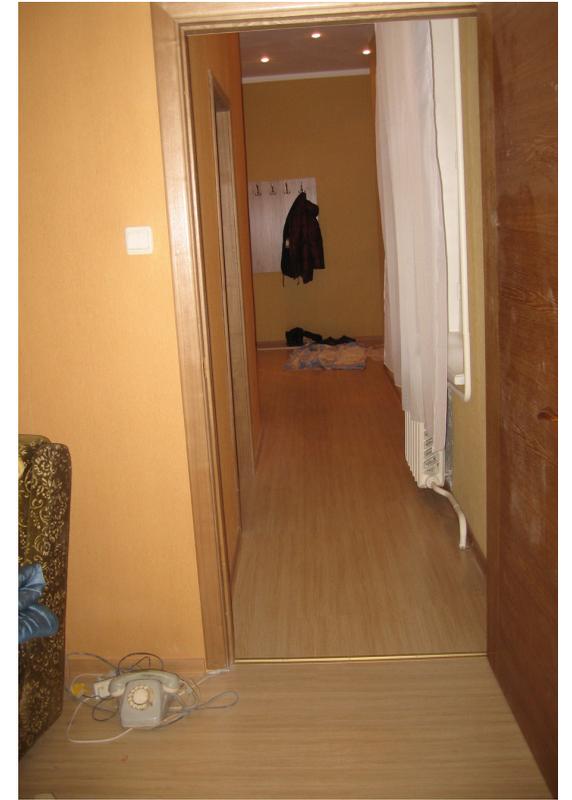


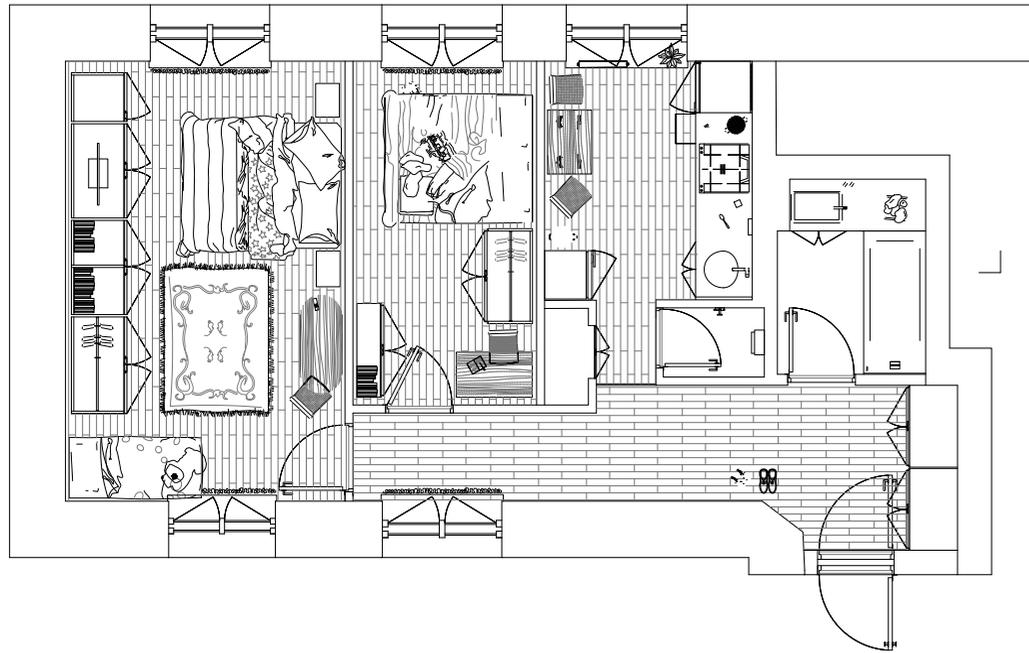
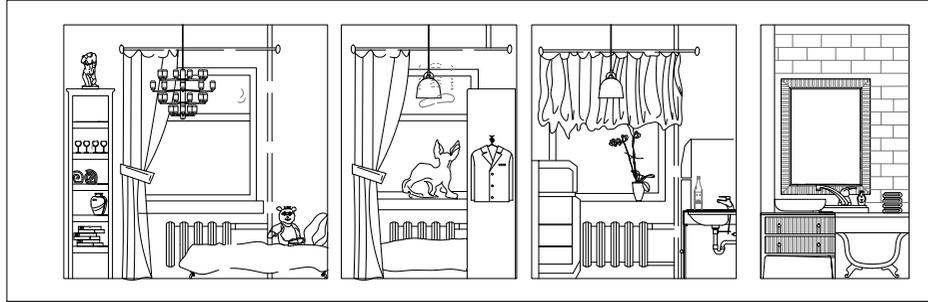
Bathroom
5 m²



Kitchen
8 m²

Bedroom 2
9,5 m²





0 2 4 10



Privacy levels

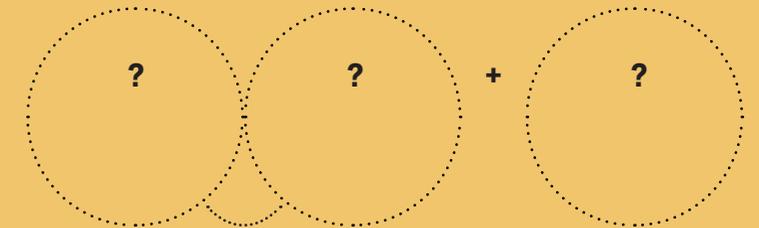


- More private
- Less private

Flows of the residents



TYPE G: UNCONVENTIONAL HOUSING CONDITIONS



The last categories summarize families who can not be classify in a specific group, since they are a mix of the previous ones. The case that we analyse find multiple and variable situation, where is visible a deep change in what a family is in our decade. We have a family with sons that are not at home anymore, except one who is disable; there is a couple composed by worker divorced adult who had children before, there are couple in the same situation that are living all together with or not, the presence of the new children of the new couple. Then we can find families where one member of it lives in another household; cousins and uncles who are living together and then family who adopt foster children. The cohabitation in this case is mainly due to a social issues and new family formation; in these cases is harder to define what a family is, since some members of the case analysed, had already a family before.

ALESSANDRO, ELISA, RICCARDO & MARCO

Worker, worker, Student, Student
40, 36, 7, 3 years old



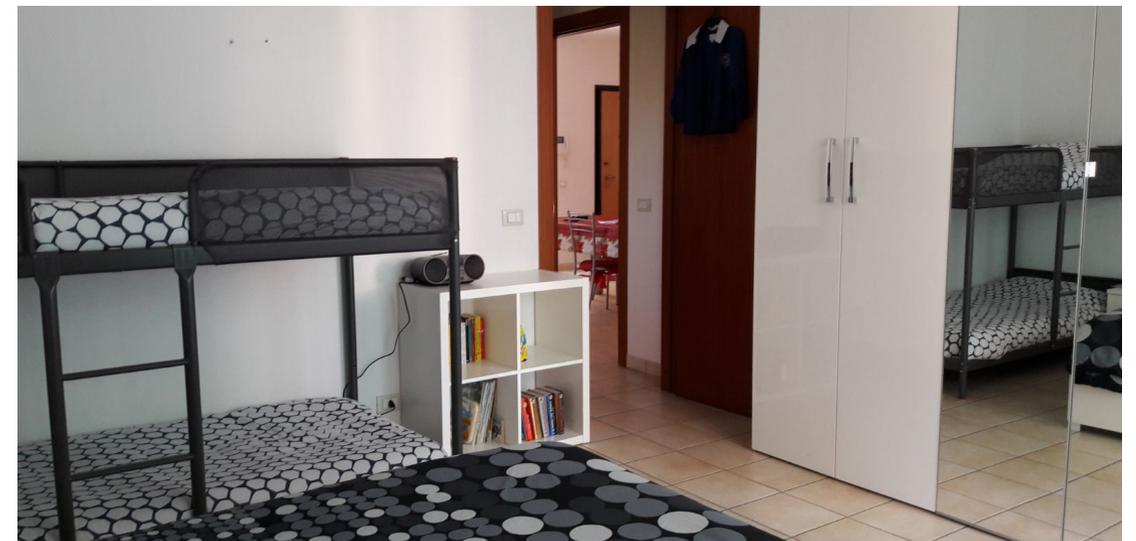
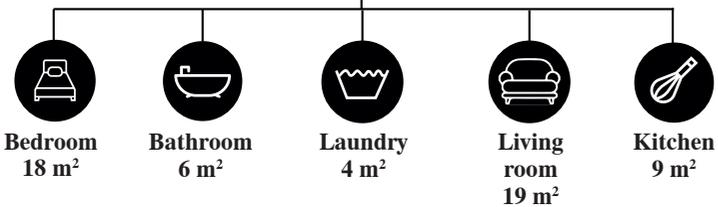
Realmonte - Modica, IT

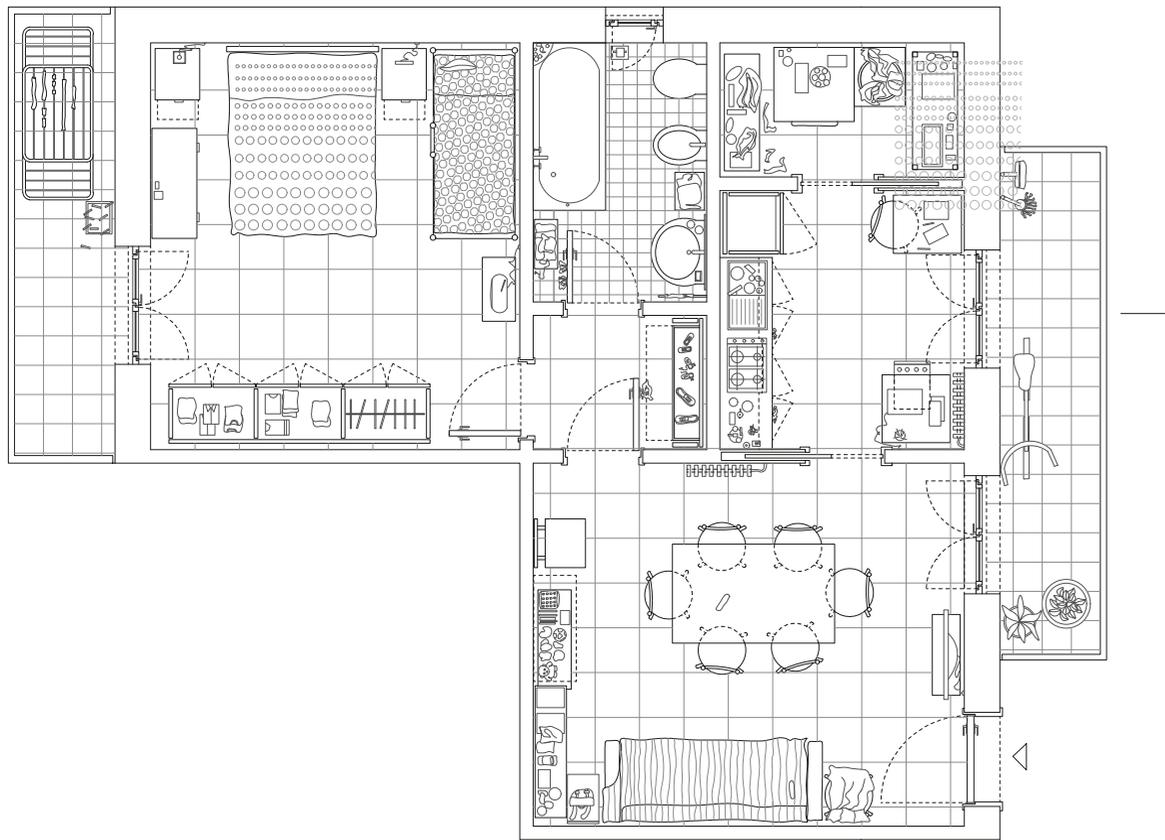
Alessandro is an architect, he has his own office in Realmonte and consequently he lives there. Her wife and their children are living in Modica, since Elisa is working there as psychologist in a primary school. They have two children, Riccardo and Marco, who are studying in the same school where the mother works. It is hard for her to take care of the children by herself, even if as soon as he can, her husband came to visit the family in Modica during the weekend.



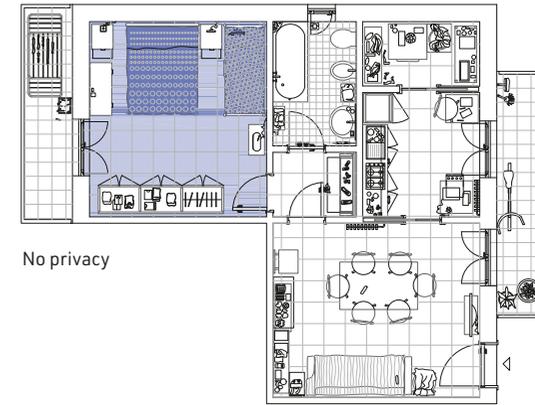
2 rooms apartment

60 m²

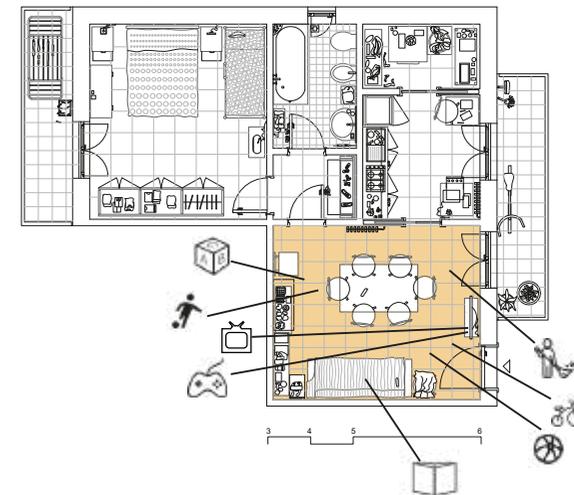




Privacy levels



An uncomfortable situation



ALESSANDRO

Worker
40 years old



Realmonte

Alessandro is living in the old apartment of the family, which is too big for one single person, consequently many rooms are unused. He is leaving the house at 8 and he came back in evening, the apartment is empty during the day. When he is at home he likes spend time watching tv and in the kitchen or he continue to work on his projects in the studio.



5 rooms apartment

161 m²



Master Bedroom
21 m²
|
Children Bedroom
16 m²



Bathroom
8 m²
|
Bathroom
6 m²



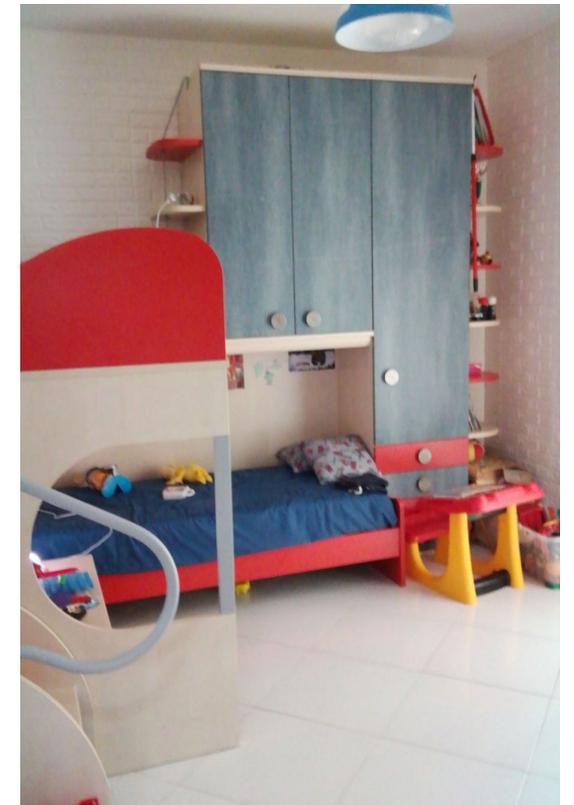
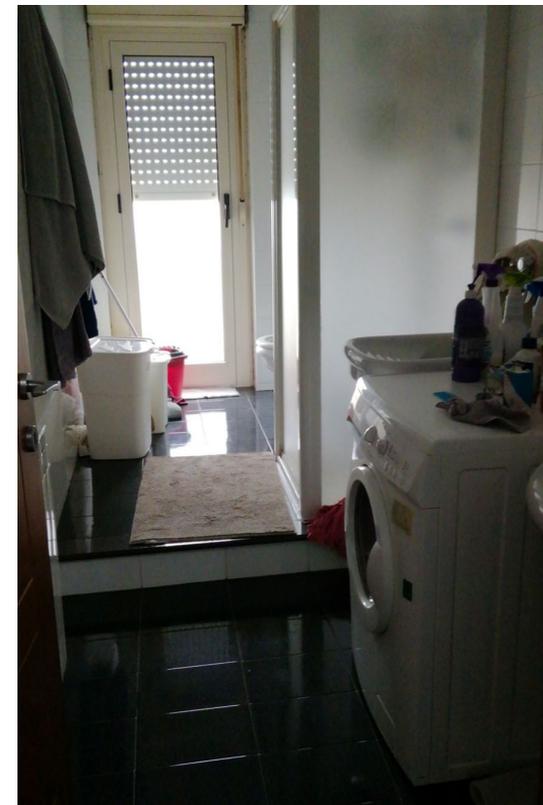
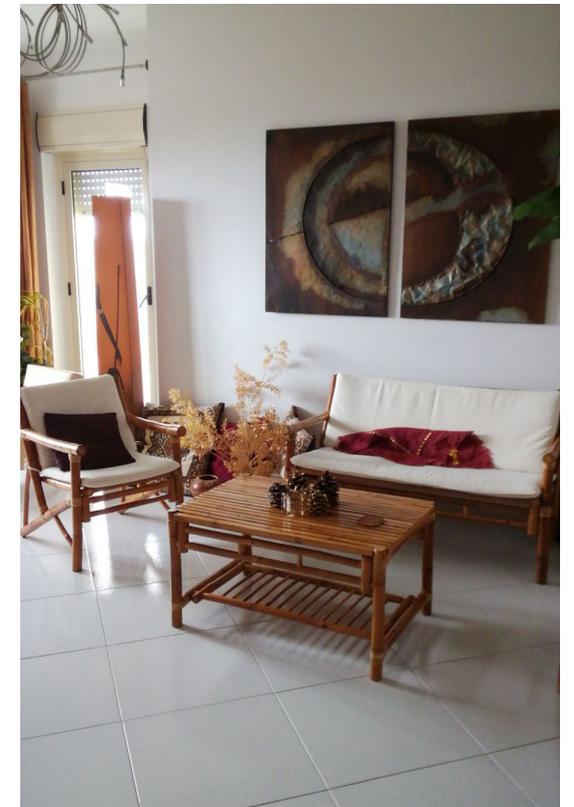
Studio
15 m²

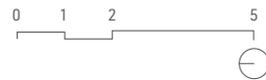
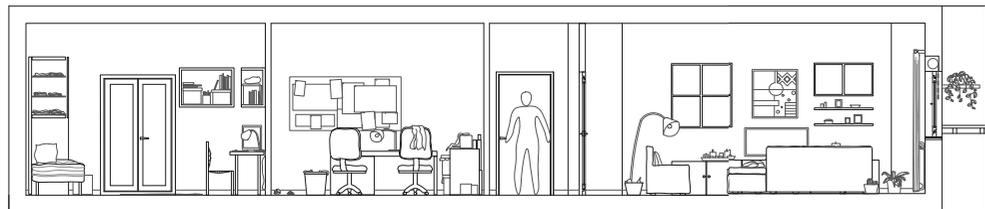
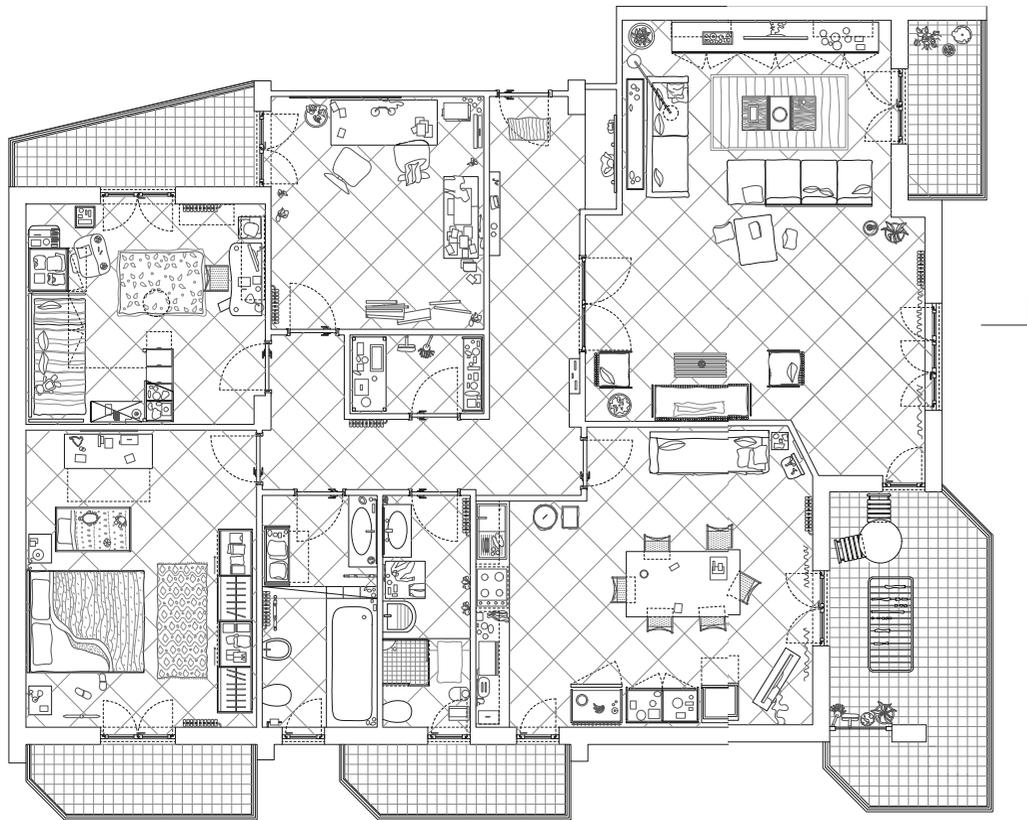


Living room
40 m²



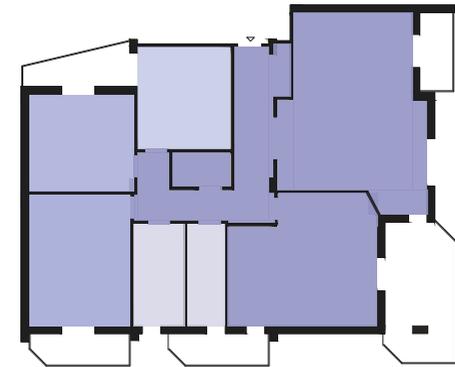
Kitchen
28 m²





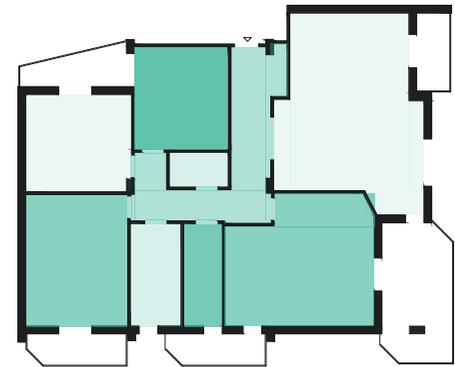
Privacy levels

less 
 more 



An excess of space

less 
 more 



AN UN-COMFORTABLE LIVING

The practices of “Re.Co.De 2018” offer a wide panoramic about the contemporary housing situation: most of the cases studies are examples of co-living between **intergenerational people often not blood-related**. They take place in **standard apartment** designed for traditional families, which do not help the creation of an harmonic space to live between not blood-related people.

The shared and private space are **not adequate to a co-living situation**: each inhabitant is not able to have his own private space and the shared area is not designed as a collective space to interact and share; these considerations emerged not only from the drawing but also interviewing the people themselves. The **shared space** does not provide services proportionate to the residents’ number and needs, the bathroom, the kitchen and the living room are in order the rooms who generate the stronger argument inside the house. In the **bathroom** residents may have the same time-table and there will be the necessity of using it at the same time; moreover, it is an intimate room, so sharing between strangers will not be easy for everyone. **Kitchen** is the second place in a house that can generate conflicts: the need of cooking at the same time, the cleaning, the small spaces and the presence of one cooker may affect the harmony inside the house. The **living room** may generate problems: one living room is not enough for the residents who may wants to use it for different purpose, like invite friends over, relax on the sofa or watch a movie, these are all activities that can not be done in the same space. At the same time the **private space** does not offer a sufficient level of privacy for everyone: not all the individuals are able to have a personal room, while if they have, they might not be present a personal bathroom, a small personal living space is almost impossible to find, unless in cases of new built villas with many rooms. The personal space deeply influencing the people lifestyle: if someone is working from home, it might be necessary for him working outside; if someone studies subject that requires the presence of a big table or a big space it is impossible to do it at home. Moreover, the private space is not design as it is the only personal and intimate area of the resident, but simply as a bedroom, which will not guarantee space for private activities.

In conclusion it must be highlight the **main consideration** we learn from the practices, which will be able to help the definition of a co-living project and understand the phenomenon of the co-habitation:

- 1. Defining nuclei not numbers.** It is not enough to consider the inhabitants counting their number for designing the space, but it must be counted the number of families inside, so the “nuclei”. Nuclei is the minimum family unit, it can be one person, a couple, a traditional family.. each nuclei are independent one to another and they consequently need a proportionate private space for their member and a collective one for them.
- 2. Bedroom is not only the bed.** Each resident has his personal activi-

ties to do and in a situation of co-habitation, not all the activities can be done in the shared space. For this reason, the bedroom can not be conceived as a room with only the bed, the bedroom is the only private space for the resident so it must become a bedroom, a living room and a study room.

3. A room for the guests. Guests or people staying half of the week need their privacy as well, each of them should have an extra room that can guarantee their privacy from the rest of the family or the residents of the house.

4. Bathroom should be private. The bathroom is the room that generate most of the conflicts, for this reason each nucleo should have their own bathroom; inside the same nucleo, there will be the necessity of having an extra bathroom, for instance in case of an adult son or two adult blood related living together.

5. Shared area as space of interaction, not conflicts. Kitchen and living area are also spaces that can generate conflicts, for this reason they should be proportional to the number of people living inside, in terms of number of furniture and size of the space. There should be also more than a single living room since the living area is composed by the space that connect all the rooms and that give the possibility of doing different activities.



III.

**CO-LIVING:
THE EVOLUTION OF
SHARED LIVING**

CO HABITATION

We talked about the economical and sociological changes through the century where we are living and we mention how these factors change as well our perception of home and our needs of houses. People are looking for new forms of living that have to satisfy their requests and their life habits which are really different from decades ago.

All over the world people are **moving to the main urban centres** looking for jobs and new opportunities, made our cities growing faster and intensely. It is however impossible to solve this problem only increasing the number of buildings, since it will require an intense and strong political urban action aligned with the economical and sociological problems of the people.

Without a sufficient space for everyone, people are **struggle to find an adequate and affordable space** to live in the city: people have to settle for rooms despite apartments, they have to accept to live in the suburban area despite the city centre and they might be obligate to share their apartment or room with other people. If in fact the lack of availability of space is one of the problem, the second is the consequence increasing of the housing prices, as in many European cities, the prices increase largely.

At the same time there are always **more people who are living alone**; the single – person households are projected to become the most popular typology of living: the increase of divorces, the attitude of living as single without children or a partner, but also the tendencies of moving abroad or in other towns for studies or work reasons. For this reason, singles are the one most affected by the housing crisis, since it is harder to find an apartment that can satisfy their privacy, their income and house habits. The ageing of the population also produces high numbers of older people who are likely to live alone since they will have fewer family members that will look after them; most of them will find to live alone for years without having the financial disposition and the health that can provide an independent life.

The last aspect of our century is the **increasing of loneliness and isolation** that afflict ourselves: being single, moving in a new town is increasing our sense of isolation. Scientists reports that “prolonged loneliness has a large impact on both our mental and physical health and could even be a greater health hazard than obesity or smoking. Almost every study going finds that the quality of our relationships is often the best predictor of whether we’re happy or not.” (Space10. 2018, p. 20)

It is in this situations that **sharing a home**, an apartment or a room seems the solution that can better satisfy and solve the problems of people today. For economic reasons and the lack of affordable houses, people find more convenient sharing their living space; in order to not feel alone and be sure of having

Space 10 (2018). IMAGINE:
explore the brave new world
of shared living. Space 10.

company in a new city, people are choosing to share an apartment, in order to support the house bill and not feel isolated, old people are hosting youngsters to live together. Living as a community, unifying one generation or different generation together, is getting more and more popular. Recalling the lifestyle of the previous century, people are readier to live in a common building with a private and shared spaces; that's why in the recent years always more form of co-habitation are spreading around the globe, with different users, targets and aim.

A CLASSIFICATION OF THE DIFFERENT TYPES OF CO-HABITATION

The most common and practicable form of co-habitation is the common house sharing or what we prefer to define as **Co-Living**, living in Co-habitation. The mapping of the practices offers a clear perspective of what is the phenomenon about and how many people are involved: they are apartments, defined cluster, composed by different private units and a shared space. The shared space contains facilities like kitchen, living area, dining area, bathroom, study room and other typologies; while the private units are different one to another, so that they can host different typologies of users. One unit correspond to one family who compose a nucleo, who can be from the single person to the family with many children; the nuclei inside the co-living apartment are not blood related. The most common typologies of this house sharing are related to the practices, which most of the case create uncomfortable living situation: self-arrangement of the tenants to transform a normal apartment in a shared typology, where each bedroom became a single unit and the living room, bathroom and kitchen a shared area. Seen the large dimension of this phenomenon many co-living housing projects appear on the market: they offer a studied and designed house or **apartments composed by one or more clusters, with a good proportion of space between the private units and the shared area and a different typology and dimension of the private units**. They are homes who guarantee the privacy for the residents but at the same time the possibility of living with other people; they provide a **long-term solution** of housing as a normal private house who can be bought with a rentable or ownership contract. They **do not have a specific target**, but on the contrary, they provide a residential solution to the widest range of population: from the youngsters to the oldest, with a mixed type of users in terms of ages, work and backgrounds. A precise definition of what co-living is can be found in the book of Guidarini "New urban houses" Called by the Swiss "Cluster-Wohnungen" or by the French Architecture company Star Architect "Co-Residence"; it is an evolution of the swiss housing typology call "Wohn-Gemeinschaft",

shared apartments with a number of bedrooms from six until twelve and shared bathrooms. A Co-Living apartment is characterized by the aggregation of small units independent to each other but connected to a shared common space. Each unit, owned by a single family, is composed by one or two bedrooms with generally a small bathroom and sometimes small kitchen and living room; while the shared space is an assemble of different spaces connected one another, living room, dining room, play room, study room and work place. These solutions are not designed for a type of user in specific but for everyone who would like to live in a shared apartment, for people who are alone or in a family and would like to live inside a big group of people, where of course, they can always take their private time in their private space, whenever they like. (Guidarini, 2018)

However, since the rediscovery of communal living form, Co-Housing is always the most popular one and often when people speaks about co habitation they generally refer to this model, even if it not always corrects. Seen the large needs of shared living and temporary apartments, today there have been creating **many typologies of shared living** houses and accommodations, different one to another in terms of contracts, typologies and targets.

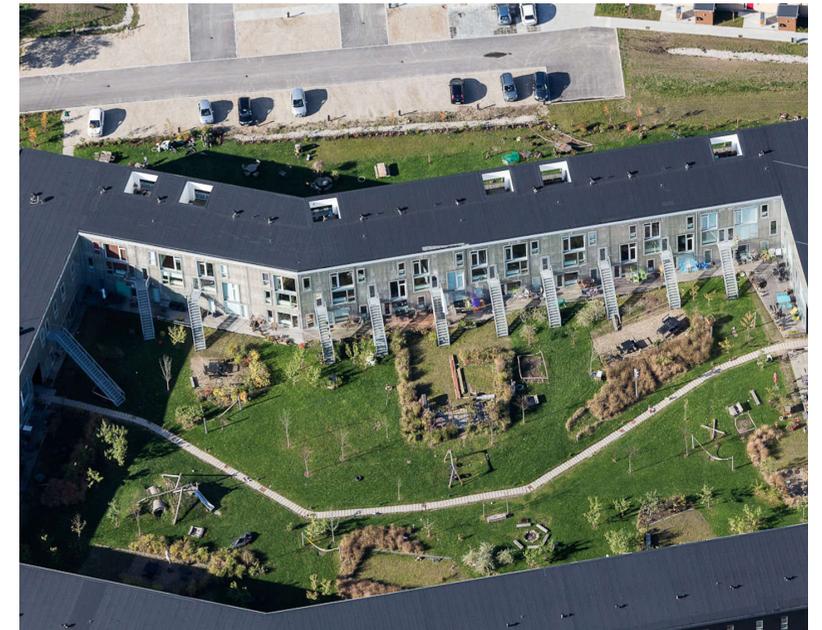
Guidarini, S. (2018). New urban housing. Milano: Skira.

CO-HOUSING

Intentional communities, created and run by their residents, with the characteristics of having private homes cluster around shared space. Each private space has their own facilities and rooms for create a private life for each resident, but they have also common parts that implies and helps the cooperation and the sense of community. In this typology is important to be involved in the **common activities**, like cooking when need it, or taking care of the children when is necessary. It means also being **involved in the development**, financial and constructed part of the building, since the house are owned by the residents. The co-housing is the most popular and old form of shared living; it born in Denmark in 1972 with the first cohousing community form that was built for 27 families by Theo Berg influenced by the article of Bodil Graae in 1967 who wrote “Every child should have 100 parents”. (Studio Weave, 2018)

There are many examples of co-housing, one is the **Lange Eng in Albertslung**, just outside Copenhagen completed in 2009, founded and constructed by the resident themselves. The building is composed by 71 private units of different typologies which are facing on a central common garden and courtyard. It also include 600 mq of shared facilites that are kitchen, living and dining area, workshops spaces, a small cinema, play area, lounge area and mini football camp. Inside the Lange Eng there is a specific schedule for common activities and meals; the families are meeting to eat all together six days per week, when they are free to join the community or not. (Studio Weave, 2018)

Studio Weave (2018). Living closer. Studio Weave Publication in collaboration with Royal Institute of British Architects.



Lange Eng in Albertslung.
Up: top view
Under: dining collective space

CO-LIVING AS LIVING AS A SERVICE

The great success of co-working spaces brings the same companies or new enterprises to expand the **co-working space** in **co-living space**, offering a living space with the highest level of comfort, flexibility and immediacy. Co-living buildings offers private apartments of different typologies for **long or short staying**, that can be ensuite room or study apartment. It also include a **big common area**: from a shared living area or dining area, until a cinema, gym or supermarket. The strongest shared facility is the co-working space, the building include rooms for shared and common activities, like parties or small group activities. The resident can access to this accommodation booking online and visiting through the website the private and shared space; the booking is using a simple and effective contract that include all the services plus wi-fi, electricity, cleaning, security and many more at one single price per week. The first Co-Living service is The Collective Old Oak in London, which was followed by many others like **WeLive**, **Common or Roam** are the most famous, but there have been created many more all over the world.

The **Collective Old Oak** is located in London East and it include 550 private rooms, 1114 mq of shared spaces and 400 co-working positions; the target are people from 21 to 35 years old who just moved to London or they are looking to a place to stay with other people paying a more affordable price than a normal house in the city. Co-Living is also the answer for the **Millennials generation**: the changing of home's idea is a consequence of the contemporary society and his changes. The continuous renting and digital technology bring them to have less possession but a lot of temporally rental services; James Scott, chief operating officer of London-based co-living developer The Collective, admit "I don't have possessions anymore, I'm all about experiences and it is high time that our workspaces and living spaces caught up," said Scott. "There's definitely a future based on this whole co-movement." Adding that "the movement reflects how young people, who accept they can't get a foot on the property ladder, now value experiences over possessions. He points to Uber, rental bike and car services, mobile phone contracts, Netflix and Kindle as examples of how Generation Y are choosing to do away with belongings." (Mairs J., 2016) It is register in fact that only the 11% of Millennials are looking for a home that will be permanent, the 68% of them on the contrary are planning to sell their first home at a certain point of life; the statistic also show that if a homeowner was keeping his house for ten years, millennials average is around six years (Pische G, 2016).

Pische, G. (2016). The Collective: andiamo a vivere in coworking?. [online] Marketrevolution.it. Available at: <http://www.marketrevolution.it/the-collective-vivere-in-coworking/> [Accessed 17 Jun. 2019].

Mairs, J. (2018). Millennials want experiences not possessions say co-living entrepreneurs. [online] Dezeen. Available at: <https://www.dezeen.com/2016/04/05/co-living-shared-collective-accommodation-housing-millennials-trend-common-wework/> [Accessed 19 Sep. 2018].



The collective Old Oak
Up: view of the building
Under: co-working space

COOP-HOUSING

Co-Operative housing are form of non-profit housing that took place during the 1950s in Canada, where they are still more widespread. They are **owned by the cooperative** itself, which as legal entity can have one or more residential buildings. Its residents are **membership-based**, with membership granted by a way of a share purchase in the cooperative and it guarantee the occupation of one housing unit. In this way the costs, the decisions and rules are divided through the community. Inside the members can have two types of contracts: ownership and non-ownership, in the first case it is assumed a permanent occupation inside the house, with a proper title and ownership registration; in the second case the contract is similar to a lease, since residents are under an occupancy agreement (Demchuk, D, 2014).

There are many examples of Coop-Housing, the one we propose will be also analyse later in the case studies; it is in Berlin and it is the **Coop Housing at River Spreefeld** designed by Carpaneto Architekten + Fatkoehl Architekten + BARarchitekten. The co-operative is composed by three buildings connected by a wide garden; it contains 64 apartments of two typologies standard and clusters that host a multigenerational and multicultural population. There are common spaces like laundry rooms, fitness rooms, guest rooms, rooftop terraces, and the music and youth room; who are facilities shared by all the residents. The ground floor includes a carpentry workshop, catering kitchen, studios, daycare center, and a co-working space. There are also Option Rooms – unassigned, unfinished spaces for community, social, or cultural projects; who are given to non-residents. The residents are fully involved in the work and design of the building, building costs are equipped staggered between the residents, as well are the price of rent. Each user is also able to carry out needed construction work inside their dwellings. (Archdaily, 2019)

Demchuk, D. (2014). Co-op Housing: What It Is and How It Works. [online] Torontoist. Available at: <https://torontoist.com/2014/03/co-op-housing-what-it-is-and-how-it-works/> [Accessed 23 May 2019].

ArchDaily. (2019). Coop Housing at River Spreefeld / Carpaneto Architekten + Fatkoehl Architekten + BARarchitekten. [online] Available at: <https://www.archdaily.com/587590/co-op-housing-project-at-the-river-spreefeld-carpaneto-architekten-fatkoehl-architekten-bararchitekten/> [Accessed 23 Feb. 2019].



The Coop Housing at River Spreefeld views of the garden with the building

SUPPORTED LIVING / EXTRA CARE

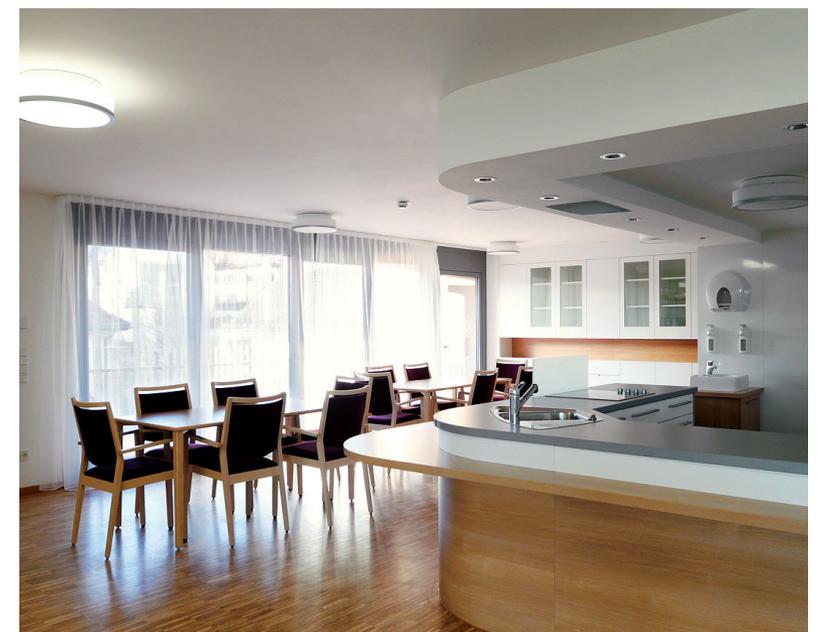
These are housing schemes provided for **older or disable people**; the aim is to help them to have an **independent life** with the constant **support of an assistant on-site**. The user chooses the house, if sharing or not the flat with one or a group of people and which type of support receiving; depending on his condition and the service he would like to receive there are different packages and a fix tax to pay. There are plenty examples of this typology of living; they generally divided into categories based on the physical or mental condition of the patient.

Homeshare is one example, it is an association operating in UK who brings people together for mutual benefit: the householder, who has a room to spare and feels would benefit from a low-level support and the homesharer who need an affordable accommodation and will get a low-cost rent in exchange of 10 hours of practical support each week (HomeShare UK, 2018). There are many examples of supported living, like **NHS, Choice Care group or Alpha living service**, who offers home sharing possibilities and home cares facilities of different typology. (Choice Care Group, 2019). A recent project is the **Veronica House Elderly Care Facility** in Stuttgart: it is a structure directly connected with the health clinic, which provides shared facilities and private bedrooms for the patients. The shared area is located around the bedroom, moreover it there is one located at the ground floor with many services accessible by the visitors as well. The shared part include common dining spaces, a common living room and a kitchen as well.

HomeShare UK (2018). Homeshare Sector report 2018 Executive Summary. Liverpool.

Choice Care Group. (2019). What does supported living look like? | Choice Care Group. [online] Available at: <https://www.choicecaregroup.com/can-we-help/care-and-support-packages/supported-living/what-does-supported-living-look-like/> [Accessed 23 May 2019].

ArchDaily. (2011). Veronica House Elderly Care Facility / f m b architekten. [online] Available at: <https://www.archdaily.com/145383/veronica-house-elderly-care-facility-f-m-b-architekten> [Accessed 17 Jun. 2019].



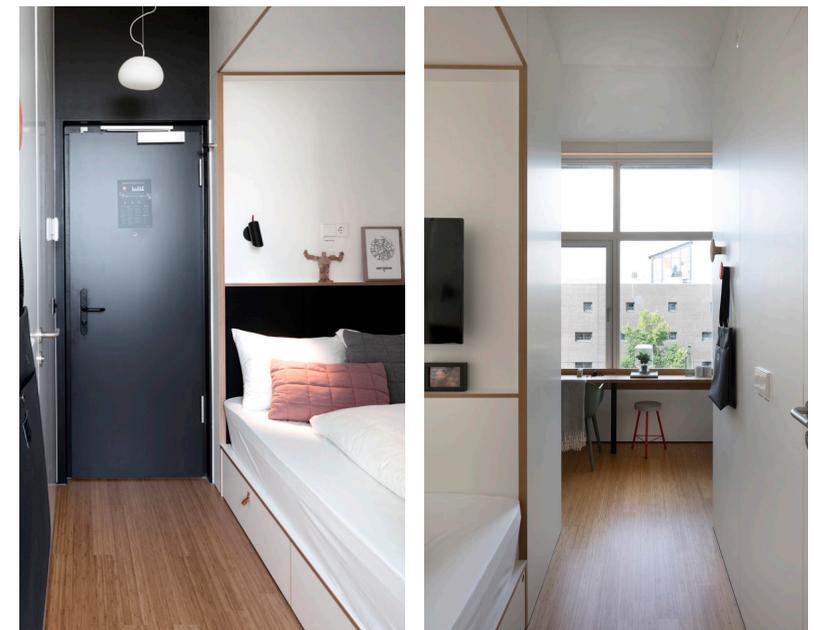
Veronica House Elderly Care Facility:
top the building and the garden
under the shared area

APART HOTEL

It is a combination between an “**apartment**” and a “**hotel**”, a serviced apartment complex with a booking system of an hotel. It is defined in United States as “a building designed for or containing both apartments and individual guestrooms or rental units, under resident supervision, and which maintains an inner lobby through which all tenants must pass to gain access to apartments, rooms or units.” These types of apartments are custom built, they offer **furniture rooms and shared space** for the residents. People, who choose this type of accommodation are renting an apartment, but without a **fixed contract** so that people can check-out whenever they want, so that residents can stay in this building from days until years (Educalingo.com, 2019).

Citadines, Adagio Apart hotel or Zoku in Amsterdam are all option who offers long term or short terms option, with different base in different cities. They offers three typologies of packaging for short staying, long staying or business travels. Depeding on the contract choosen the resident has different services or facilities inside the private units, which are generally modular and offer four different dimension in base of the duration of staying of the resident. Apart-hotel has a common area with shared facilities as well, in order to create interaction between the residents.

Educalingo.com. (2019). APARTHOTEL - Significato e sinonimi di aparthotel nel dizionario inglese. [online] Available at: <https://educalingo.com/it/dic-en/aparthotel> [Accessed 17 Jun. 2019].



Zoku Apart Hotel in Amsterdam view of the interiors

STUDENT HOUSE

It is a residential building design and **conceived for students** and managed by the local educational authorities; they are generally connected through a specific university as an extra service that they offer to the students. Through a **simple contract** that includes apartment, wi-fi and the bills of a normal house; they offer **rentable single or double bedrooms**, with bathroom included or not and a shared kitchen and living room between the residents. The building can be divided into multiple apartments where from three to seven people divide the shared facilities keeping the privacy with their bedrooms. Otherwise living room and kitchen are shared in bigger groups like the entire floor or the entire building, with a private bedroom and a bathroom included. The student house generally contains extra space for studies, a gym, a library and an event space. As for the Apart-Hotel they have an entrance controlled by a member of the staff. (The Student Hotel, 2019).

There are many examples of student houses and most of the biggest universities all the world provide student houses for their students, while in countries like UK all the cities are provided with student houses who are not directly connected to a specific university. **Student Roost** for instance provides student houses for students around UK: each resident can choose between a **standard room** (with bathroom, living room and kitchen shared between 3 to 7 people), the **ensuite room** (which includes a private bathroom, but living room and kitchen to share between 5 people) or **the studio room**, (Self-contained studio bedrooms with own kitchen and bathroom). They correspond to different prices, which is also different from a student house building to another (Studentroost.co.uk, 2019).

The Student Hotel. (2019).
The Student Hotel: About Us. [online] Available at: <https://www.thestudenthotel.com/about/> [Accessed 23 May 2019].

Studentroost.co.uk. (2019).
Student Roost. [online] Available at: <https://www.studentroost.co.uk/accommodation/aberdeen/meal-market-exchange> [Accessed 23 May 2019].



Mealmarket accommodation, Aberdeen (Scotland, UK). View of an ensuite bedroom and the shared area.

SERVICE APARTMENT

They are **furnished apartment** for a **short-term or long-term** staying, with housekeeping and other services for guests. Despite the Apart hotel they offer a space more like a house, with a bigger kitchen and other facilities included, like gym, restaurant, laundry room. They can generally host professionals who are far from home for a work assignment, it can be a temporary solution while looking for a permanent resident. They offer a **contract** with taxes and utilities included in the rental price. (Smartments-business.de, 2017).

An example is **Essential living** in London. Located in four area of London it offers four typologies of rentable apartments, the studio apartment, the one, two and three bed apartments. It also includes some shared facilities located in the building, plus the company itself organize different social activities for the residents in order to increase their socialization.

Smartments-business.de. (2017). Serviced Apartments definition: What does this mean?. [online] Available at: <https://www.smartments-business.de/en/blog/detail/news/serviced-apartments-definition-was-bedeutet-das/> [Accessed 23 May 2019].



Essential Living apartment.
View of the interiors

SHARED LIVING IS NOTHING NEW

THE BEGINNING OF SHARED LIVING

For most of human history **people have always lived communally**. The prehistoric shelter, the medieval houses and the collective houses of the industrial revolution are examples of dwellings where the residents are depending one to another and they are part of a strong community who shared the same values, culture or religion. Since ten thousand years ago humans were all living in a collective environment, it was the best answer for their social challenges, religious habits and needs of the time.

The reality is that since man exist, he has always lived collectively, the first examples of shared living could be found in the **prehistorical hunters-gatherers**, where a division between shared and private life was impossible, as impossible was also the possibility of surviving as a single-family household. It is here with the creation of the first villages or the first shelters that people around a fire and one roof started to build a collective life. From **Greek and Roman empires to the Medieval times**, people were living sharing their private spaces: unrelated people from the same social class were sleeping under the same roof, in a room that were not divided between living and sleeping area. (d'Abrosca, Nava, 2015)

The ideal human habitants were also imagined by philosophers as a communal harmonic living: 2400 years ago the Greek philosopher Plato described an ideal community based on a collective organization; in 1506 Thomas More criticized the actual society in his book "Utopia" describing a life where people would have to live combined in small groups with common dining-room and shared leised facilities. The debates on the shared living reach the highest level during the XIX century with the industrial revolution, where the many theorists elaborate the idea of creating a living space connected to the working space. The most famous project was the **Phalanstère**, created by **Charles Fourier**: a community for 500-200 people who were living and working in together. Divided in different areas for the collective living, working and the private apartments, the village was able to contain a kindergarten, a theatre, a shared kitchen and shared living spaces. (Kollektivhus.nu., 2008)

Living and working in the same space found real and strong references in the North of Italy with the creation of "**le cascine**": farmhouses that born during the X century but found their strongest creation between the XIII and XIX centuries. The requisition of the church fields' and the unification of livestock and farm contribute to enlarge the dimension and the power of



Top: neolithic village

Under: Charles Fourier, Phalanstère

d'Abrosca, G. and Nava, F. (2015). ABITARE DINAMICO Il coabitare nel social housing. master. Politecnico di Milano.

Kollektivhus.nu. (2008). History of cohousing – internationally and in Sweden. [online] Available at: <http://www.kollektivhus.nu/pdf/colhisteng08.pdf> [Accessed 23 May 2019].

“cascine”. The **cascine** are made by a central building where the living and working activities were done, different facilities and other structures for the living needs and work like barns, granary or mill and ten of hectares of land for farming. They were located in the middle of the country side, some km far from one to another. The central building has a quadrangular shape with a courtyard in the middle where the farming instruments were located; the quadrangular shape was not always close on itself but sometimes it could be an open courtyard with one empty side or buildings separated. The “cascine” were able to host people in a number proportionate to their dimensions: in the low irrigated valley they were hosting from 10 to 25 families, while in the high dry valley they were hosting from 4 to 6 families, a “cascina” with 20 families were containing around 100 people. These people were living in a precise area containing the bedrooms, but they were sleeping all together; the exception was for the family of the owner of the “cascina” or for the family of the delegate person who have to control the “cascina”. (It.wikipedia.org, 2019)

Always in the North of Italy was built a shared living working village, in 1878 in **Crespi d’Adda (BG)**: Crespi was the owner of a cotton manufacturers who built a village for his workers close to the factory. He wanted to build an “ideal workers village” where all the employees were able to have everything they need for living, from the private apartments to the shared facilities. In this little town was included a church, a school, a small hospital, a theatre, a market for food and clothes and a small health centre. The private apartments were 50, they were all provided with a private garden and they were different for dimensions and characteristics depending on the categories of the workers. (Lombardia, V, 2019).

The most relevant examples of collective living during the XIX century were represented by the **American Boarding House**: spaces of transition for incoming immigrants in New York and Boston during the 1830. They hosted from 30% to 50% of the Americans until the 1938 when they were hit by a deep decline. There were plenty typologies of it, that unified groups from the same country or social class situation, like the Jewish and Quaker boarding houses, the German or Irish boarding houses, boarding houses for sailors, medical students and “marriageable women” (Etherington, 2017). Each Boarding House was providing to their guest two or three hot meals per day, plus a bed to share in bedrooms with other people. In the boarding house there was not enough privacy for the resident, moreover the social environment was not always safe and quiet, but despite the problems that was afflicting this type of building there was also a deep sense of community living. The boarding house

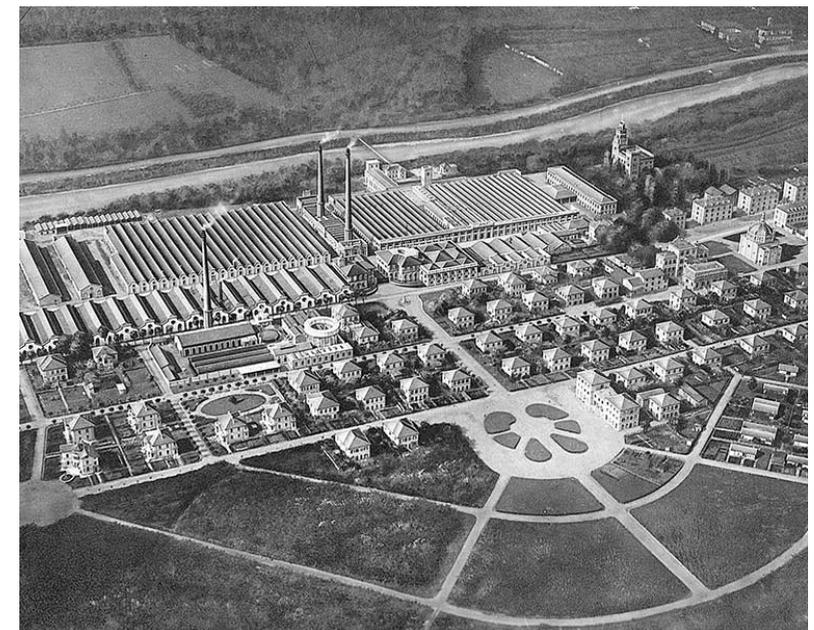
It.wikipedia.org. (2019). Cascina. [online] Available at: <https://it.wikipedia.org/wiki/Cascina> [Accessed 23 May 2019].

Lombardia, V. (2019). Villaggio Operaio Crespi d’Adda - Siti Unesco in Lombardia. [online] eccoLecco. Available at: <https://www.eccolecco.it/localita/villaggio-operaio-crespi-adda/> [Accessed 23 May 2019].

Etherington, C. (2017). [online] 6sqft. Available at: <https://www.6sqft.com/the-history-of-new-york-city-boarding-house-and-where-you-can-still-find-them/> [Accessed 3 Jan. 2019].



Top: neolithic village



Under: Charles Fourier, Phalanstère

were considered as a transitional step before family life and independency; their expansion and creation was in fact at the same time as the development of New York and Boston as the strongest urban cities and the spread of single-unit apartments.

Collective living and shared villages were not only existing in Europe or America, but also in Asia, where in China and Japan villages of workers were sharing the same living and working space or the same sanitary facilities. The first communities born with the creation of the first agricultural villages, like the **Tolou**, who are still existing as structure but they are not used anymore. They are ancient construction realized between the XIII and XX century by the Hakka population, an ethnich minority from the mountain region of the South- East of China. Made in terrain material, with a circular or square shape, they were perfectly integrated with the nature and the landscape. They were also built with the aim of having an independent life from the outside and be protected by the attack of foreigners. They are considered the first example of Co-Housing and one of the strongest social housing model based on democracy. They were hosting familiar clans in equal units of habitations, without discrimination for the power of the family. Each Tolou was a single village able to host until 800 people, allocate on the three floors of the building, each family has two or three rooms por floor. The common activities and facilities were inserted in the courtyard, a central open space that contains smalls buildings for the common life or for working. (Albè, M. 2019).

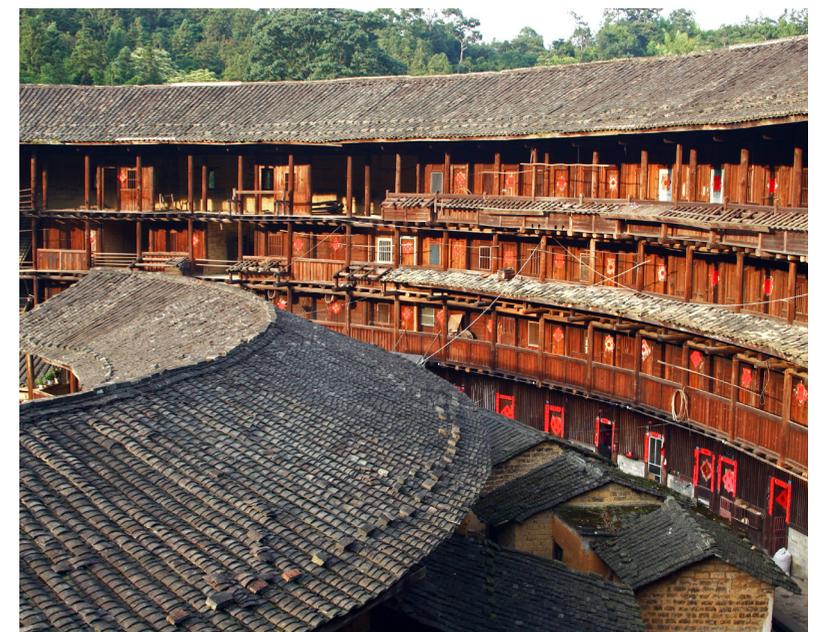
THE INDUSTRIALIZATION PERIOD

By the end of XIX century and the beginning of XX century, the individual housing unit became the most popular form of living for many reasons: the development of a new economy, the urbanization of the cities and the migrations from the countryside to the centre of the city. The beginning of this change can be found between the 1800 and 1900 when the rentable houses became apartment building: they were buildings occupying a part of an urban block and composed by four-five floors, owned by a single family who was renting to others all the rooms available inside. The common parts shared by everyone were the entrance, the stairs and the landing points; while the first two floors were occupied by the owner of the “rentable houses”, with bedrooms and other shared facilities, like living room, dining room and kitchen. The other residents were living above the first two floors, there were bedrooms and shared spaces until the last floor, higher the floor was, less was the social class importance of who was living. What happen next was that the ownership was

Albè, M. (2019). Tulou: le case circolari degli Hakka nate per creare comunità autosufficienti. [online] GreenMe. Available at: <https://www.greenme.it/viaggiare/asia/13829-tulou-case-circolari-hakka-co-housing> [Accessed 3 Jan. 2019].



Top: Dining in an American boarding house



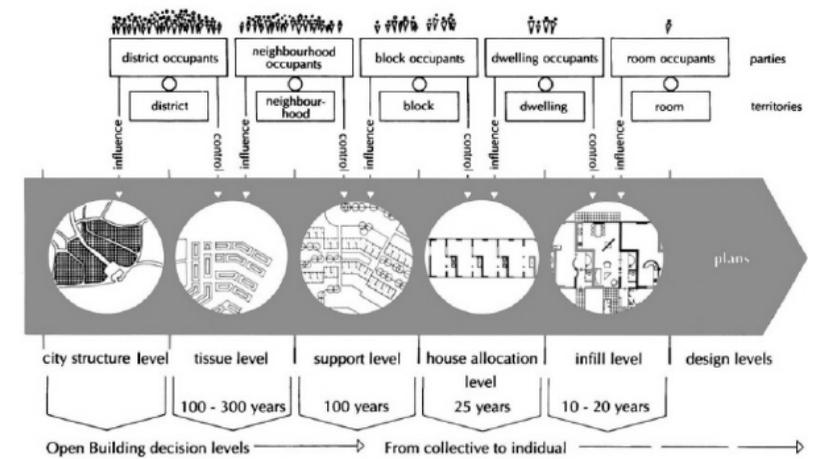
Under: Tolou

divided inside the single floors and rooms in different apartments, the new construction technologies let the creation of higher buildings with a homogeneous plan, call “standard floor plan”; in this case the people from a lower social class were the ones staying in the lower levels, while the higher classes were in the upper floors with penthouses. (Guidarini, 2018)

The first half of the XX century in architecture was mainly dedicated to the discussion about urbanization and the development of single apartment unit; however some of the new consideration and approach to design were really important to permit the rising of collective houses and communities from the 1950. The research regarding the single-unit apartments starts with “the minimum dwellings”: the minimum space, light, air and heat necessary for man to develop their daily activities without the interfering with the dwelling. A scientifically approach that contribute to the creation of the typology called “trivial house”, based on the security, health, social affirmation that search for characteristics against the urbanity, like the isolation from the context, the familiar privacy, the relationship with the green space and a safe open space. Conventional apartments, common and distribution space are reduced to minimum dimensions, apartments are not flexible and the typology is unchanged, despite the economical standard of the apartment’ users. This typology considers the society as composed by traditional families, so that the unit configurations were looking all equal one to another. The studies of the apartment and the focus on the building were followed by the concept of creating flexible and adaptable spaces; **Mies van der Rohe** claim how he was creating buildings as neutral borders where men and arts can lead their life independently, a clean construction for an open flexible plan. An example is the **Weissenhof in Stuttgart** in 1927, a building with less fixed elements and less possibility of distributions, numerous variable of modular apartments divided for the requirements. Against the flexibility, Aldo van Eyck and Herman Hertzberger propose the concept of versatility, a space that can be use for different uses without any interventions in its architectural shape, the single spaces and rooms can be changed during long times and the same day. (Guidarini, 2018)

A first step of transition was made during the 50 's when architects like Team 10, Colin Rowe and Robert Venturi argue against the principal of CIAM. Refusing the functionalism and the idea of Modern period, they propose a new analysis of the urban space, underling the human associations with the private and public space and the revaluation of the street as place of collective life and identification. Particularly, the attention of Team 10 on the inhabitants and public spaces, bring an important reflection on the open space as collective

Guidarini, S. (2018). New urban housing. Milano: Skira.



Top: Weissenhof, Stuttgart, Mies Van der Rohe. Flexibility of the plans

Under: Open building concept by Nikolaas John Habraken

use and on the in- between space of a residence and his social relationship attached. They were not the only to underline a new reflection between inhabitants and the city: in 1961 **Nikolaas John Habraken** proposed a new concept of residence against the mass housing of modernism, a “**Open building**” based on different level of flexibility that seen the participation of inhabitants in the housing design. In the same year Jane Jacobs announced a new quality of living, based on the idea of a city as an assemble of individual projects with an urban variation as a variation in the functionality of the building. Kevin Lynch underline a new aspect of the urban studies, with a deep focus on social and anthropological issues: an open ground floor that have to interact with the city in order to create new urban relationship. (Guidarini, 2018)

Until the mid of XIX century shared living was not the predominant form of habitation and the re-discovery of this living form do not reach the highest success. The form co-habitation that we can find in this period are referred to intentional communities that were born with the idea of being against the capitalist society and the industrialization, promoting an idea of living more connected with the nature, equality of social relationships and spiritual beliefs. America was one of the country with the strongest attitude or rebellion and creation of independent settlements: the most important to cite are the **Fruitlands**, and agrarian village born in 1840 which idea of living wanted to renounce the civilised world aspiring to self-sufficiency, commune eschewed private property and trade. The **Melusina Fay Pierce’s cooperative**, part of the ‘Grand Domestic Revolution’ described by Dolores Hayden: a movement for mother and wives to share their duties and promote the economic independence for women, the gender equality and the reorganisation of the domestic duties. (Studio Wave, 2018).

One of the most famous intentional communities were the one of the **Kibbutzim**, who is still existing today. The movement born from the 80’s in 1800 in Palestine with the ideology of Sionista: 15000 jewis from South of Russia and other region of Europe moved to Palestine creating the movement First Aliyah. The intention was the creation of a rural village, based on the principles of sharing and collective activities. In 1909 the first village born in the south region of Galilea, while in 1914 its members became five times bigger, until the beginning of the second world war the members living in Kibbutzim were 4000, the 5% of the Jewish population living in Palestine. Their importance reach the highest level during the 60’s where their life tenure increase, until the 80’s where all the collective services like the education or health system became private. At the beginning of Kibbutzim, children were living

Guidarini, S. (2018). New urban housing. Milano: Skira.

Studio Weave (2018). Living closer. Studio Weave Publication in collaboration with Royal Institute of British Architects.



Top: Fruitland museum

Under: A Kibbutzim community

all together in a collective house with a person that was taking care of them; every role in the community was taking by a single person, they were rotating their role once in a while: someone for cooking, someone for cleaning the plates and so on. There were 150 families. approximately between 400 and 500 people. There was a building with a common dining room and a gathering room; a secretary that was suppose to split the cars when the residents need it, a gallery for artist, the private houses of the family, farms and fields. The education system was controlled by the community, during their first six years in a internal school, then outside but with other Kibbutzim members. (Viverealtrimenti.com, 2019).

Other forms of shared living born in this period were examples of alternative dwellings for people, which in some countries or society / political condition were a mandatory choice to do. Always in America in New York, a housing co-operative movement born in 1920 by Abraham Kazan, offer a solution to the structural disenfranchisement with shared ownership.

In Switzerland the attention was on creating housing models for the workers social class and the weaker part of the people: the “**Amerikaner-Haus**” of **Karl Schwank** (1916) or the “**Frauenkolonie Lettenhof**” of **Lux Guyer** (1926) and “**Cafè Boy**” of **Stephan Huttenmoser** (1923) were given attention to the weaker social classes; young adult and single woman in the Frauenkolonie and labourers for the Cafè Boy. All of these case studies were containing space for working and common activities, dining cooking and living area and multiple typologies of apartments or single rooms adapt to the different users. (Studio Weave, 2018)

The strongest and most relevant example in this case are the one referring to Russia, with the Kommunalka and the Narkomfin building.

From the 1917 were conceived a new housing plan, a system of co-living idealized by Lenin as an answer of the economic and housing crisis and a reflection of socialism ideas. This typology is known as **Kommunalka**: buildings of old rich tenants were confiscated and reconverted in shared buildings, each floor was divided in single apartment, where inside different rooms were created. Who were finding job in a nationalised company, got a room inside a Kommunalka apartment, the rule was 10 mq were calculated for each adult and 5 mq for each children. This system can generally host until seven families, where each of them has a personal bedroom, the only personal and private space; living room, dining room, kitchen and bathroom were shared, as well the electricity, the heating and water system. Each family has also their own cooker, sink and utilities in the kitchen, while all the other electro domestics had

Viverealtrimenti.com. (2019). Storia del fenomeno comunitario: la stagione dei kibbutzim - Viverealtrimenti | Vivere Altrimenti. [online] Available at: <http://www.viverealtrimenti.com/storia-del-fenomeno-comunitario-la-stagione-dei-kibbutzim/> [Accessed 23 May 2019].

Studio Weave (2018). Living closer. Studio Weave Publication in collaboration with Royal Institute of British Architects.



Top: Kibbutzim village and community

Under: Frauenkolonie Lettenhof” of Lux Guyer

to be share. (Kommunalka: traditional Soviet-Russian living, 2013) Everyone was living in Kommunalka: labours, professors, unemployed and other higher professions; it is calculated for instance that in Leningrado were living the 70% of people in Kommunalka. There were particular rules to follow in order to increase the positive environment of the co-habitation, some of them decided by Russian authorities, like curfew for noises and light and how to divide bills and cleaning roots. (Zirulia, 2017). The kitchen was the place of meetings and gathering, the place of discussion and decision of the house. Despite the possible conflicts, there were also a big interaction and help between the residents: they were helping each other to look after the children and elderly, plus they were helping each other in difficult moments, like money need or the reaseach of a job. At the end of the 50's in URSS many mass - housing were built, so that each family were able to have his own personal apartment, in the 90's mostly of the Kommunalka were empty. Today Kommunalka are not disappear, a lot of Russian people still choose this form of living; around 260000 of people in St. Petersburg are still living in this type of accommodation. Most of the existing Kommunalka today had been renovated and a family can be able to have more than one room inside; moreover, the personal bedroom who was only rentable in the past, today can be owned. People who are living today are variable: elderly, who were living in the kommunalka since the past, young students or young workers who can not afford other type of apartments in the centre or people from emarginate categories and with social problems. The Kommunalka is in Russia a solution for who would like to meet other people, save money and live in the city centre.

Kommunalka: Traditional Soviet-Russian Living. (2013). [video].

Zirulia, P. (2017). Perché le kommunalki rendono Pietroburgo più attraente e come sono cambiate dai tempi sovietici. Ce lo racconta l'antropologo Il'ja Utechin.. [online] Russia in translation. Available at: <http://russiaintranslation.com/2017/11/10/perche-le-kommunalki-rendono-pietroburgo-piu-attraente-e-come-sono-cambiate-dai-tempi-sovietici-ce-lo-racconta-lantropologo-ilja-utechin> [Accessed 3 Jan. 2019].

The Soviet State built The **Narkomfin Building** (Dom Narkomfin) in Moscow as reflection of the political and ideological idea of the regime. It was designed by Moisei Ginzburg and Ignatii Milinis in 1928, for the employees of the Commissariat of Finance; a social and architectural experiment in order to transform the daily life of the people following principles of the socialist citizen. New values were at the base of the building: a common and shared life between a community, the revaluation of the traditional family, the new role of women in the society and the education of the children. The building was composed by two blocks, one containing the private units and the other one with the shared facilities and collective activities, plus a common garden in the centre of the space. The private part was located in the longest block; it was composed by apartments of two typologies, K Types, that include bedroom, washroom, toilets, a space for cooking for the children and the F Type which include only the bedroom, toilet and washroom. The shared facilities were a common kitchen, a dining space, a laundry room, a gym, a library and a



Life inside a Kommunalka apartment

children space; the presence of shared facilities that regards the education of the children and the shared cooking area, implies that children have to be raised collectively and without the patriarchal relationships, moreover it allows women to be free from their houses duties and questions the privatization of couple relationships. After the loss of power by Soviet Regime, the Narkofin fall in a state of decay: the shared activities were no longer used and the residents had not been using the shared spaces. The **Narkomfin** was a failure and today is in a big state of decay; however, seen the historical importance of this building and his great location in the centre of Moscow, the authorities are trying to recover it with a renovation project. (Lucarelli, 2016)

THE SECOND HALF OF THE XIX CENTURY

After the second half of the XIX century shared living became more than in intention of rebellion or confined in one building; inspired by the shared living communities and Kommunalka, architects and people start to interrogate themselves about the design of urban and private space and its relationship; they also start to discuss the common habits of everyday living and the constitution of the society and the traditional family. The concept of home as private and calm space is discussed: the house starts to be seen as a common urbanity, a place of collective life and works. Inspired by the Kommunalka of Russia, the individual privacy, the idea of ownership and the idea of family as a project for life, bring the rising of the “sharing home”. It suits during the 70’s with the loft typology, places where living is only one of the main functions that can be done inside: private and public life coincide in one space, the absent of space division increase the domestic possibilities inside. Nikolaas John Habraken of Open building, a multidisciplinary method of interpretation and design that favour the participation of users and their adaptability through time. This theory was used in the intervention of swiss Co-op residence through four principles: an idea of house that can be modify by the use of inhabitants, with different disposition of furniture; the prevision of inserting extra rooms that can be used in combination with the existing apartment; buildings with a flexible plant building and a low print on the ground from the bearing walls; an urban flexibility where buildings can be substitute with others without altering the urban layout. It was the beginning of the “golden age of communities”, which generates more than 100 experimental living settlement and utopian idea, reaching their strongest level around the seventies in all around the world: next to intentional villages and small utopian communities, different form of housing based on shared living born in Europe and America, the Co-housing and Co-Operative housing, which today represent a strong percentage of

Lucarelli, F. (2016). The Narkomfin Building in Moscow (1928-29): a Built Experiment on Everyday Life. [online] SOCKS. Available at: <http://socks-studio.com/2016/12/04/the-narkomfin-building-in-moscow-1928-29-a-built-experiment-on-everyday-life/> [Accessed 3 Jan. 2019].



Top: Narkomfin, after the construction

Under: Narkomfin, today

housing options.

The Co-Housing starts in Denmark in 1964 when the Danish architect Jan Gudmand-Hoyer discuss with a group of friends the housing options of today and the need of people. They bought a site in Hareskov, an outskit of Copenhagen, where they develop a project that included twelve terraced houses set around a common house and a central garden; the architect wrote also an article about his intention called “The Missing Link between Utopia and the Dated One-Family House,” in 1968 where he explains his idea and concept. The article collect more hundred of families interested to move in this type of settlements and the Co- Housing topic interested the local enterprise and investors. During the same year, Bodil Graae wrote “Children Should Have One Hundred Parents,” led to a group of fifty families interested in creating “a housing collective with the common denominator ‘also for children.’” In the meanwhile, in 1970 the architect presented the **Farum Project**, designing family dwellings and single clusters around an interior common area containing a school; all connected by a glass covered pedestrian street. From that year the architect in 1973 the architect create the first three co-housing form also call bofælleskab: Saettedammen where 27 families where living there, Skraplanet with 33 families and Nonbo Hede later in 1976 (Milman, D, 2019). The **Seattedammen** building was a ownership type co-housing community designed by Theo Bjerg, it is designed with two rows of autonomous private adaptable dwellings centred around a communal green space. It also includes a separate common house for the shared facilities which work as “heart of the community”. The Danish Building Research Institute sponsored a national design competition for low-rise, clustered housing; the winning proposals where published and this had a great impact in the Danish Housing Market. All the winners were proposing space that were recalling a shared living, common facilities and the resident participation in the design process: the was the first rental cohousing community built with a non-profit housing developer; by the 1982 22 owner-occupied co-housing communities were built. The **Tinggarden** village is arranged in small rows of houses clustered around a central communal space. Each building contains an individual common area containing the kitchen, living and service spaces; each cluster has also the possibility to be adaptable, so that the residents can enlarge their private cluster if they will need it (Madden S. ,2019).

Norway has a different story from Denmark; for his geography there was not a great development of co-housing typologies, but more isolated communities. The collective living in Norway assumed the form of three main typologies:

Milman, D. (2019). The History of Cohousing. [online] Canadian Cohousing Network. Available at: <https://cohousing.ca/about-cohousing/history-of-cohousing/> [Accessed 23 May 2019].

Madden, S. (2019). [online] Oikodomos.org. Available at: http://www.oikodomos.org/workspaces/app/webroot/files/deliveries/smadden47384_236_Oikonet-PDF.pdf [Accessed 23 May 2019].



Views of Seattedammen building

housing collectives (bokollektiv), housing/living communes (bofellesskap) and collective houses (kollektivhus). By 1970 and 1980 it is calculated that 23 bofellesskap (homeshare) were built; they were composed from 3 to 100 flats. All of them were mostly designed in order to facilitate for women with families the entering in the labour market. The most important bofellesskap were one in Trondheim in 1972 and two in Oslo built in 1976 and 1987; they consist in separate flats and collective space with common space for cooking and eating. There are existing fewer example of bofellesskap for all ages; they are often smaller, with self-owned flats and one-family homes; on the contrary, it is most developed the idea of fellesskap, houses for seniors, generally developed more by local authorities and constructing firms. (Egerö B, 2019). Two relevant examples of bofellesskap are **Friis gate 6** designed by **MNAL Bard Isdahl, Erlend Løvtakken e Halldis Eckhoff** in collaboration with the residents and the local authorities. It was completed in 1987 and it is composed by 27 apartment, two rooms for the guests and 400 mq of shared facilities (15% of the total area). The shared facilities include a party room, a laundry, a kitchen, a game room, working area, gym and outdoor areas. The other example is the **Bergsligata 13** in Trondheim in 1977, it is the oldest collective house complex of Norway. There are 20 people living together in a building of 5 floors, they have different ages and background, each of them can have a room or a small apartment. The shared areas are the dining room, a kitchen, a bathroom, sauna, gym, laundry and outdoor areas; on each floor the residents can use the common kitchen and bathroom who is shared by two or few more residents. Despite the other case study, this co-housing model is still working and use the common rules and common duties to carry on the life inside the community. (Eckersberg, M, 2018).

Egerö, B. (2019). Puzzling patterns of co-housing in Scandinavia. [online] Kollektivhus.nu. Available at: <http://www.kollektivhus.nu/pdf/Bertil%20Lidewij%20article%20corr%20aug%2014.pdf> [Accessed 23 May 2019].

Eckersberg, M. (2018). Bofellesskap - Arkitektur N. [online] Arkitektur N. Available at: <https://arkitektur-n.no/temaer/bofellesskap> [Accessed 31 May 2019].

Sweden has a long history in communal dwellings: the kollektivhus (collective building) are used to describe housing with shared facilities. The term born in 1930's to reduce women's housework in order for them to be able to have a full-time job even when they were married or with children. At the beginning it was more referring to a collective organisation of housing, only later the word kollektivhus will refer to a sense of community and collaboration between the neighbourhood.

The first modern collective house in Sweden was built in 1935 by Sven Markelius, at John Ericssonsgatan in Stockholm: a solution of co-housing that was considered for "for privileged people" and impossible to afford for the labour party. The building was provided with private apartments, common kitchen and dining area and a kindergarten; the house based on the division of labour, tenants were not working inside the house, but they were served by an



Bergsligata 13 in Trondheim.
Top: today
Under: during the 70's

employed staff who were working in the room cleaning, laundry and cooking. However, this building born not with the idea of making activities together, but mainly to offer a solution for women who was working outside their home. One of those who saw the advantages was the housing expert Brita Åkerman. She had taken part in several government investigations on family and housing policy. As early as 1970 she was writing positively about collaborative housing. In an investigation on single parents, commissioned by the City of Stockholm's committee for women's interests, the idea of cohousing was put forward: "... there could be service buildings, accessible to all sorts of people. They would have apartments of different sizes, appropriate for single persons, for families with children, for young people and for elderly. As well as the individual apartments, there would be collective spaces where those who lived there could meet one another and help one another and in every way see to it that everyone had the help and opportunities that they needed. In the hotel there were 328 apartments

The cooperation between tenants born in 1969 when a similar typology of co housing building, the **Hässelby Family Hotel** had to shut down the restaurant inside; residents were then obligate to collaborate between each other and use the common kitchen inside the hotel. At the same time a group of professional women called Bo I Gemenskap (Big, live in the community), were not agree to minimize the housework, on the contrary housework was consider a common responsibility , both men and women, but they must be suitable with the daily life's activities and work. They were proposing the idea of splitting these work between different nuclears of family (the ideal number is between 15 and 50) the advantage will be not only reducing the personal time in housing duties, but also to enjoy these duties and take it as an occasion for sharing life with other people; the activities which were ideal to share were cooking and raising children. The compromise will be not only sharing these activities and these spaces, but also reducing the personal apartment space of 10% in order to increase the common area and the communal activities.

From the 70's many marries women were working outside home, while younger start to live in smaller communities inside the big city, the request of collective house was so high that the municipal housing companies starts to support these new settlements with financial and construct programme. The first example of real collective living was **Stacken** built in Bergsjön, Gothenburg in 1979, when the architect Lars Ågren turn one of the ten-storey tower blocks in a cohousing unit. The shared living was on the 5th floor where the kitchen, a dining room and a nursery for children were placed, the tenants had to arrange their life and their common living all together. Another example is the building of **Prästgårdshagen** (1983) in southern Stockholm, which was



Stacken community.Bergsjön

by Leo de Jonge and Pieter Weeda; it contains 50 households organized in a collaborative housing form. The building contains 10 clusters of five units that encourage a mix between the tenants, each cluster has a common area shared by the cluster, plus an extra common area shared by the entire co-housing building. Like Sweden, Netherlands develop housing for elderly as well called woongroeps or living group for elderly designed for the over 50; the great success of them was due by the collaboration between the housing associations and the local authorities, who sustain the health and well-being of the seniors. (Killock, J, 2014).

The development of Co-housing and Co-operative housing was followed by movements and association inspired by the shared living and the creation of community composed mainly by youngers who were sharing the same values and lifestyle. Similar of the utopian community of some decade before, new aggregation born after the second world war, inspired by the Hippy movements and the new life style based on freedom and independence. One of the most relevant born during the 70's in Italy with **Le Comuni**, by word of mouth from the american examples in Ovada or the Beat Generation; many young boys and girls decide to leave their home to live in the Ligurian farmhouses as act of rebellion from the society. The first italian farmhouses born in Piemonte between the 1970-1971, they were community based on the self-management and a life in harmonic with nature. One of the first and most important was the one in Via Giambattista Vico in Milan, next to San Vittore prison. The italian Comuni are well described in the words of Donata and Grazia Francescato, in a book call "Famiglie aperte: la comune" of 1975, the community born during the 1800 were utopial, a model for the society; the Comuni of 70's have more limited visions, the society model based on new political and religious belief, leave the place to community whose members are looking towards their personal belief and psicology. If before the members were around hundreds, during the 70's they became a dozens, mostly young adult or teenager. (D. G. Francescato, 1975) . A propose of a new vision in contrast with the standard families, with many activities and space inside that help the interaction and harmony between the members of the community.

THE CONTEMPORARY AGE

Even in the second half of the XIX century when the rising of co-housing and co-operative housing offer a different solution for living, the single house unit was still the predominant form of housing choose. However, the economical and sociological crisis of the XX century define new

Killock, J. (2014). Is cohousing a suitable housing typology for an ageing population within the UK?. RIBA.



Life in Le Comuni

problematic about housing and living itself, with the consequences of a big return of the shared living: metropolis attract young students and workers, with the presence of important universities or the possibility of getting a better job, people are obligate here to rent a room despite a house, since it rapresent a more affordable solution. The conditions of house sharing of the contemporary age are more about unrelated people living together in a traditional apartment and at the same time, the creation of new form of shared living and the strengthen of the existing ones. Many new typologies of shared living and co-living have been creating since a decade now, they offer different form of apartments try to find an answer to the need of the people: there are services like apart-hotel or service apartment who are more for who need a temporary accommodation, or there are co-living full furnished accommodation who offers furnished houses with shared facilities for a specific target of people. Examples are **WeLive**, **The Collective**, **Common**; services who offered a price por week that include a full furnished apartment, wi-fi, laundry and cleaning services and the possibility of using the shared space. They generally contain from one hundred to five hundred private units of different typologies. Entrepreneur are investing more money in these kind of accommodation, for instance in London there is finance of £1 billion to invest in co-living and start-up spaces, since they are able to answer easily to the request of youngers generation, they can be visited and booked through internet, without the requirement of a big commitment and they can offers multiple services with one contract.

Regarding the second point, the new housing policies are trying to invest more on co-housing or co-operative housing. In Netherland, Denmark, Norway and Sweden, where the movement born, many people are preferring this typology of houses; their number is increasing and they are looking more to the development of the shared space and the creation of intergenerational communities, in order to help families, elderly and youngers to work together and give each other's support. Relevant examples are in the cities of Deventer, in Netherlands and in Aarhus in Denmark: in the first case the project called **Humanitas**, students work as volunteer for 30 hours per month in exchange of a vacant room; while in the second case, called **Generationernes Hus**, this accommodation offer houses that combined different groups of people who are sharing some communal facilities like kitchen and living spaces. At the same time, country with less typology of co-housing are creating more houses of this typology, like in UK; where it is possible to find shared living for intergenerational communities or a specific target. One example is the **Older Women's Co-Housing Community (OWCH)**, in North London, designed for women over 50 years old: it contains 25 private apartments with 17 lease hold



WeLive, New York
Top: one of the shared area

Down: the private bedroom

type and 8 socials rentable , it is the first example of Co-Housing for elderly in UK which helps these women to live independently sharing their life and various activities in the common space of the community. Finally, it must be said that countries which do not have co-housing houses or few co-operative buildings , like Italy or Spain, are trying to develop these type of accommodation and sensitize people and association about the positive aspects of these possible alternative solution for living, trying to offer an affordable house for the weaker social class or families. (Space 10, 2018)

Shared living has always existing since man came to earth, it is in man nature to find relationship with other people and finding supports also outside the small nuclear of family. The traditional house was then enough when the economy, the work and the family structure were stable; however, the instability in the social and economical fields obligate man to adapt and find new type of houses or accommodation. The previsions for the future show a biggest instability: the increase of urbanizations, the increase of loneliness and the need of more affordable and temporary accommodation will probably find a bigger request on the housing market about shared accommodation or houses.

Space 10 (2018). IMAGINE:
explore the brave new world
of shared living. Space 10.



Older Women's Co-Housing
Community
Top: two residents of the
community
Down: Courtyard of the
OWHC

TOLOU

-
South- East of China

Living and working village
Dimension: from 14 to 77 m diameter
N° of users: 800
Shared facilities:
school, working place, health and religious facilities, kitchen, living spaces



PHALANSTÈRE

Charles Fourier

Utopian project
Dimension: -
N° of users: 1600- 2200 (450 families)
Shared facilities:
Kindergarten, theatre, kitchen, living spaces



AMERICAN BOARDING HOUSE

Collective living
Dimension: -
N° of users: -
Shared facilities:
kitchen, living spaces, bathroom, bedroom



CRESPI D'ADDA

Arch. Ernesto Pirovano
Crespi d'Adda (BG)

Working village
Dimension: 85 ha
N° of residents: 50-100 families
Shared facilities:
working area, church, hospital, market, living spaces



XII- XX
century



XII- XIX
century

LE CASCINE

--
North of Italy

Living and Working
Dimension: 40-100 ha
N° of residents: until 100 (6-25 families)
Shared facilities:
working area, kitchen, living spaces, bedroom



1820



1830



1840



AMERICAN COMMUNITIES

Fruitlands
Harvard, Massachussetts

Utopian agriculture village
Dimension: 90 ha
N° of residents: -
Shared facilities:
working area, living spaces, kitchen



1878



KIBBUTZIM

-
Israel

Living and working villages (270 villages)

Dimension: aprox. 300 m diameter

Nº of users: aprox. 400-500 (150 families)

Shared facilities:

school, working place, health and religious facilities, kitchen, living spaces



FRAUENKOLONIE LETTENHOF

Lux Guyer
Zurich, Switzerland

Social housing

Dimension: -

Nº of residents: -

Shared facilities:

working area, kitchen, living spaces



NARKOMFIN BUILDING

Moisei Ginzburg and Ignatii Milinis
Moscow, Russia

Collective living

Dimension: -

Nº of users: 54 families

Shared facilities:

kitchen, living spaces, laundry, library, gym, dining area, children's space



LE COMUNI

-
North Italy

Utopian village

Dimension: -

Nº of users: -

Shared facilities:

kitchen, living spaces, dining area, outdoor area



1880



1917



1926



1928



1935



1970



KOMMUNALKA

-
Russia

Collective living

Dimension: aprox. 20 mq for a room

Nº of users: up to 7 families

Shared facilities:

Living room, dining room, kitchen, bathroom, corridor



HÄSSELBY FAMILY HOTEL

Sven Markelius, John Ericssonsgatan
Stockholm, Sweden

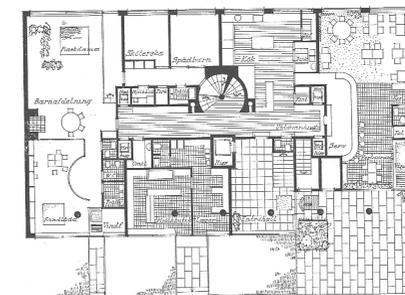
Privileged kollektivhus

Dimension: -

Nº of residents: 328 families

Shared facilities:

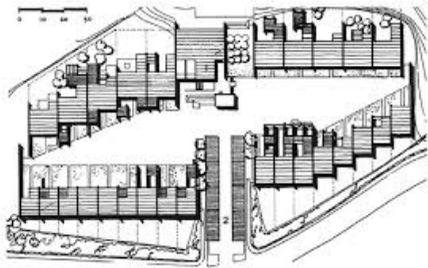
kitchen, living spaces, dining area, kindergarten



SAETTEDAMMEN

Theo Bjerg
Hillerod, Denmark

Bofælleskab - Co housing
Dimension: -
N° of residents: 27 families
Shared facilities:
garden, living room, dining room, kitchen



1973

BERGSLIGATA 13

Trondheim, Norway

Bofælleskab
Dimension: -
N° of users: 20 people
Shared facilities:
dining room, kitchen, bathroom, sauna, gym,
laundry and outdoor areas

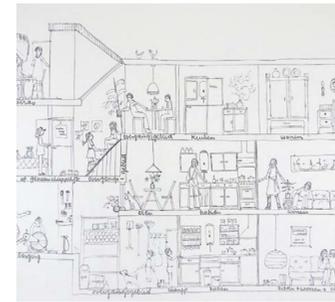


1977

CENTRAAL WONEN

Leo de Jonge and Pieter Weeda
Hilversum, Netherlands

Collective housing
Dimension: -
N° of residents: 50 families
Shared facilities:
hobby room, living room, dining room, kitchen,
gym, guest rooms



1977

PRÄSTGÅRDSHAGEN

Stockholm, Sweden

Kollektivhus
Dimension: -
N° of residents: 31 families
Shared facilities:
laundry, garden, kitchen, living and dining area



1983

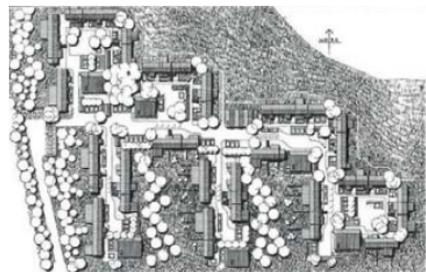


1974

TINGGARDEN

Copenhagen, Denmark

Bofælleskab - Co housing
Dimension: -
N° of residents: 22 families
Shared facilities:
garden, kitchen, living and dining area



STACKEN

Lars Ågren
Bergsjön, Sweden

Kollektivhus
Dimension: -
N° of users: -
Shared facilities:
kitchen, living spaces, dining area, nursery



**FRIIS GATE 6
MNAL**
Oslo, Norway

Bofelleskap
Dimension: aprox. 2000 mq
N° of users: 29 families
Shared facilities:
Party room, laundry, kitchen, working area,
gym and outdoor areas



1987

HUMANITAS
-
Deventer, Netherlands

Intergenerational Shared living
Dimension: -
N° of residents: -
Shared facilities:
Living room, dining room, kitchen



2012

**OLDER WOMEN'S CO-HOUSING
COMMUNITY**
-
London, UK

Co-Housing
Dimension: -
N° of residents: 26 elderly
Shared facilities:
garden, common house, guest rooms, laundry



2016

**CO - RESIDENCE
/ CO- HABITATION**
-
Everywhere

Shared Living
Dimension: -
N° of residents:
depending on the number of bedroom in the room
Shared facilities:
Living room, dining room, kitchen, bathroom



TODAY



FÄRDKNÄPPEN
-
Stockholm Sweden

Kollektivhus for elderly
Dimension: -
N° of residents: 43 families
Shared facilities:
hobby room, living room, dining room, kitchen,
gym, guest rooms



THE COLLECTIVE OLD OAK
PLP Architecture
London, UK

Co-Living
Dimension: 16.000 mq
N° of residents: 500 residents
Shared facilities:
hobby room, living room, dining room, kitchen,
gym, library, cinema, co-working and more



CASE STUDIES

CO-LIVING IS EVERYWHERE

Co-habitation is becoming a widespread phenomenon, consequently architects and enterprise are moving for designing new typologies of shared living. It has been already explained the many possibilities and typologies of co-habitation, many projects have been developed which are included in different categories.

For instance, if we search for “co-living” on google, the results show projects of co-living as co-habitation, but mostly Co-Living as Living as a Service solutions, co-operative projects or apart-hotel, which we already define as not object of our research.

1. Co living apartment. The case studies selected are related to the category of “co-living”: apartment characterized by the aggregation of small units independent to each other but connected to a shared common space. Each unit, owned by a single family, is composed by one or two bedrooms with generally a small bathroom and sometimes small kitchen and living room; while the shared space is an assemble of different spaces connected one another, living room, dining room, kitchen, study room and work place.

2. General target. These solutions are not designed for a type of user in specific but for everyone who would like to live in a shared apartment, for people who are alone or in a family and would like to live inside a big group of people, where of course, they can always take their private time in their private space, whenever they like. (Guidarini, 2018) . There is not a particular target for all the projects with the exception of Seaul and the Common Villa

3. Clusters inside a Coop projects or Co-housing project. The case studies can be projects designed as co-living buildings themselves or housing typologies like co-housing or co-operative housing where inside some floors are designed as co-living apartments. In the second case there have been analyse only the floor containing this typology of shared living, the rest of the building was not take in consideration in our analysis.

4. An avarage number of users .Another important characteristic was the number of users: even if it was hard to find cluster typologies with more than 30 residents living inside, projects that include a high number of people (over 30) where not inserted; the projects inserted has a middle number of residents.

5. Case studies from all the world The selection of the case studies were done considering not only Italy or Europe, but the entire world, since the phenomenon we are facing is worldwide spread.

6. Research projects. The last important aspect to present is that two of these projects are not constructed; the case of Co-Résidence and Communal Villa are **research projects** born to investigate the phenomenon of shared living.

When the selection of case studies was done, they have been analysed in order to help the definition of a design strategy. For each case studies there have been inserted the most important general information, like dimensions, number of clusters and units, number of residents and facilities included. Then, both the private and the shared spaces have been analysed in detail in order to understand what could be the final rules that can be used to design a co-living housing typology. For the shared area and each single unit there have been inserting critics and comments related to the space, what was positive, what was not, what was a good strategy and what should be implemented. The critics was based on the observations made after the analysis of the practices, so combined what was identified as problems and what has been understand are the needs of the people living in a shared apartment. The analysis was summarised at the end of each case study, leaving a clear vision for each project.

SELECTION OF CASE STUDIES

**CO- LIVING
APARTMENTS**



**AVARAGE NUMBER
OF RESIDENTS**



**GENERAL
TARGET**



**WORLDWIDE
CASE STUDIES**



**CLUSTERS OF
NORMAL HOUSES**



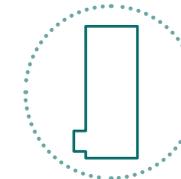
**RESEARCH
PROJECTS**



THE CASE STUDIES



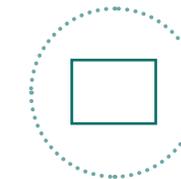
Adrian Streich Archi-
tekten AG - Claudia
Thiesen
KRAFTWERK
1 HEIZENHOLZ
Zurich, Switzerland
2012



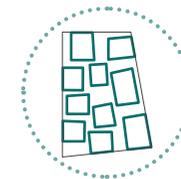
Star Architect
CO RESIDENCE
Paris, France
2012- on going



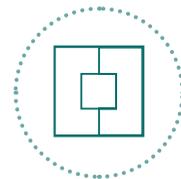
Carpaneto, Fatkoehl,
BAR architekten
COOP HOUSING AT
RIVER
SPREEFELD
Berlin, Germany
2013



Naruse Ikonuma
Architect
SHARE HOUSE LT
JOSAY
Nagoya, Japan
2013



Duplex Architekten
HUNZIKER AREAL,
HAUSA
Zurich, Switzerland
2009- 2015

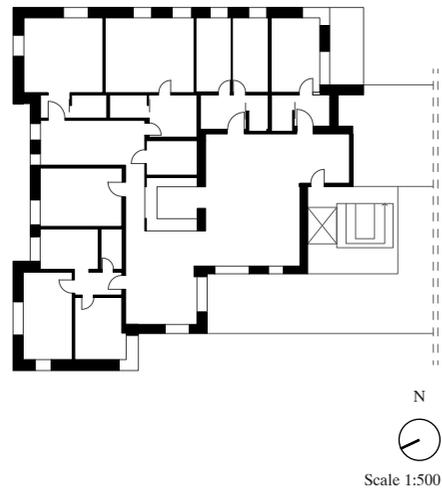
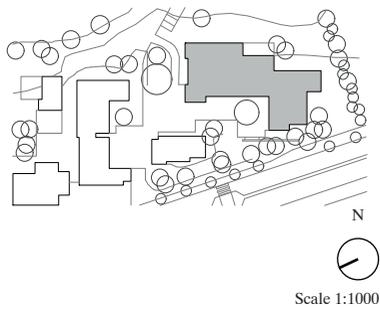


Archihood WXY
THE GAP HOUSE
Bokjeong-dong, Seon-
gnam, Korea
2014-2015

Adrian Streich
Architekten AG -
Claudia Thiesen

KRAFTWERK 1 HEIZENHOLZ

Zurigo, Svizzera
2012



751 mq



Cluster



*20

N° of
residents



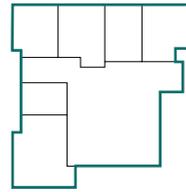
37.5 mq
per person

Heizenholz is the second intervention realized by the cooperative Kraftwerk 1 in Zurich. The project is based on the reconversion of two adjacent buildings from the seventies and the insertion of an extra block that will connect both buildings. The cluster apartments (Cluster - Wohnungen) are found on the second and third floors. They both follow the same plan and they are located on one single floor. The shared space has a meander conformation, in this way the different areas are divided inside the same space: the centrality is given to the presence of the corner kitchen and the dining area. The single units are six per cluster, they are all made up by one or two rooms, a kitchen corner and a bathroom. The Cluster- Wohnungen of Heizenholz guarantees the socialization and the interaction between the residents, with a balance living between the private units and the shared area.

Guidarini, S. (2018). New urban housing. Milano: Skira.

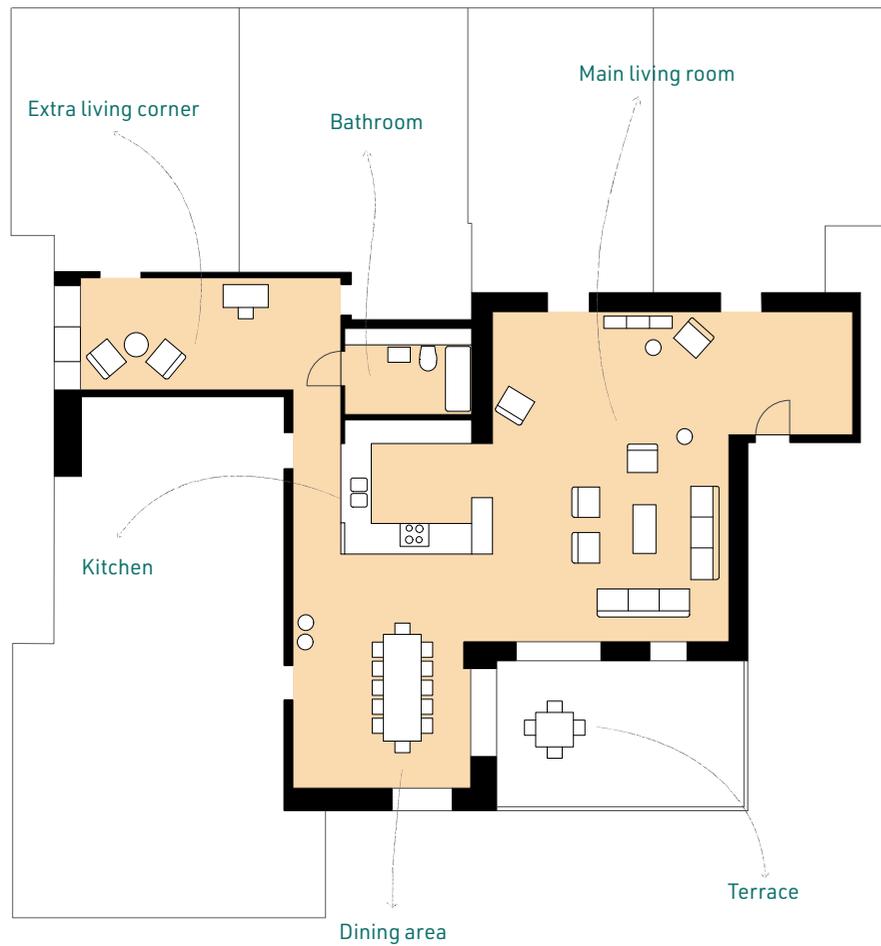


CLUSTER



THE SHARED SPACE

150.8mq
Mq per person: 15.1 mq

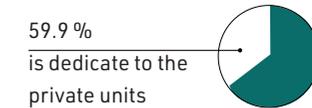


Scale 1:200



THE PRIVATE SPACE

225 mq
Mq per person: 22.5 mq



Single room apartment	Single room apartment	Double room apartment	Single room apartment
34.9 mq	45.3 mq	37.3 mq	27.6 mq
* 1 person	* 1 person / 1 couple	* 1 person	* 1 person / 1 couple



Scale 1:200



THE SHARED SPACE

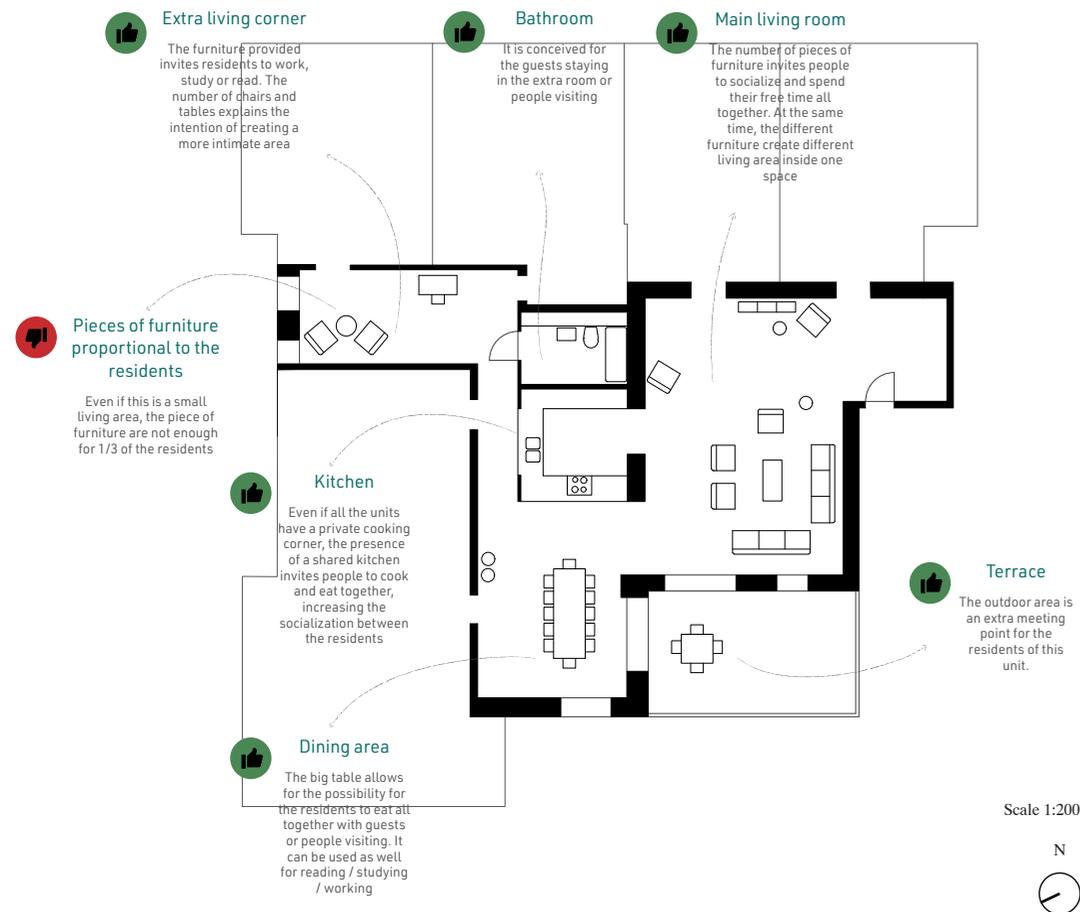
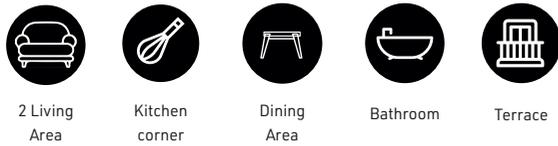
150.8 mq

Dimension: 150.8 mq

N° of residents: 10

Target: All

The shared space include:



THE PRIVATE UNITS

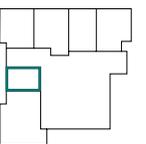
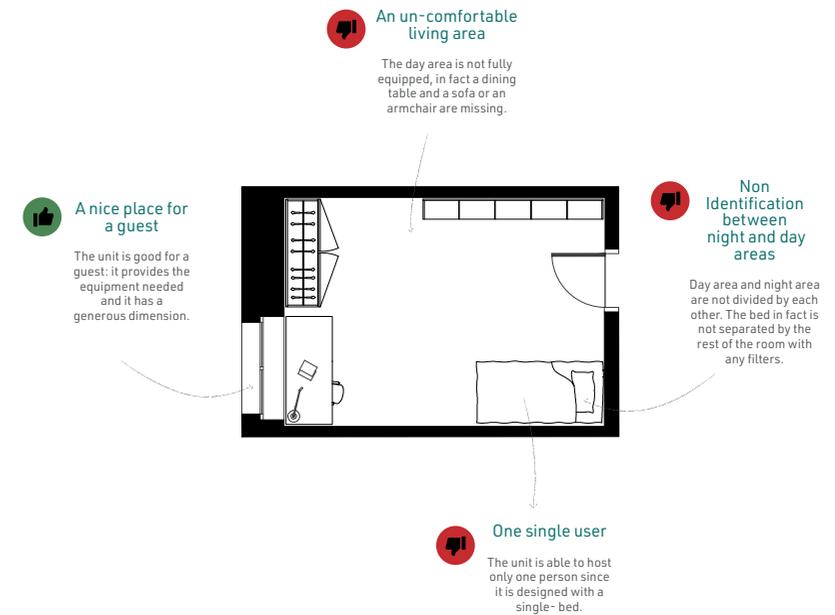
Unit -0-
Guest Room

Dimension: 22.5 mq

N° of residents: 1

Target: Guest or Tourist

The unit include:



Scale 1:100

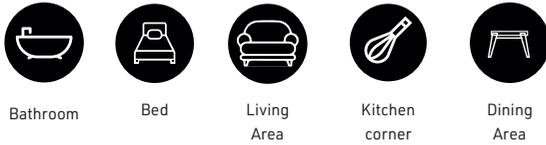
Unit -1- Single room Apartment

Dimension: 34.9 mq

N° of residents: 1

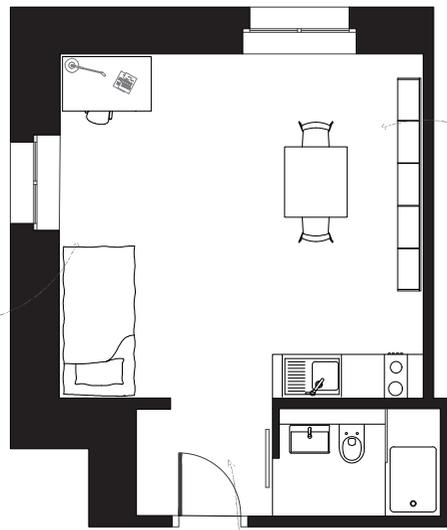
Target: No specific

The unit include:



A non identification between night and day areas

The day area and night area are not divided inside the unit. There are no filter that can separate the bed from the rest of the room.

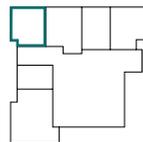


An uncomfortable living area

The unit is not provided with an armchair / sofa and a wardrobe.

Buffer Zone

The bathroom and the entrance hall are separated from the main room in order to give more privacy and create a filter from the shared space to the private unit.



Scale 1:100

Unit -2- Single room Apartment

Dimension: 45.3 mq

N° of residents: 1 / 2

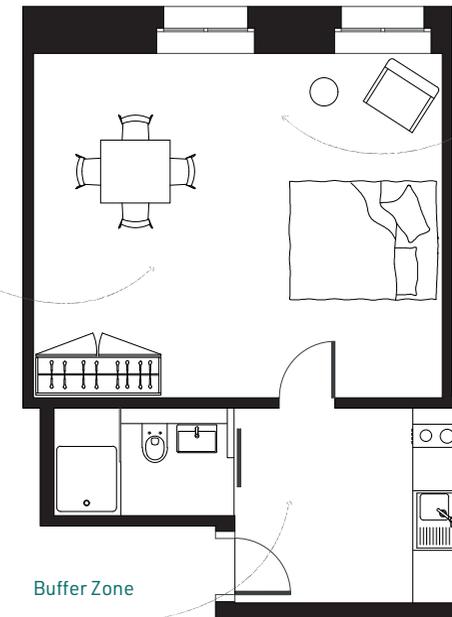
Target: No specific

The unit include:



A non identification between night and day areas

The furniture are display inside the room without creating a separation between the day and night area. For instance, the wardrobe is located on the opposite side in front of the dining table and not the bed. The bed is located in front of the door and it is not separated by the rest of the room with any filter.

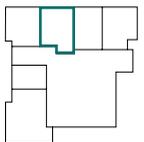


Pieces of furniture not proportional

The armchair and the wardrobe are not proportional to the number of people that can live here. The unit can host two people, but the dimension of the wardrobe and the presence of one armchair is enough only for one person.

Buffer Zone

The filter from the shared space to the unit is given by the bathroom, the kitchen and the independent entrance. It is a good solution since it create privacy to the main room.

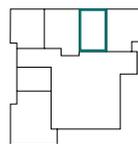
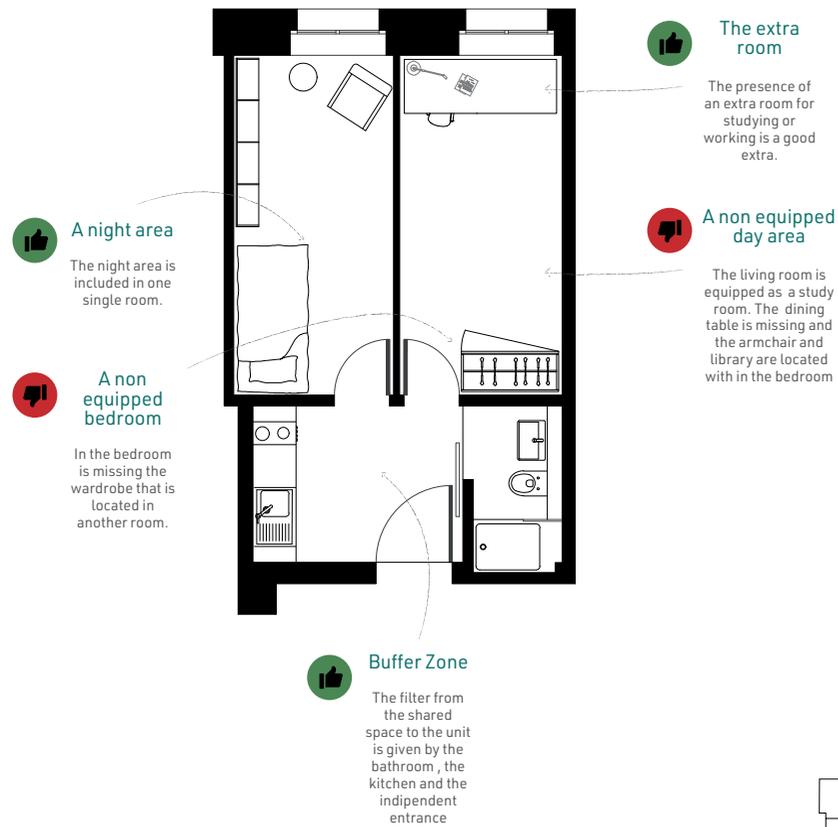


Scale 1:100

Unit -3 - Double room Apartment

Dimension: 37.3 mq
N° of residents: 1
Target: No specific

The unit include:

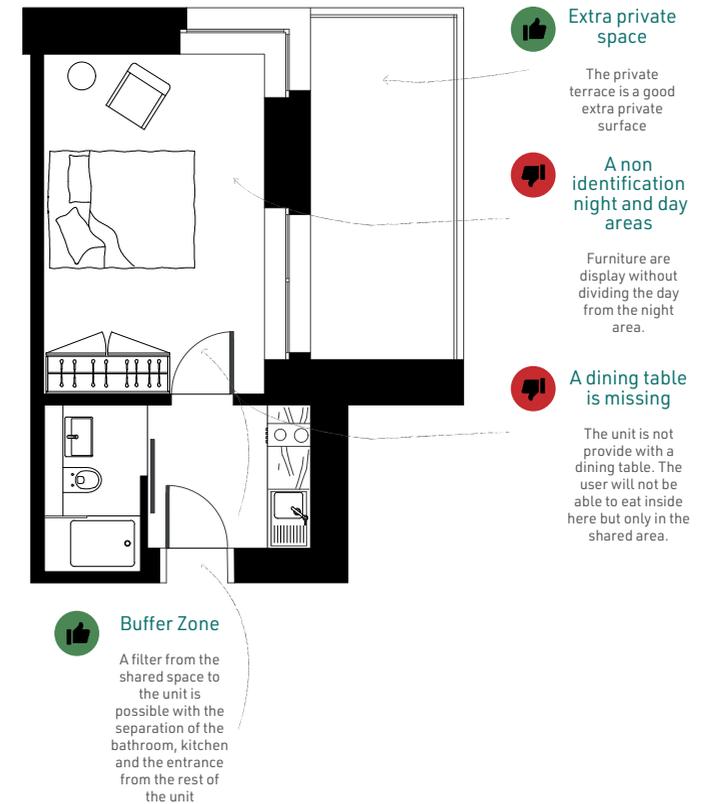


Scale 1:100

Unit -4- Single room Apartment

Dimension: 27.6 mq
N° of residents: 1/ 2
Target: No specific

The unit include:

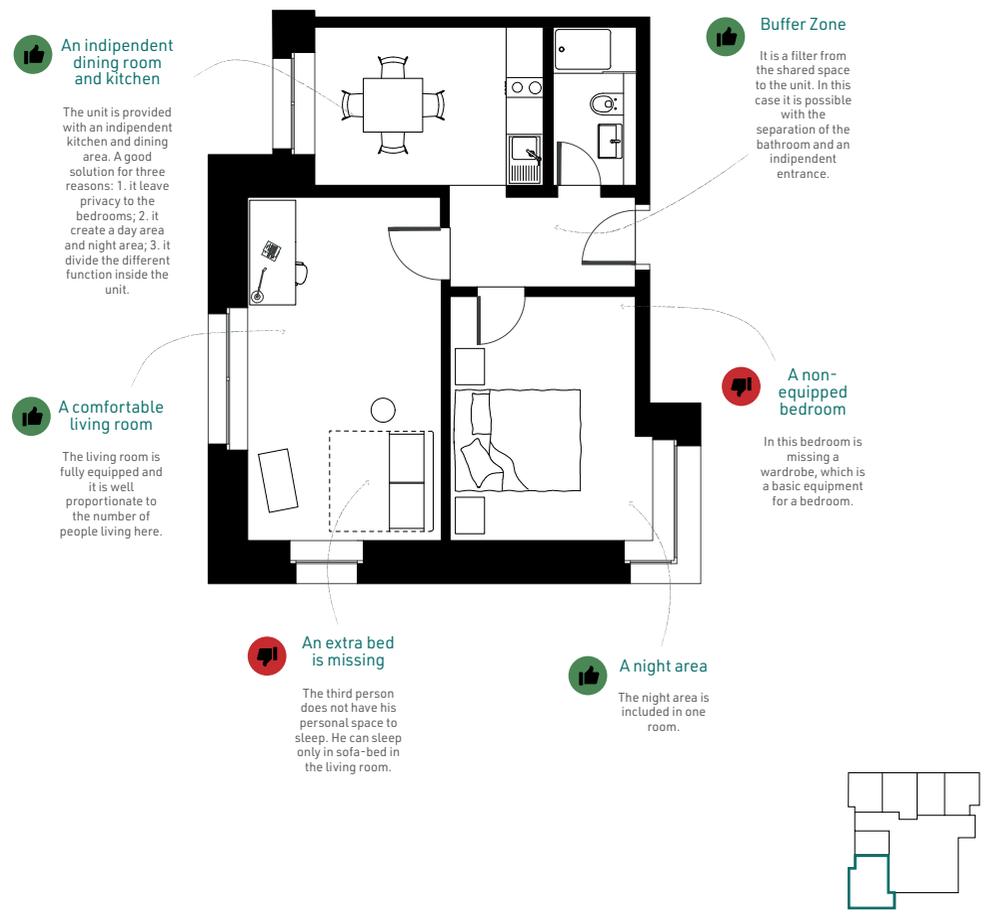


Scale 1:100

Unit -5- Double room Apartment

Dimension: 57.4 mq
 N° of residents: 2 / 3
 Target: No specific

The unit include:



CONCLUSION

The cluster

THE GOOD STRATEGIES

THE MEANDER LAYOUT

The meander shape of the shared space create different areas inside a unique space. Moreover, it implies the disposition of the private units around the shared area. In this way the socialization between the residents is facilitated.

SMALL AND BIG LIVING AREA

The meander shared space help in the creation of corners and areas with different dimensions that represent different facilities or uses of the space. There are three different shared area: the biggest in the centre, with the kitchen and the dining table. A medium area located in one corner with few armchairs and tables, and a medium - big one on the opposite corner provided with armchairs and sofa

THE SHARED BATHROOM

The shared bathroom can be use by guests or other people visiting the house.

THE SHARED KITCHEN AND COMMON DINING ROOM

The strongest place for interaction is given by the shared kitchen and the dining table. Even if all the room are equipped at least with a cooking corner, the presence of a shared kitchen increase the possibility of socialization and interaction between the residents. The dining table offers a solution for eat all together.

INCREMENTABLE STRATEGIES

TPOLOGY OF UNITS

The unit typologies are not designed for families, disable; plus they are not flexible so units can not be joined two by two or with an extra space.

AREAS WITH NOT ENOUGH PIECES OF FURNITURE

The shared space provide different meeting points. Even if some are smaller and designed to be used by not all the residents, the pieces of furniture are not well proportionate to at least half of the number of residents

The units

THE GOOD STRATEGIES

THE BUFFER ZONE WITH THE HALL ENTRANCE

The creation of a hall is a good solution in order to have a buffer zone before entering the proper private space. In all the units the buffer zone include an access to the bathroom, and in some of them it include the kitchen as well.

THE INDEPENDENT KITCHEN

Locating the kitchen in an independent area and not in the living / sleeping area is a good solution when is possible.

ALL THE EQUIPEMENT IN THE UNIT

All the units (except the guest room) are provided with all the equipment: a kitchen, a bathroom, sofa or / and table that can guarantee the resident a living area. All the residents have all the privacy needed.

DIVISION OF BEDROOM FROM THE OTHER ROOM

In the solution with two rooms, the bedroom is designed as a separate room. In this case the room is not provided with the living area equipment but they are located in another room.

SECOND ROOM AS EXTRA ROOM

The presence of a second room is good since it give the possibility to have extra space that can be used not only as living room or dining room, but also as working area or for other uses.

INCREMENTABLE STRATEGIES

SEPARATION OF THE BED NIECHE FROM THE REST OF THE UNIT

In the case of one bedroom apartment, the bed is not divided by the rest of the room by any filter. A curtain for instance will be a good solution to give more privacy and intimacy to the bed.

PIECES OF FURNITURE NOT PROPORTIONAL

All the units should have least contain a wardrobe, an armchair or sofa and a dining table. They should be also proportionate in the number of the residents and if the apartment is one single room, they should be counted as two people are living here.

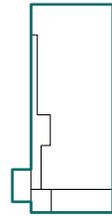
DISPOSITION OF FURNITURE

The disposition of furniture is important since it define different areas inside the apartment, especially in the case of one single room apartment.

SECOND ROOM WITHOUT AN EXTRA BED

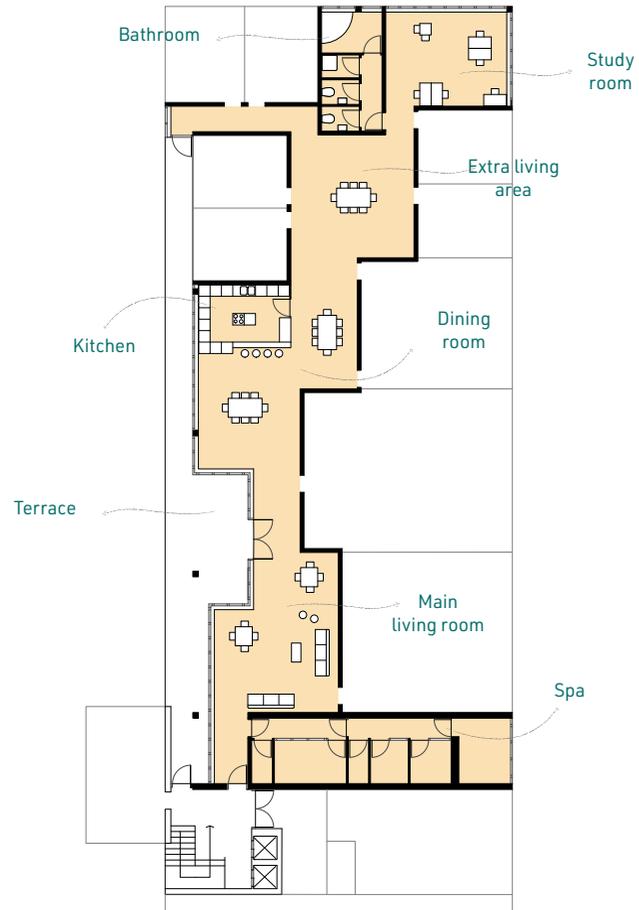
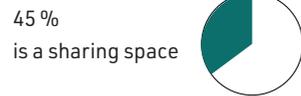
In the units with two rooms, will be a good solution inserting an extra bed or a sofa-bed.

CLUSTER



THE SHARED SPACE

319.7 m²
Mq per person: 16.8- 14.5 m²

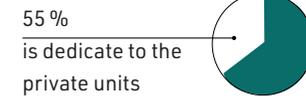


Scale 1:400



THE PRIVATE SPACE

389.9 m²
Mq per person: 20.5 or 17.7 m²



Scale 1:400



THE SHARED SPACE

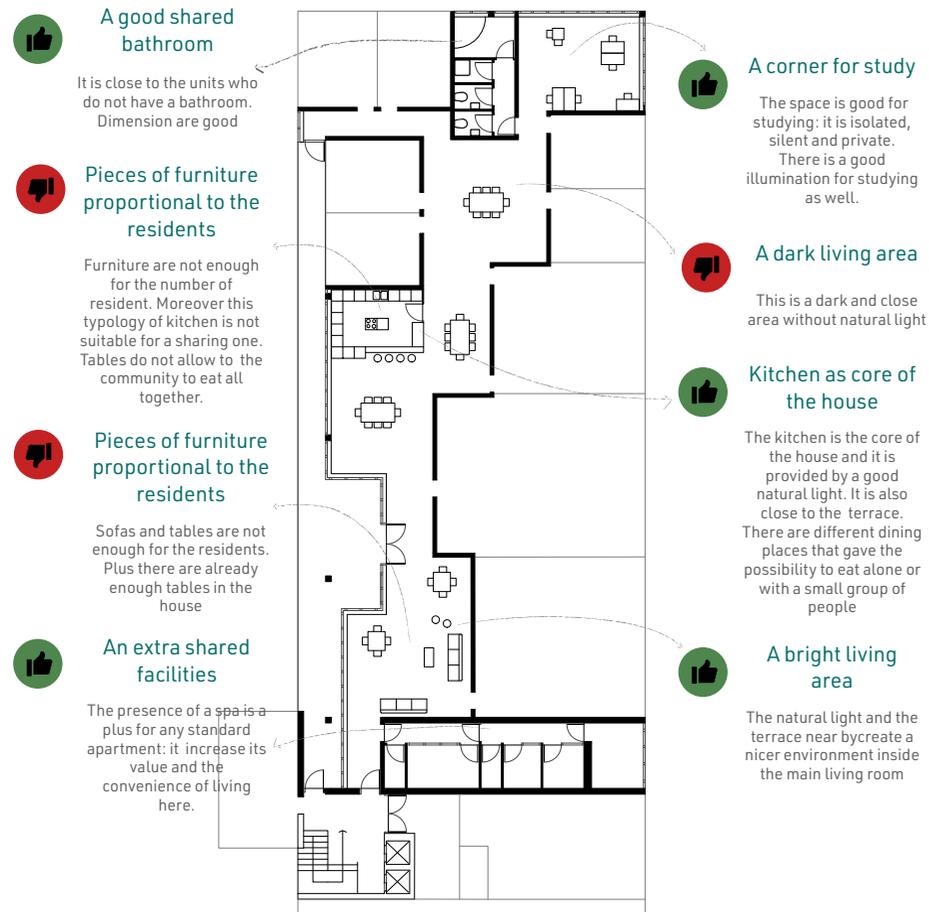
319.7 mq

Dimension: 319.7 mq

N° of residents: 19 - 22

Target: All

The shared space include:



Scale 1:400



THE PRIVATE UNITS

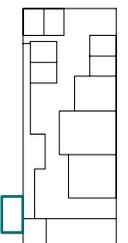
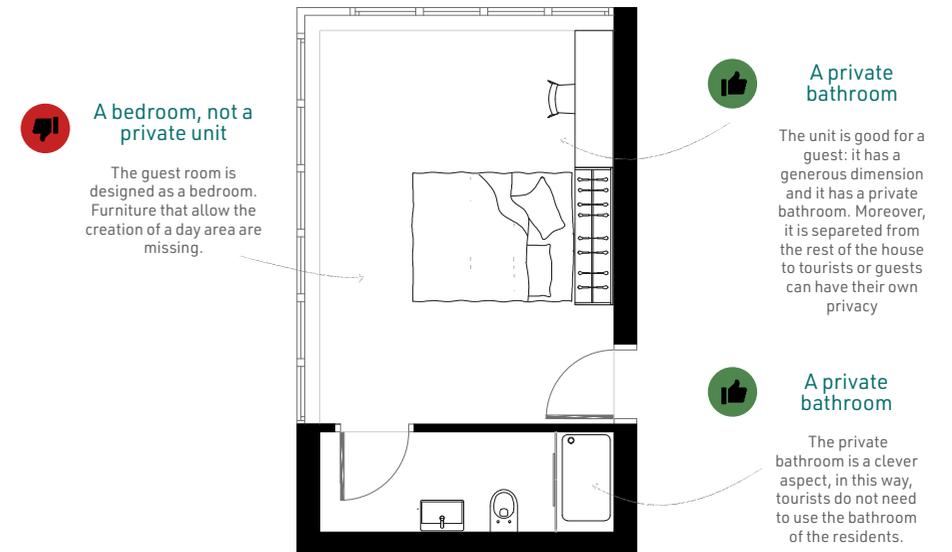
Unit -0-
Guest Room

Dimension: 32.3 mq

N° of residents: 1/2

Target: Guest or Tourist

The unit include:



Scale 1:100

Unit -From 1 to 6- Single room Apartment

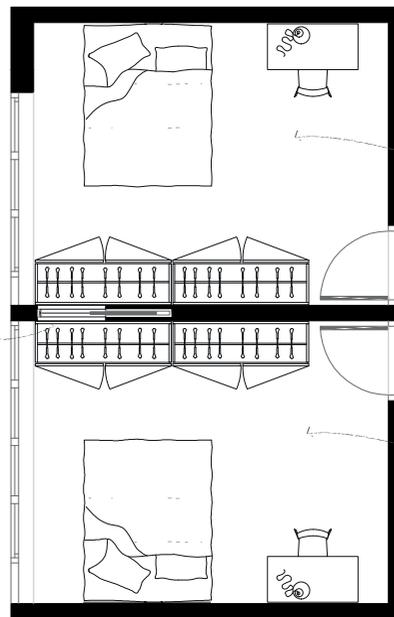
Dimension: 20.8 mq
 N° of residents: 1
 Target: No specific

The unit include:



Flexible units

The bedroom are mirrored themselves in pairs, the wall dividing them include a sliding door that can allow the residents to unify the bedrooms or not.



No bathroom

Even if the bathroom is common and located in a good area of the house, it is still an inconvenience situation



Private bedrooms, not apartment

The private units do not include furniture that transform the space in a living area as well.



Scale 1:100

Unit -7- Double room Apartment

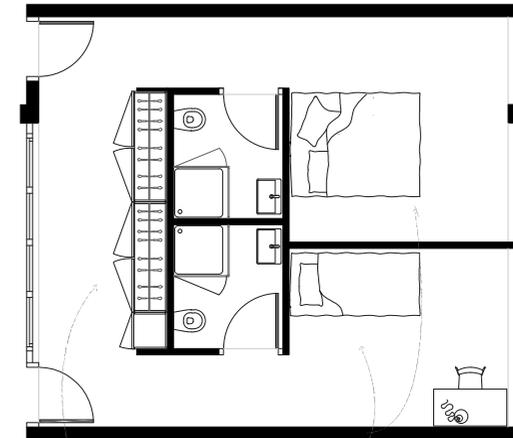
Dimension: 56.5 mq
 N° of residents: 3
 Target: No specific

The unit include:



A comfortable unit

Each resident has his own bathroom, furnished bedrooms and a big wardrobe



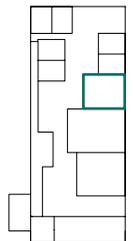
Anonymous buffer zone

Wardrobe are shared and located only in the buffer zone. The buffer zone is also not used in a proper way since it is a space without a function.



Not equipped bedrooms

The position of the beds do not allow the space for a private closet and a desk in one room.

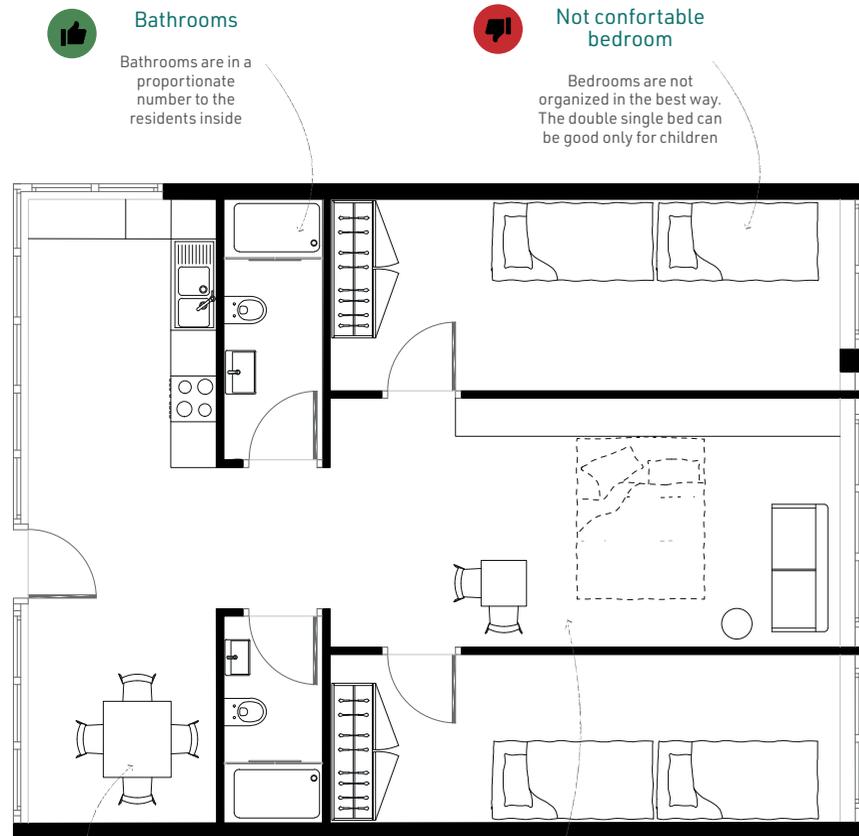
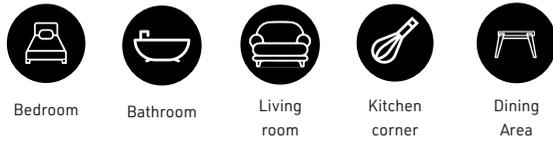


Scale 1:100

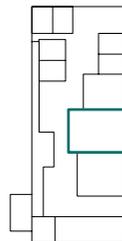
Unit -8- Single room Apartment

Dimension: 96 mq
N° of residents: 4-6
Target: No specific

The unit include:



Furniture not proportionate
The living room is not furnished properly: chairs and armchairs are missing for the six residents.

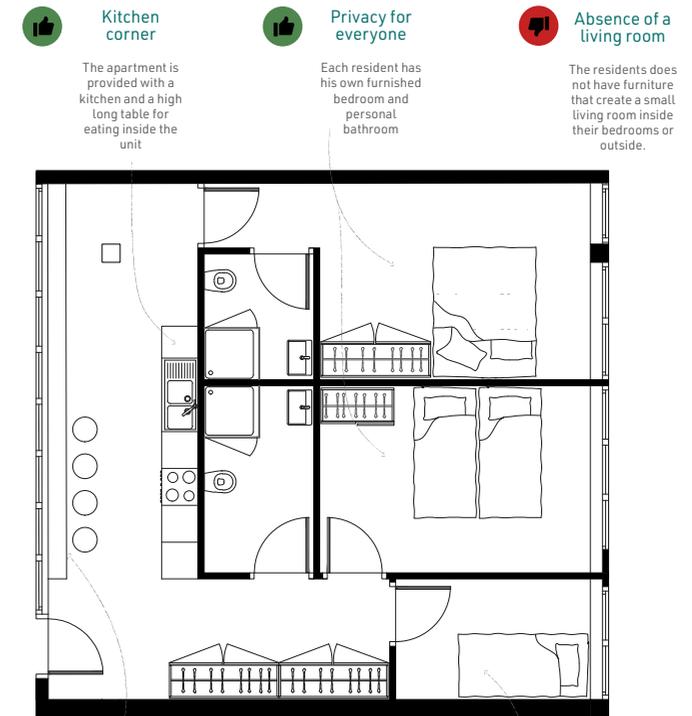


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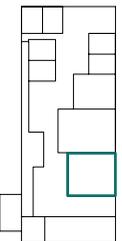
Unit -9- Double room Apartment

Dimension: 80.3 mq
N° of residents: 5
Target: No specific

The unit include:



A bench as table
It is good having a place for eat, but it is not the best solution eating for a family on a long narrow table.



Scale 1:100

CONCLUSION

The cluster

THE GOOD STRATEGIES

THE MEANDER LAYOUT

The meander shape of the shared space create different areas inside a unique space. Moreover, it implies the disposition of the private units around the shared area. In this way the socialization between the residents is facilitated.

SMALL AND BIG LIVING AREA

Thanks to the meander shape, different shared areas are created, using the best of every area. There is a study room, located in the most intimate area of the house and in a bright area; a spa located always in the corner, that used the length of the unit to develop a long but narrow space. There is the kitchen corner, the living rooms and the dining rooms that are located in the central area and directly connected with the terrace

THE SHARED KITCHEN AND COMMON DINING ROOM

The central core of the house is the kitchen, the living room and the dining area: these spaces are so connected that is hard to define a specific function for each of them. They guarantee in this sense, a strong connection and interaction between the residents.

THE SPA

The spa is an extra space that increase the quality of Co- Résidence, since it is a facilities that is normally not present in a standard apartment. Living in Co-Résidence do not offer only an extra shared space, but also facilities that in a normal apartment would not be possible to get.

INCREMENTABLE STRATEGIES

AREAS WITH NOT ENOUGH PIECES OF FURNITURE

The shared space provide different meeting points, in some of them the pieces of furniture are not well proportionate to half of the number of residents

DINING TABLE FOR 8 NOT FOR MORE

The dining table are present in a good number, however since the most of the units do not have a private dining area or kitchen, is important to have a big dining table that can guarantee to the residents to eat all together. It is really important for build a community to leave the possibility of organizing dinner and lunch all together once in a while

THE KITCHEN IS A REAL CORNER

The kitchen is one of the most important facility inside the house. It is then really important that all the residents can cook in harmony one to another. This kitchen is too small, furniture are not enough and the shape itself do not help to more than three people cooking together.

The units

THE GOOD STRATEGIES

DIFFERENT TYPOLOGIES OF PRIVATE UNITS

Co-Résidence is really for everyone: it offer single rooms, a guest room, a double room and two three room apartment. Some of them have all the facilities shared, others can have all the privacy needed inside their room.

THE BUFFER ZONE

The creation of the buffer zone is helping for create a filter between the private area and the shared area. It can contain functions like kitchen, dining space or living area.

THE GUEST ROOM

The guest room is a good strategy since allow the residents to gain money if it is rented or it can become a space useable for a relative visiting. In any case the guest will have his own privacy and his own bathroom, he can live in the house without interfering with the life of the residents.

THE FLEXIBLE ROOM

Single room are mirrored one to another and separated by a partition with a sliding door. It can become really useful in case relatives are living together and they would like to transform the rooms in one single room.

INCREMENTABLE STRATEGIES

PRIVATE UNITS ARE BEDROOMS

The private single units are designed not as a private space for who is living inside but as a normal bedroom. This person does not have any furniture that allow to chill or eating alone if need it. They are obligate to use the shared facilities. This units are also without the private bathroom.

PIECES OF FURNITURE NOT PROPORTIONAL

All the units should have least contain a wardrobe, an armchair or sofa and a dining table. They should be also proportionate in the number of the residents and if the apartment is one single room, they should be counted as two people are living here.

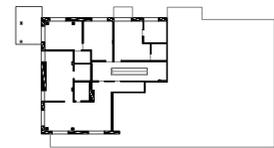
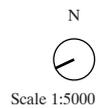
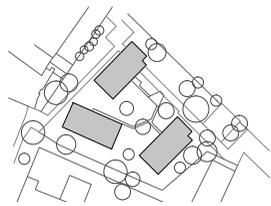
DISPOSITION OF FURNITURE

The disposition of furniture is important since it define the quality of the space. In some apartments the disposition of the bed or wardrobe limitate the use of the space and the facilities inside.

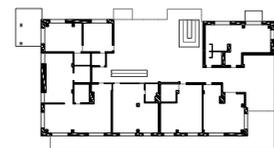
Carpaneto Architekten,
Fatkoehl Architekten,
BARarchitekten

COOP HOUSING AT RIVER SPREEFELD

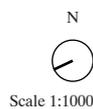
Berlin, Germany
2013



First floor



Ground floor



674 mq



Cluster



*18

N° of
residents



37.4 mq
per person

This Co-Operative project born after different previous projects in Berlin. Its importance deals with a lot of positive characteristics: being close to the centre of the city, low costs, low renting, economy of the space, self-help construction, self-production of renewable energy. It is composed by three blocks which contain three types of spaces: private, communal and public. The communal and public parts are located on the ground floor and on the upper floor, in different terrace or gardens. In the first case we have workshop, kitchen and co-working spaces, while in the gardens we have more chilling and collective activities area. The block included standard apartment and cluster units: the clusters are on an area of 1905 m² and they are designed for people who prefer to share also their house with the others. Since it is a Co-Operative project, people who are living there, participate in the working progress of the building and for this reason the rent are affordable for everyone.

ArchDaily. (2019). Coop Housing at River Spreefeld / Carpaneto Architekten + Fatkoehl Architekten + BARarchitekten. [online] Available at: <https://www.archdaily.com/587590/coop-housing-project-at-the-river-spreefeld-carpaneto-architekten-fatkoehl-architekten-bararchitekten/> [Accessed 23 Feb. 2019]. nies-gables-south-korea/ [Accessed 23 Feb. 2019].



CLUSTER



674 mq



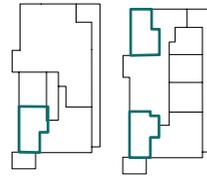
Unit
por cluster



N° of residents
por cluster



37.4 mq
per person



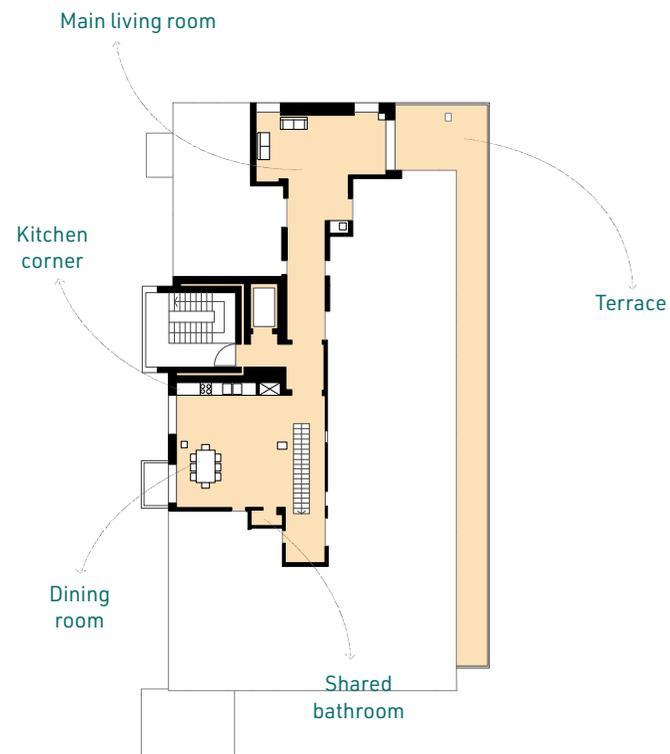
THE SHARED SPACE

179.4 mq

Mq per person: 10.0 mq

26.7 %

is a sharing space



Scale 1:400



THE PRIVATE SPACE

494.6 mq

Mq per person: 24.5 mq

73.3 %

is dedicate to the
private units



First floor

Ground floor

Scale 1:400

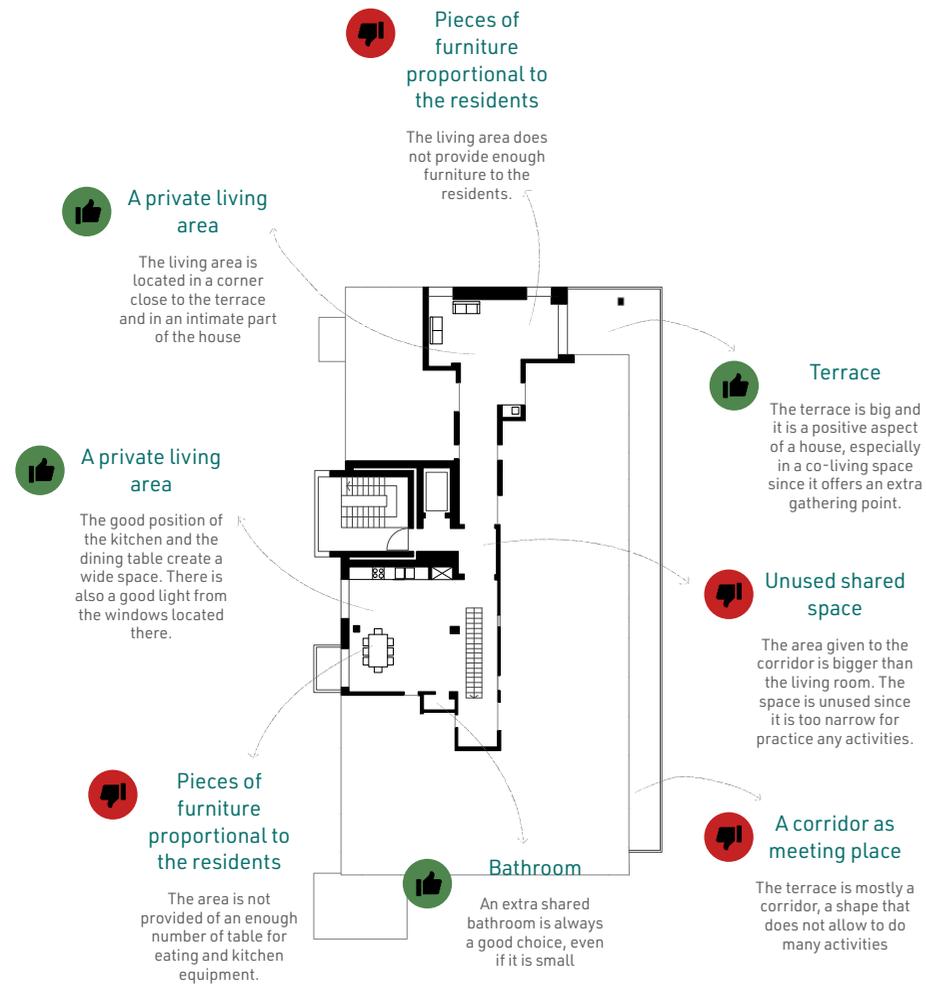
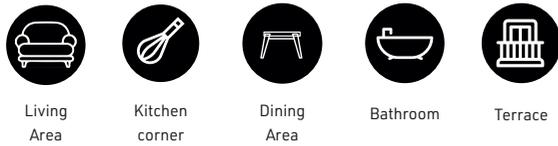


THE SHARED SPACE

179.4 mq

Dimension: 179.4 mq
 N° of residents: 18
 Target: All

The shared space include:



Scale 1:200

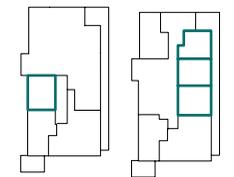
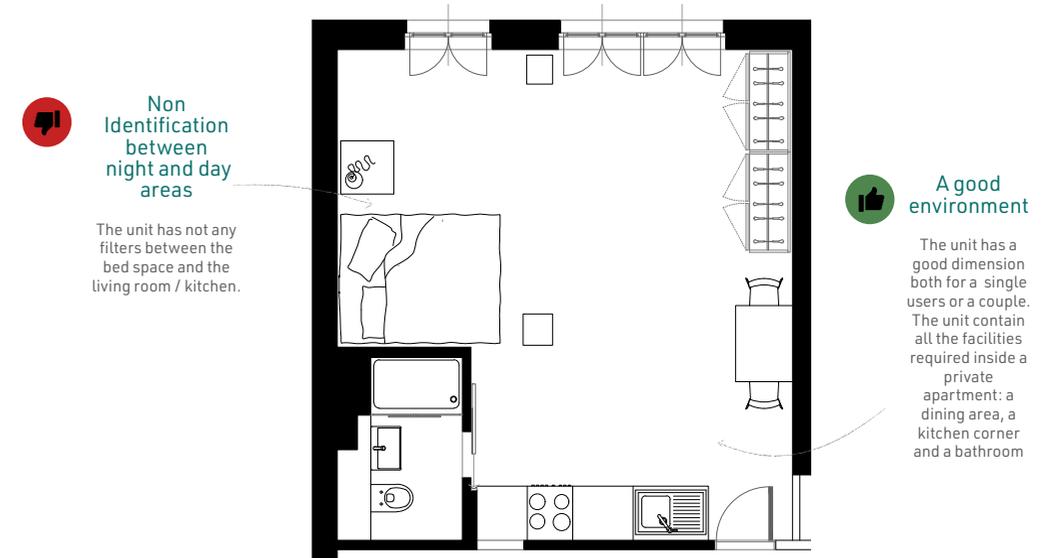


THE PRIVATE UNITS

Unit -1-
 Single room Apartment

Dimension: 44.8 mq
 N° of residents: 1/2
 Target: All

The unit include:



Scale 1:100

THE PRIVATE UNITS

Unit -1- Double room Apartment

Dimension: 46.2 mq
 N° of residents: 1/2
 Target: All

The unit include:



Bed Dining Area Bathroom Kitchen corner Terrace Living Area

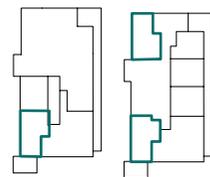
A real apartment inside a co-living house

The house has a good dimension for a couple as a normal apartment. The addition of the private terrace and the shared common facilities increase the quality of living in this unit.



A comfortable living

The unit guarantee a comfortable living for his residents since it include many facilities: a dining room with a kitchen, a bathroom, a bedroom with a living space and a terrace



Scale 1:100

THE PRIVATE UNITS

Unit -1- Double room Apartment

Dimension: 89.2 mq
 N° of residents: 1/2
 Target: All

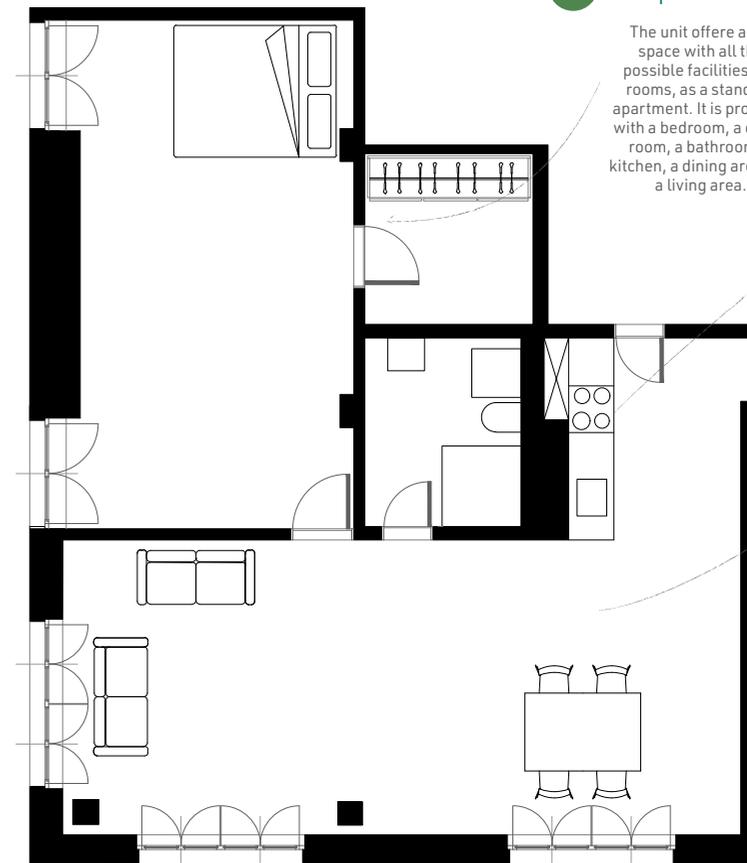
The unit include:



Bed Dining Area Bathroom Kitchen corner Living Area Closet

A complete apartment!

The unit offers a big space with all the possible facilities and rooms, as a standard apartment. It is provided with a bedroom, a closet room, a bathroom, a kitchen, a dining area and a living area.



Kitchen corner
 The living room is big enough to have a space for the kitchen. The kitchen is located in the entrance right on the left of the door.

A big but not flexible apartment
 The unit has a sufficient dimension to host three people inside, but the disposition of the space do not allow the possibility of having a third person.



Scale 1:100



CONCLUSION

The cluster

THE GOOD STRATEGIES

THE MEANDER LAYOUT

The meander shape is a good layout since it allow the private units to have a direct access to the shared facilities. At the same time, the units have access to different facilities one to another so they are obligate to walk in the meander shape to do other activities and consequently, meet other residents.

SIMPLE BUT EFFICIENT

The shared facilities are not much but they are sufficient to stimulate the residents to meet each other. Their dimension in most of the case is good as well.

THE SHARED KITCHEN AND COMMON DINING ROOM

The central core of the house is the kitchen and the dining room. This is visible from the dimension of the room, which is the bigger of the house. The shape of the kitchen is also good for a shared accommodation: it reduce the troubles that can occur in a close shape shared kitchen.

INCREMENTABLE STRATEGIES

THE CORRIDORS

Inside the cluster there is a lot of waste space given to corridors, which became unused area. This is happening both in the inside area and also on the terrace.

PIECE OF FURNITURE NOT PROPORTIONAL

The house do not provide pieces of furniture proportional to the residents inside, both in the dining and living area. Moreover, the table is not big enough to allow all the residents to eat together.

FIRST FLOOR AS LEFT-OVER SPACE

The cluster is located on two floors, however the people living in the upper floor do not have direct access to any of the shared area. The upper floor seems more a standard floor plan of an apartment building, not a plan of a cluster.

The units

THE GOOD STRATEGIES

DIFFERENT TYPOLOGIES OF PRIVATE UNITS

The Coop offers three main typologies of units. One for a single person and the other for a couple. They are also really different one to another, so the resident can choose the apartment that he prefers more.

ALL THE EQUIPEMENT IN THE UNIT

All the units (except the guest room) are provided with all the equipment: a kitchen, a bathroom, sofa or / and table that can guarantee the resident a living or dining area. All the residents have all the privacy needed.

A STANDARD APARTMENT IN A CO-LIVING HOUSE

The double and three rooms apartments offers an independent standard apartment inside the cluster. Who is living here will not only have a private full apartment but also all the common area.

INCREMENTABLE STRATEGIES

LAYOUT OF THE UNIT

One unit is big enough to leave the possibility of an extra person to live inside. However, the disposition of the space will not allow that.

LIMITATION OF THE USERS

Even if the typologies of units is changing, it is not changing the number of residents that can live inside. In all the units residents can be one or a couple.

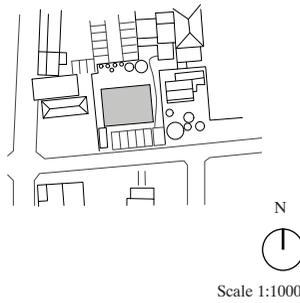
SEPARATION OF THE BED NICHE FROM THE REST OF THE UNIT

In the case of one bedroom apartment, the bed is not divided by the rest of the room by any filter. The consequence is that there will not be any division between night and day area.

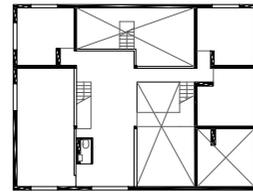
Naruse Ikonuma Architect

SHARE HOUSE LT JOSAY

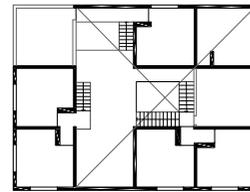
Nagoya, Japan
2013



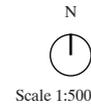
Ground Floor



Mezanine Floor



First Floor



468 mq



Cluster



N° of residents

*13



36 mq per person

The project was designed with the intention of answering an high demand of house in Japan where unrelated person shares spaces like kitchen, living spaces and bathrooms. Based on the principle of the communal living and the capacity from strangers to share naturally the same space with one another, Naruse Ikonuma create a shared occupancy house with communal bathroom, kitchen and living space, that encourage the residents to interact in different ways. The architect says: “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”.

ArchDaily. (2014). LT Josai / Naruse Inokuma Architects. [online] Available at: <https://www.archdaily.com/497357/lt-josai-naruse-inokuma-architects> [Accessed 20 Mar. 2019].



CLUSTER



468 mq



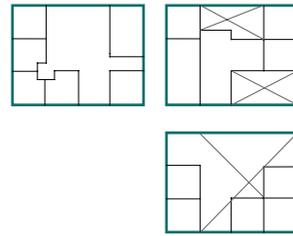
Unit
por cluster



N° of residents
por cluster



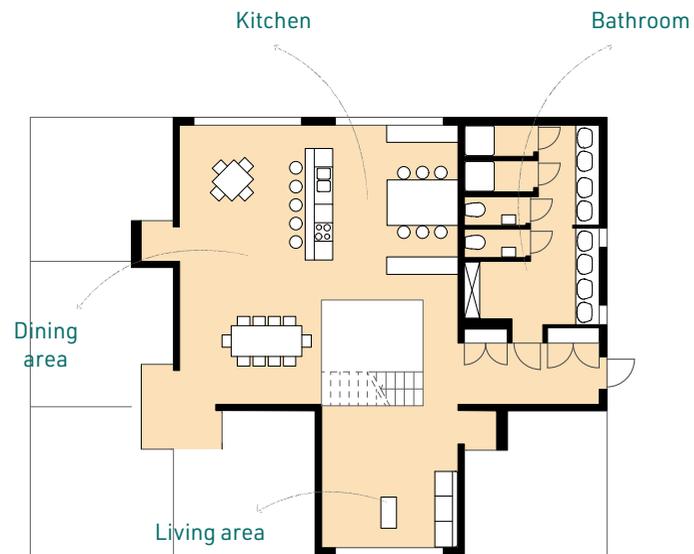
36 mq
per person



THE SHARED SPACE

205.9 mq

Mq per person: 15.8 mq



Ground Floor

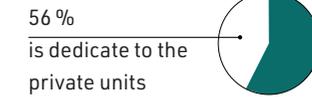
Scale 1:200



THE PRIVATE SPACE

262.1 mq

Mq per person: 20.2 mq



Ground Floor

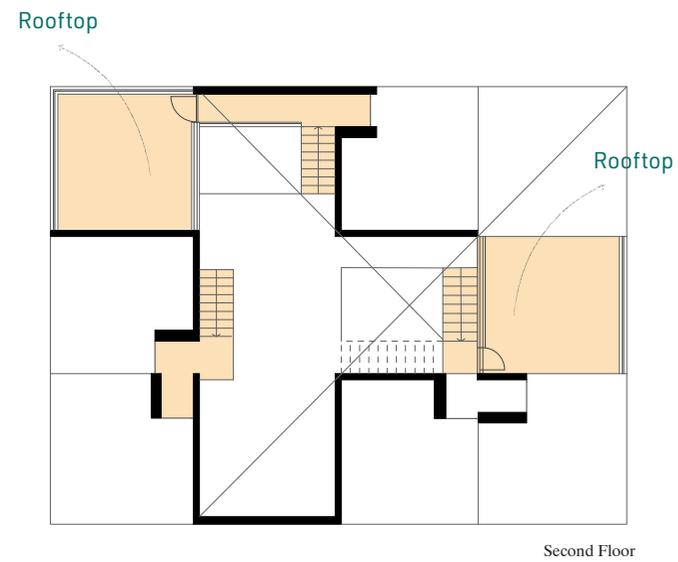
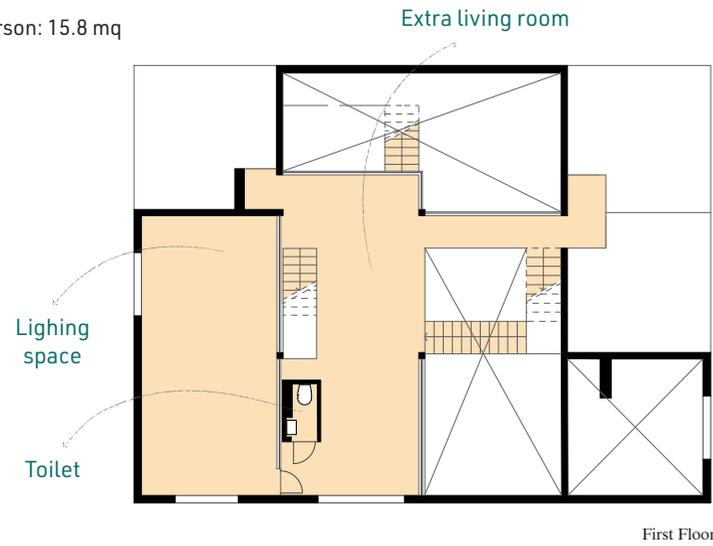
Scale 1:200



THE SHARED SPACE

205.9 m²

M² per person: 15.8 m²



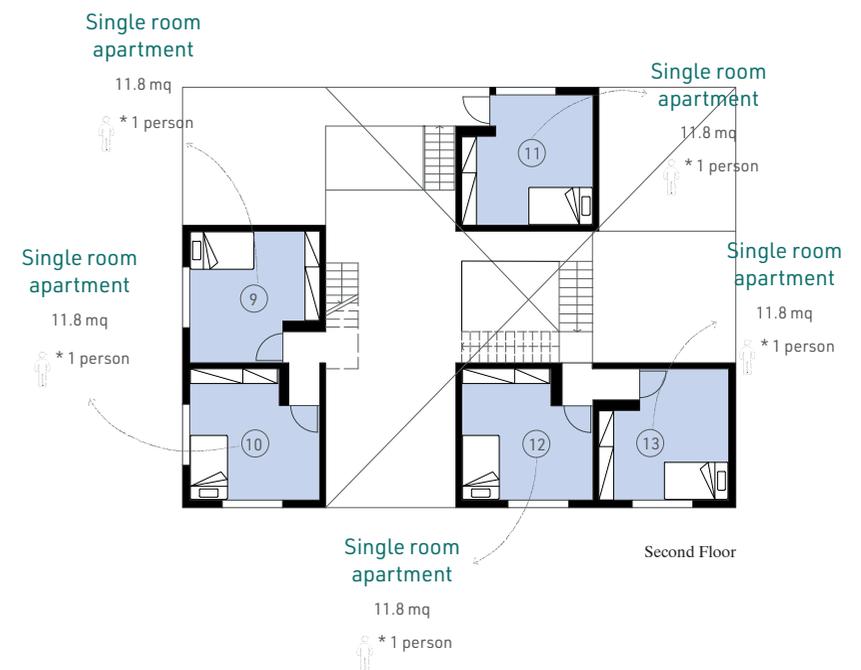
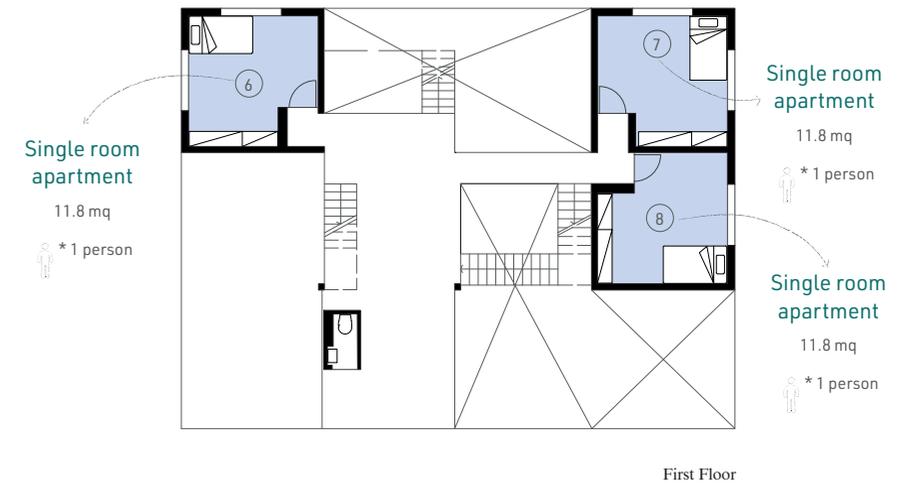
Scale 1:200



THE PRIVATE SPACE

262.1 m²

M² per person: 20.2 m²



Scale 1:200



THE SHARED SPACE

205.9 mq

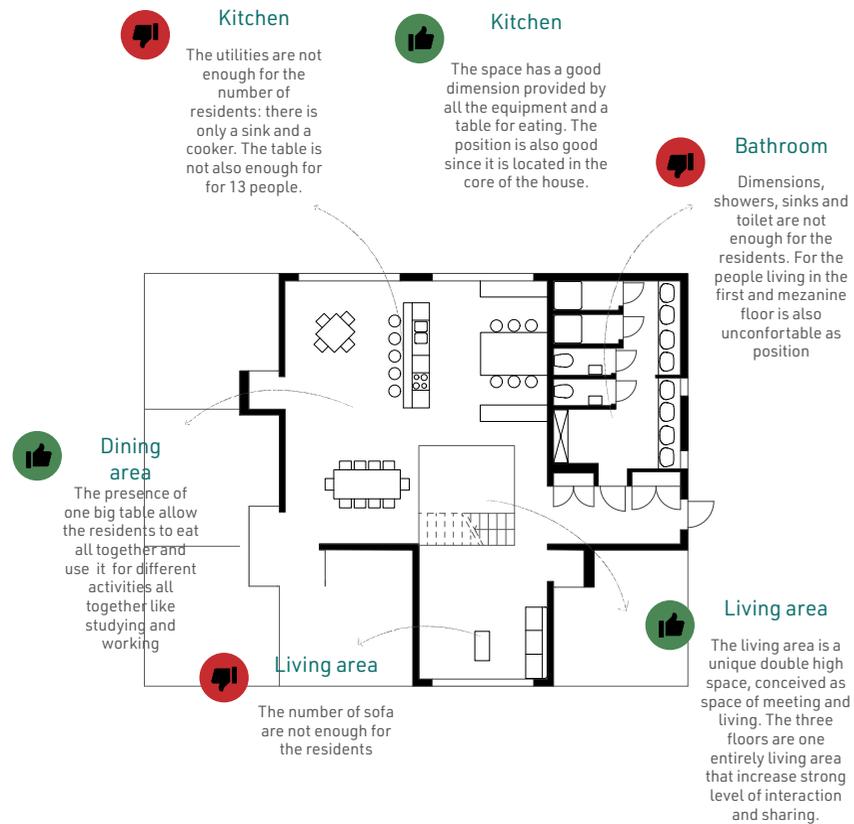
Dimension: 205.9 mq

N° of residents: 13

Target: All

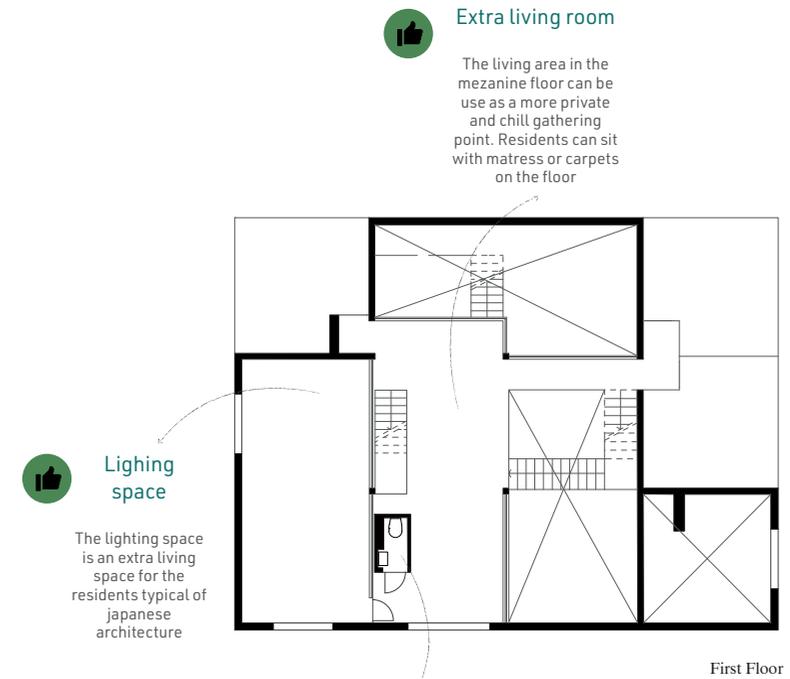
The shared space include:

- 
 2 Living Area
- 
 Kitchen corner
- 
 Dining Area
- 
 1 Bathroom and 1 toilet
- 
 2 Rooftop and lighting space

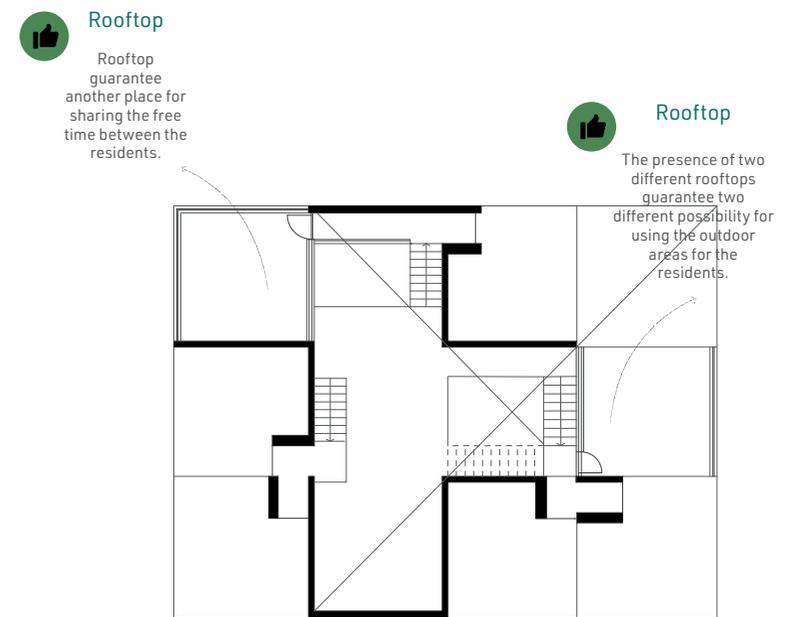


Ground Floor

Scale 1:200



First Floor



Second Floor

Scale 1:200



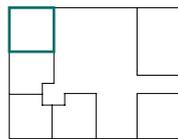
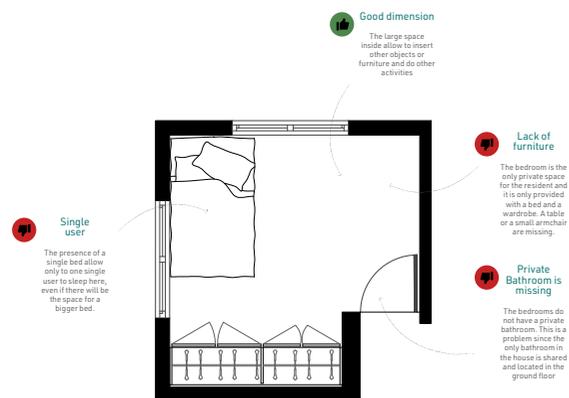
Unit -ALL- Single room Apartment

Dimension: 11.8 mq
N° of residents: 1
Target: No specific

The unit include:



Bedroom



Scale 1:50



CONCLUSION

The cluster

THE GOOD STRATEGIES

THE VOLUME OF SHARED AREA

The common space is articulated in one single volume that occupy the centre of the house and the three floors of the house. Units are located on the border of this volume; this shape help the interaction of the units with the shared space and consequently the interaction between the residents. In few words, when residents came out of their rooms they are already in the shared space and they can be connected with everyone.

SMALL AND BIG LIVING AREA

The single volume create different living area that guarantee different level of privacy, different possibility of interaction and different use of the space. On the ground floor there is the strongest living centre, on the mezanine floor a middle and the first floor contain only the rooftops as living area.

THE SHARED KITCHEN AND COMMON DINING ROOM

The strongest place for interaction is given by the shared kitchen and the dining table. Their location is mixed with the living room and it increase the possibility of socialization and interaction between the residents.

THE ROOFTOPS

The rooftops are important living area that can increase the socialization and collective activities between the residents.

INCREMENTABLE STRATEGIES

THE SHARED BATHROOM

The house present only one shared bathroom located on the ground floor and one small toilet on the mezanine floor. One bathroom is not enough for the 13 residents, also because it is not big enough and it does not have enough piece of furniture. The last floor does not have even a small toilet, while the mezanine floor has just one small toilet.

AREAS WITH NOT ENOUGH PIECES OF FURNITURE

The living area and the kitchen in some case do not provide enough pieces of furniture. The bathroom does not have enough sanitary for all the residents.

The units

THE GOOD STRATEGIES

A BEDROOM

The private space is a bedroom. It is in fact provided by a bed and a wardrobe; it also has an empty space that can be use by the residents as they prefers.

DISPOSITION

The bedrooms are display in a good position one another and in relation with the shared space: they are directly connected and this facilitate the interaction between the residents.

INCREMENTABLE STRATEGIES

LACK OF FURNITURE

Since this is the only private space in the house, it should be provided by more furniture for the residents, like armchairs or a desk. The residents are obligate to use the shared space for studying, work or relax.

A BATHROOM IS MISSING

If the shared bathroom was enough for all the residents it was fine for some rooms not having the bathroom. Unfortunatly in this house the shared bathroom is not enough for everyone so, a private bathroom should be inserted.

ONLY ONE USER POR ROOM

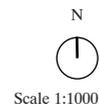
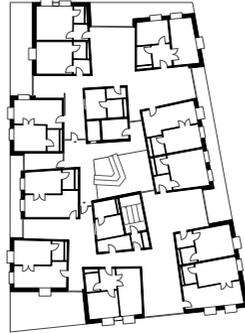
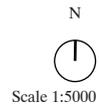
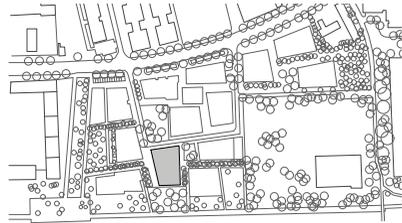
The bed is a single bed and then it implies that only one person can live inside, even if there will be the space for a bigger bed and so for hosting a couple.

Duplex Architekten

MORE THAN LIVING DIALOGWEG 6

Zurich, Switzerland

2009-2015



801.9 mq



Cluster



N° of residents



40.0 mq per person

The building is part of the urban project Mehr als Wohnen realized in the Hunziker Area of Zurich, a composition of different residential projects which seen the cooperation of different architects. All the projects are characterized by a particular attention to offer living solution for the society of today. The Dialogweg is characterized by a central atrium that is the core of the building becoming one of the place of interaction between the different residents. It is also facing the public area inside the cluster through a glass wall. The public area are characterized by a meander shape that embrace the private units. The people living inside this building are different: from the youngers, to the elderly, to family, ex-squatter of the nineties' and a group of youngers from a family home on the ground floor.

Guidarini, S. (2018). New urban housing. Milano: Skira.



CLUSTER 1



311.4 mq



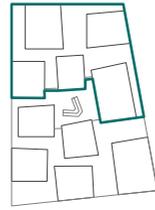
Unit
por cluster



Nº of residents
por cluster



38.9 mq
per person



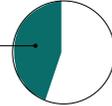
THE SHARED SPACE

150.1 mq

Mq per person: 18.7 mq

48.2 %

is a sharing space



Scale 1:400



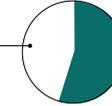
THE PRIVATE SPACE

161.3 mq

Mq per person: 20.2 mq

51.7 %

is dedicate to the
private units



Single room
apartment

25.8 mq

* 1 person

Double room
apartment

41.0 mq

* 2 person

Single room
apartment

25.1 mq

* 1 person

Double room
apartment

37.4 mq

* 2 person

Double room
apartment

36.6 mq

* 2 person



Scale 1:400



CLUSTER 2



401.5 mq



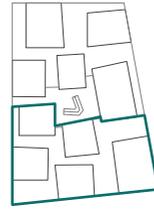
Unit
por cluster



Nº of residents
por cluster



40.2 mq
per person



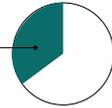
THE SHARED SPACE

123.7 mq

Mq per person: 12.4 mq

30.8 %

is a sharing space



Scale 1:400



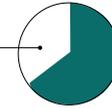
THE PRIVATE SPACE

277.8 mq

Mq per person: 27.8 mq

69.2 %

is dedicate to the
private units



Scale 1:400



CLUSTER 1

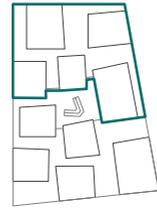
THE SHARED SPACE

150.1 mq

Dimension: 150.1 mq

N° of residents: 8

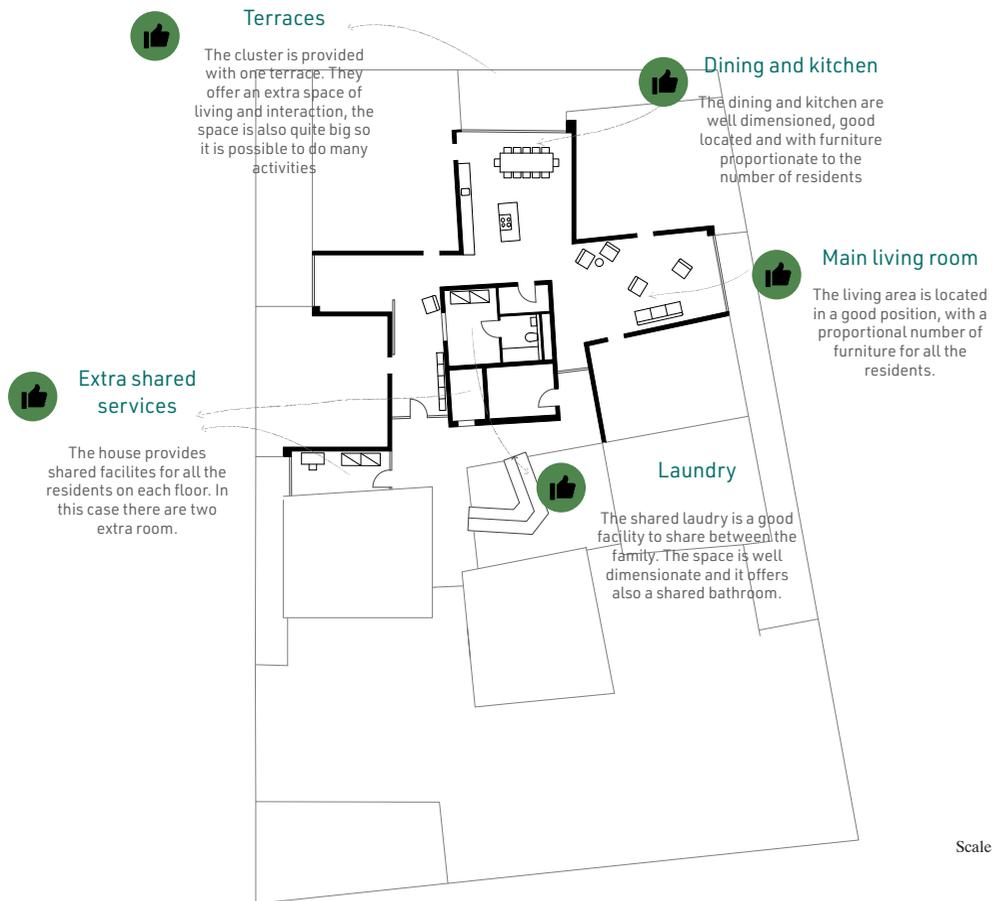
Target: All



The shared space include:



2 Living Area Kitchen corner Dining Area Bathroom and laundry Terrace



Scale 1:400



CLUSTER 2

THE SHARED SPACE

123.7 mq

Dimension: 123.7 mq

N° of residents: 10

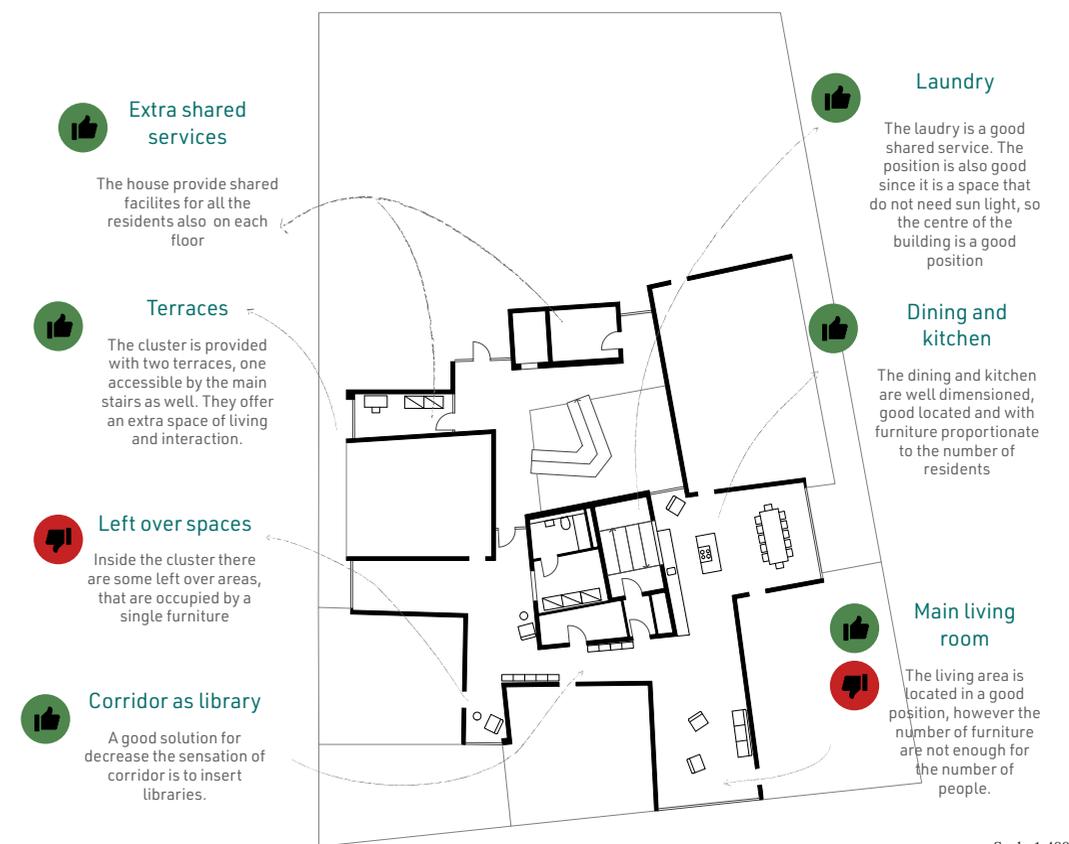
Target: All



The shared space include:



2 Living Area Kitchen corner Dining Area Bathroom and laundry Terrace



Scale 1:400



THE PRIVATE UNITS

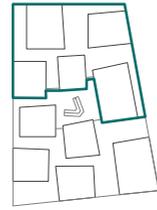
Unit -1a, 2a, 5b, 6b- Single room Apartment

Dimension: 25.1-28.5 mq

N° of residents: 1

Target: No specific

The unit include:



Private bathroom

Inside the unit there is a private bathroom which is always a good solution. The bathroom is in fact what people will less to share

An un-comfortable living area

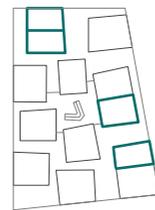
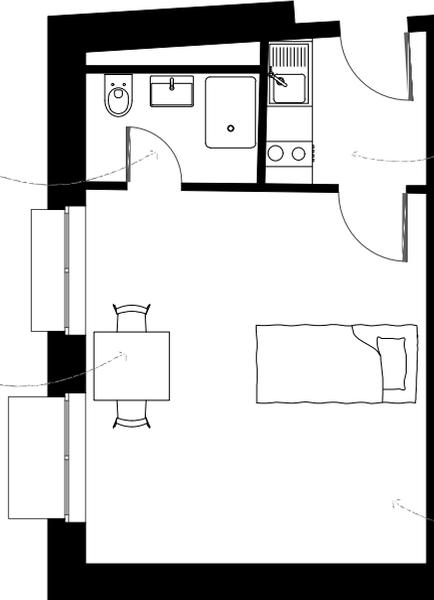
The room is not fully equipped with day area facilities. There are not sofas or armchairs for instance.

Buffer Zone

The filter between the shared area and the private area is given by the entrance and the kitchen corner

Non Identification between night and day areas

Day area and night area are not divided by each other. The bed in fact is not separated by the rest of the room with any filters.



Scale 1:100

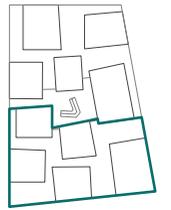
Unit -5a, 3b- Double room Apartment

Dimension: 38.8 - 41 mq

N° of residents: 2

Target: No specific

The unit include:



Buffer Zone

It is a filter from the shared space to the unit. In this case it is given by an independent entrance with a kitchen corner

A night area

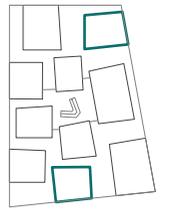
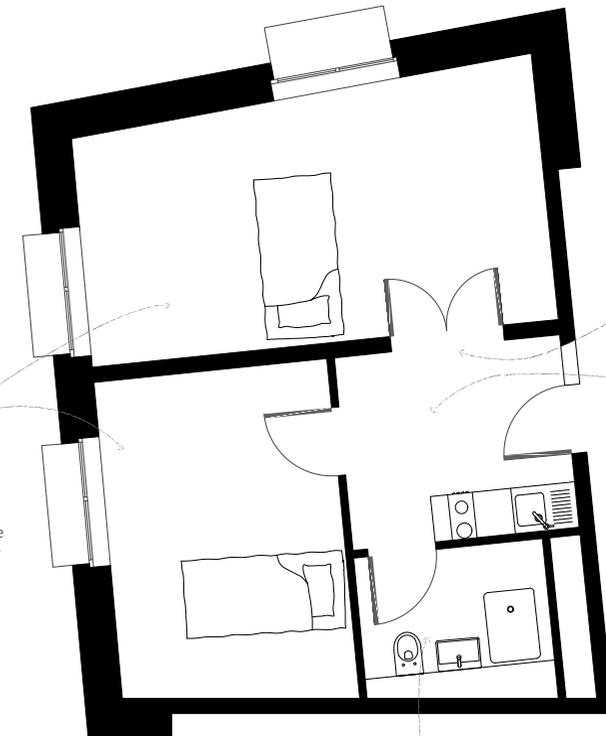
The night area is included in one room. Moreover the residents have one bedroom each.

Absece of living area

Inside the unit there is not a living or dining area for the residents. There are no tables, armchairs or sofa.

Private bathroom

Inside the unit there is a private bathroom which is always a good solution. The bathroom is in fact what people will less to share



Scale 1:100

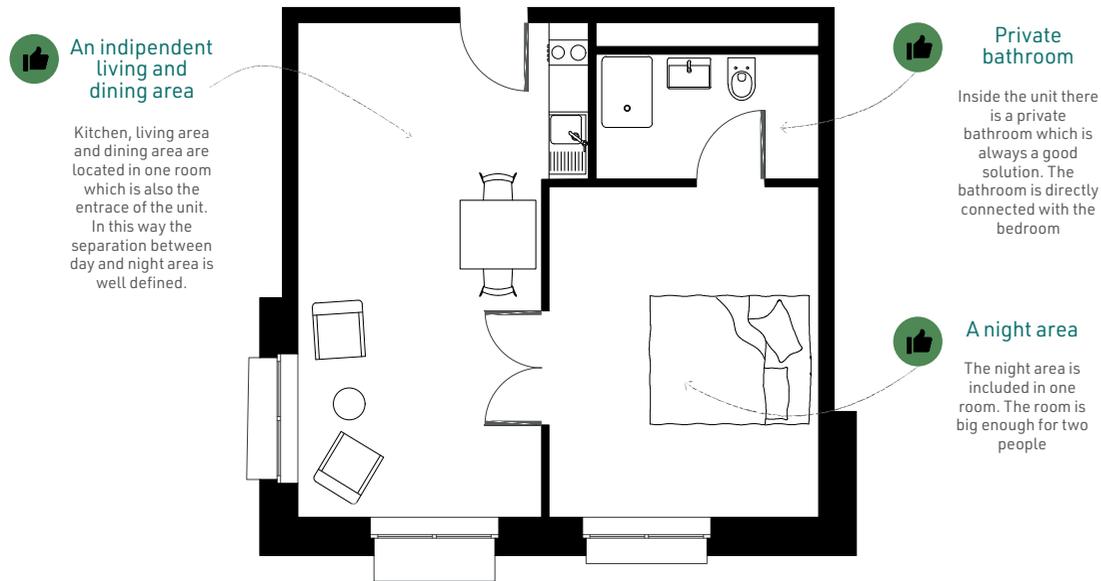
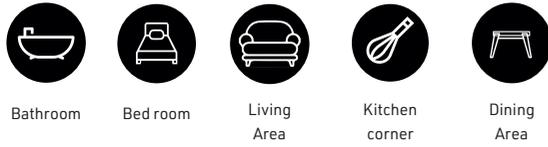
Unit -3a, 4a, 1b, 2b, 4b-
Double room Apartment

Dimension: 36.8 - 41 mq

N° of residents: 2

Target: No specific

The unit include:



Scale 1:100



CONCLUSION

The cluster

THE GOOD STRATEGIES

THE MEANDER LAYOUT

The meander shape is what give character and interest to the project. The shape allow the creation of different areas and the direct access from the units to the shared space

UNITS AS CLOSE SHAPE INSIDE AN OPEN BIG ONE

The shape and disposition of the units allow the creation of a good cluster and a nice shared environment. All the units (or intimate shared facilities) are conceived as close block display inside one big shared space.

THE SHARED BATHROOM AND LAUNDRY

The shared bathroom can be use by guests or other people visiting the house; the laundry is a good facility to share: it reduce costs, energy consume and it is another space of interaction

THE SHARED KITCHEN AND COMMON DINING ROOM

The strongest place of interaction and socialization is represented by the kitchen corner and the common dining room. In this case the furniture are proportional to the number of residents, so that they can have the possibility of eating all together.

THE EXTRA SHARABLE FACILITIES

Between the clusters there are the common stairs, in this location there are also two extra room which provide shared facilities for all the residents.

INCREMENTABLE STRATEGIES

TPOLOGY OF UNITS

The unit typologies are not designed for families or disable people; plus they are not flexible so units can not be joined two by two or with an extra space.

AREAS WITH NOT ENOUGH PIECES OF FURNITURE

The meander shared area in some case create some left-over places which are all equipped with furniture. However, some of them are without a strong character and not really useable. For instance, some single chair with one table are located next to the door of a private apartment: a space where rarely a single person will stay for read or study.

The units

THE GOOD STRATEGIES

THE BUFFER ZONE

The creation of an entrance is a good solution in order to have a buffer zone which separate the public from the private space. The buffer zone contains the kitchen corner.

THE INDEPENDENT KITCHEN

Locating the kitchen in an independent area and not in the living / sleeping area is a good solution when is possible.

ALL THE EQUIPEMENT IN THE UNITS

Most of the units guarantee the maximum level of privacy for their residents. They include in fact a kitchen corner, a dining area, a bathroom and a bedroom

SEPARATION OF DAY AND NIGHT AREA

Day and night area in most of the case are separated with the creation of different rooms.

INCREMENTABLE STRATEGIES

SEPARATION OF THE BED NIECHE FROM THE REST OF THE UNIT

In the case of one bedroom apartment, the bed is not divided by the rest of the room by any filter.

ABSENCE OF DINING / LIVING AREA

Some units are not equipped with the minimum furniture for creating a day area: armchairs, sofa, table with chairs.

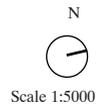
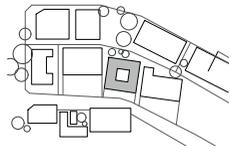
Archihood WXY

THE GAP HOUSE

Bokjeong-dong, Seongnam,

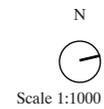
Korea

2014-2015



Ground floor
Common space

Plan type
Clusters



664.5 mq



Cluster



N° of
residents



36.9 mq
per person

The project is located in a university area of Bokjeong-dong, in South Korea and it wants to answer to the biggest request of students- dorms and houses. The area was already rich of multi-functional units, study places and students dorms, but however they were built without considering the presence of gardens, out-door spaces or common space with generous dimensions. The architects in this case conceive the building as a composition of four blocks facing a central court, these four blocks are interrupted by long balconies that create nice perspective and open-air meeting spaces between the house, the internal court and the exterior of the urban context. The house is conceived in order to leave enough privacy to the students through personal bedrooms, but at the same time, space of interaction and common living that create a confort and nice environment between the residents. The internal court is also contributing to increase the interaction between the residents.

Mairs, J. (2019). Seoul apartment block by Archihood features gabled corners. [online] Dezeen. Available at: <https://www.dezeen.com/2015/08/21/seoul-apartment-block-housing-archihood-wxy-balconies-gables-south-korea/> [Accessed 23 Feb. 2019].



CLUSTER



99.5 mq



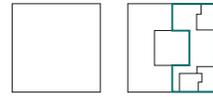
Unit
por cluster



N° of residents
por cluster



33.1 mq
per person

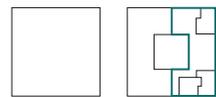
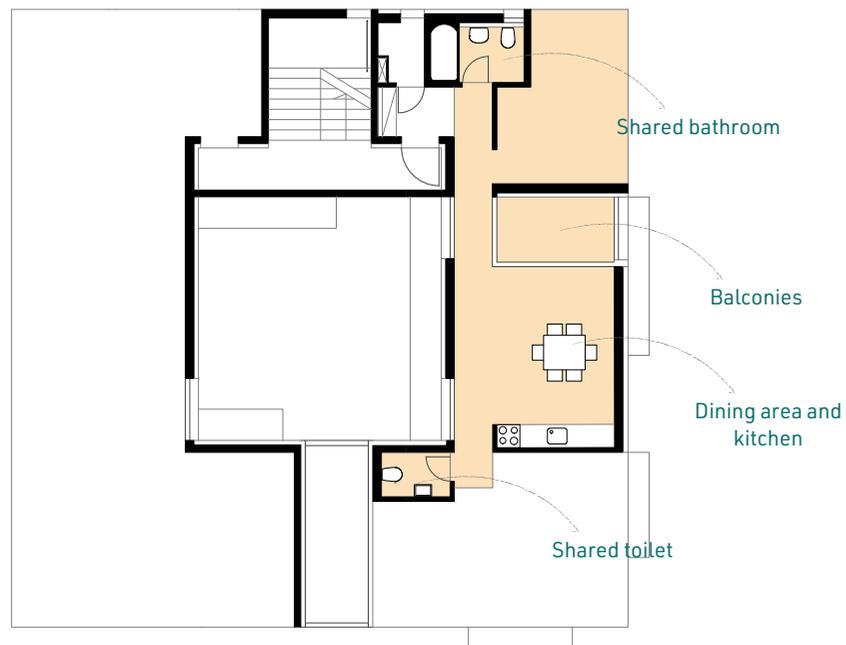
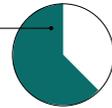


THE SHARED SPACE

65.7 mq

Mq per person: 21.9 mq

66 %
is a sharing space



Scale 1:200

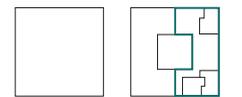
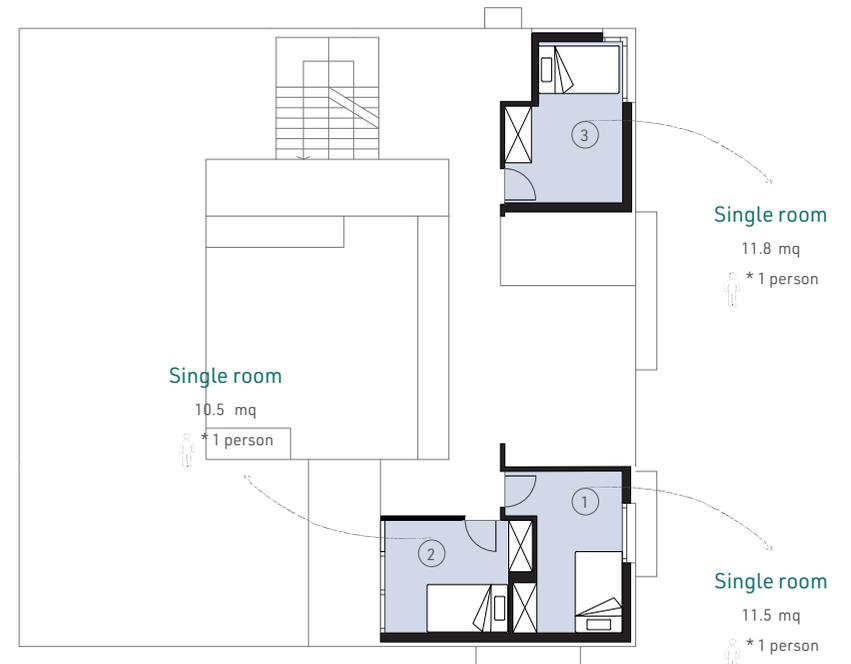


THE PRIVATE SPACE

33.8 mq

Mq per person: 11.2 mq

36 %
is dedicate to the
private units



Scale 1:200



THE SHARED SPACE

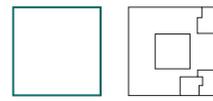
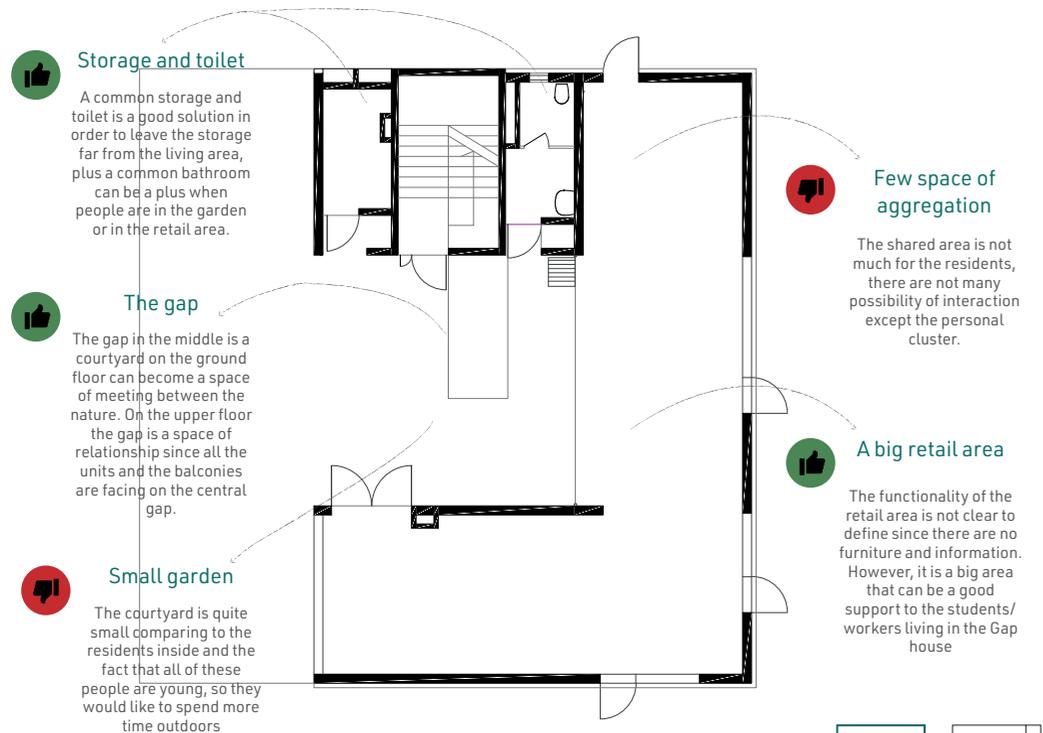
The common courtyard
263 mq

Dimension: 263 mq
N° of residents: 18
Target: Students

The shared space include:



Bathroom Terrace Storage Retail



Scale 1:200



THE SHARED SPACE

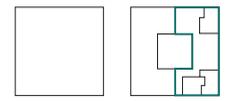
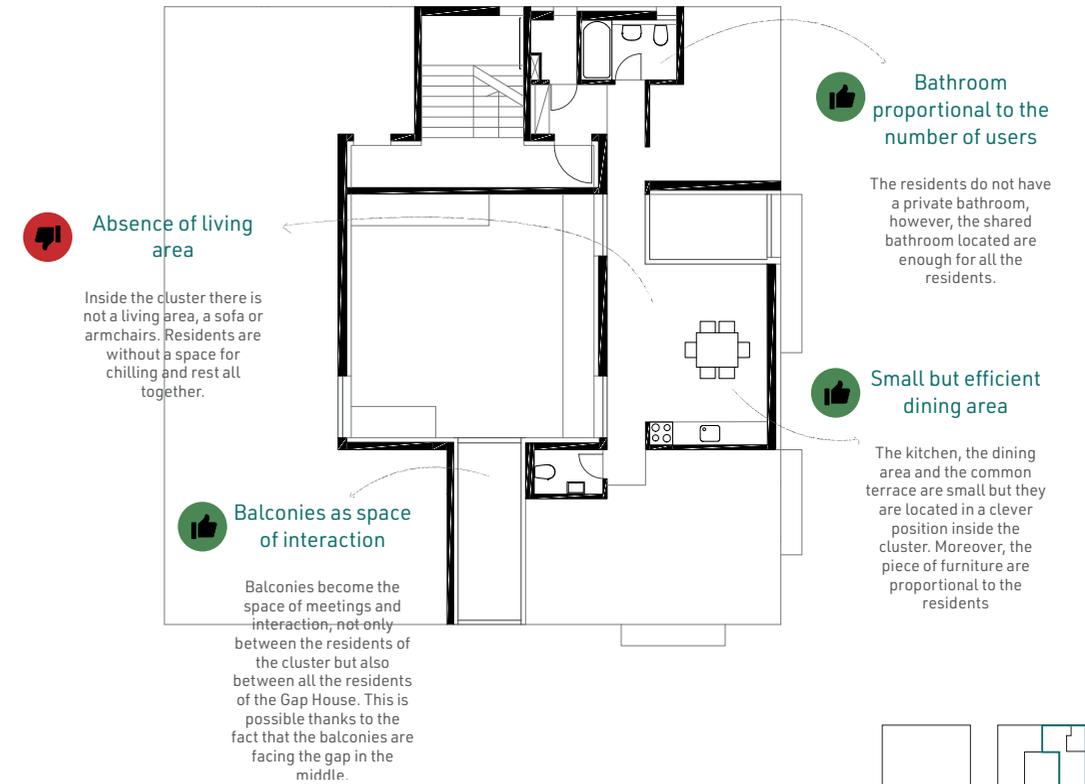
The common courtyard
65.7 mq

Dimension: 65.7 mq
N° of residents: 18
Target: Students

The shared space include:



Kitchen corner Dining Area Bathroom Terrace



Scale 1:200



THE PRIVATE UNITS

Unit -1,2,3 -
Single room Apartment

Dimension: 11.8 - 11.5 - 10.5 mq

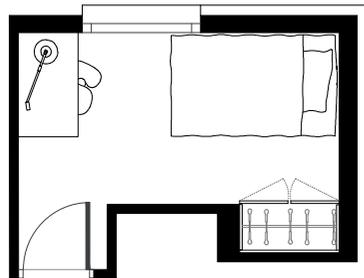
N° of residents: 1

Target: Students

The unit include:



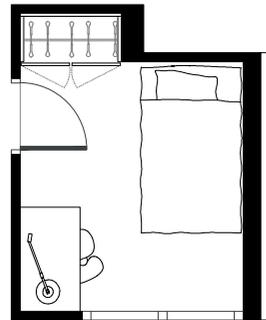
Bed



Unit 1

A bedroom not a private space

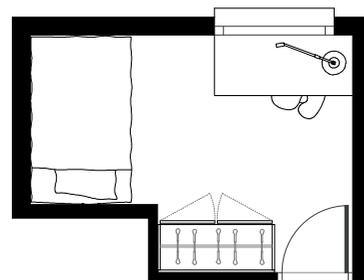
The private rooms are not a private space but simply private bedroom. They are without any living facility, like sofa or armchair.



Unit 2

A small space

The unit has a small area, so the private space for each resident is really limited.



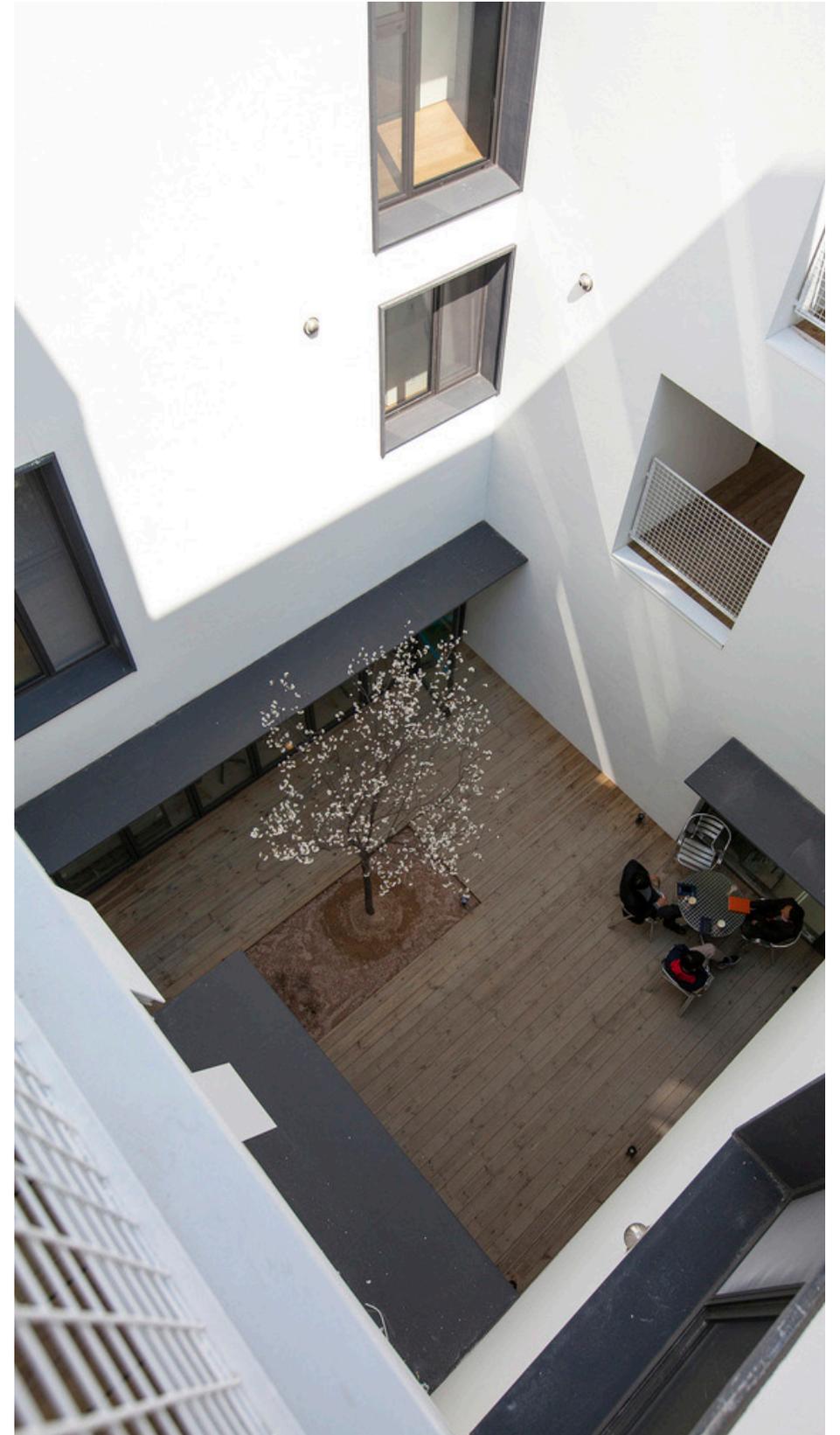
Unit 3

Equipped bedroom

The bedroom is furnished with all the equipment a bedroom for a student need: a bed, wardrobe and a desk.



Scale 1:100



CONCLUSION

The cluster

THE GOOD STRATEGIES

THE GAP

The gap in the middle of the building is a good strategy. On the ground floor in fact the gap became a courtyard where the residents can spend time together. On the upper floor, the interaction can happen thanks to the balconies that are cutting the building and are facing the centre of the courtyard: users can see each other and interact one to another.

PROPORTIONAL NUMBER OF FACILITIES

Inside the building the pieces of furniture and the facilities are display in a proportional number compared to the residents.

A NOT CHAOTIC LIVING

The disposition of a common generic area and small space of agglomeration insidet the clusters guarantee a private and quite living even if there are many residents inside.

INCREMENTABLE STRATEGIES

FEW SPACE OF INTERACTION

Despite the area on the ground floor, there are not other generic space of meeting and gathering inside the house. On the ground floor also the facilities are not well defined, so it is not totally clear how much this spaces can help the interaction between the users.

MORE GREEN AREAS

The courtyard space is quite small compared to the possibility that the ground floor can give. Most of the space is dedicated to retail areas or storages. The incrementation of a green furnished area can only increase the possibility of interaction between the students.

MORE SPACES FOR STUDENTS

The users are clear, unfortunately the Gap house does not contain any shared facilities related to the users hosting. There are not study room or libraries for instance, or working space.

The units

THE GOOD STRATEGIES

MANY CLUSTERS, MORE ORDER

The Gap house divide each floor in two cluster, in this way the co-habitation became more private and even if the students need to share everything, the sharing will be less confusing or disturbing

PROPORTIONAL NUMBER OF FACILITIES

Inside the cluster the pieces of furniture and the facilities are display in a proportional number compared to the residents: dining room, kitchen and bathrooms are proportional to the number of people living inside

THE BALCONIES

Balconies are located next to the dining and the kitchen, this space became more bright and interesting. They are also a good solution for make the residents from the same floor or different, interact one to another .

INCREMENTABLE STRATEGIES

WHERE IS THE LIVING ROOM?

Each cluster is not equipped with a sofa or armchairs that can create a living area. The living area is not present as well inside the bedrooms, so the residents of the Gap house do not have a space to chill at all.

PRIVATE UNITS AS BEDROOMS

The private units are bedrooms and not a private space itself. They are not provided with any living furniture, so that the resident here can only sleep and study.

WHAT WE HAVE LEARN FROM THE CASE STUDIES

The case studies proposed were used to understand what are the possible strategies that can be used for design a co-living project; at the same time, they were also useful to understand the critics and complications of the shared living. What has been learn from the case studies can be summarize as follow:

THE CLUSTERS

The meander layout: a meander layout of the shared space creates different areas inside a unique space and gave the possibility to the units to have a direct access to the shared area. The creation of different areas implies the possibility of inserting different facilities and the creation of a core which is the centre of the house and the ideal meeting place of all the residents. The meander layout implies that the residents must walk though the entire space to reach a facility or another, the consequence is that will be easier to meet other people and socialize.

Many facilities inside one space: strictly connected to the meander shape, the creation of one single space with different area inside offer a more valuable common space, with more facilities that someone will not be able to have in a standard apartment. The different areas are not separated by walls, but only by furniture: sofa, armchairs or wardrobe define the different possibility of the space offered by the shared area.

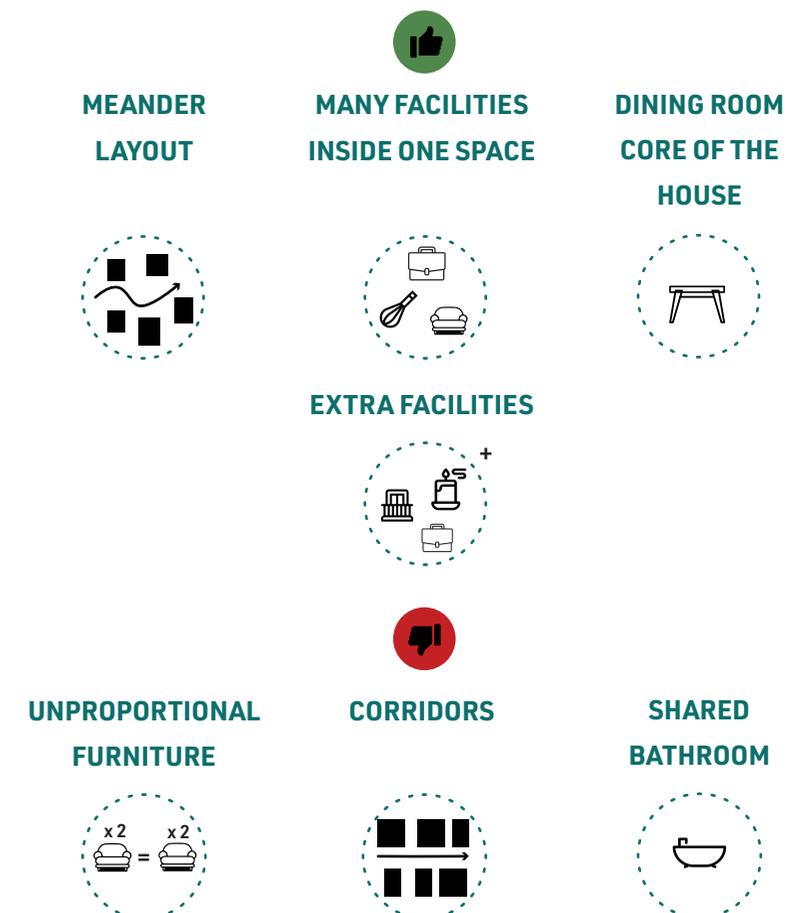
Kitchen and dining as core of the house: eating and cooking together is defined as one of the main aspect that can help the relationship between people. It is important guarantee a space for eating all together and consequently a kitchen big enough to be used simultaneously by more than two families. The kitchen and the dining area should be located in the centre of the house.

Extra facilities: the insertion of facilities like study room, play room, workshops or a spa are a big plus for the shared houses. They offer a service that were not be possible to found inside a standard apartment, it is then a service that increase the value of the shared house.

Another good strategy is represented by the presence of a common terrace or balcony, since it is always an extra space useable for meeting and gathering that can increase the possibility of interaction between the residents.

Inside the cluster we identify some main problems that influence negatively the co-habitation. The first problem recognizable was **un-proportion between the piece of furniture and the residents:** armchairs, sofa, chairs and table in

some case and some areas were not enough to satisfy half of the number of residents living here. It is an important aspect to consider since without furniture, people can not spend time together and consequently not socialize. The attention must be keep for the kitchen and the dining table as well, in order to not create a confuse situation of cooking and leaving the residents to eat all together. In some case we notice a second issue, some **spaces were left-over** or the **area given to corridors** were too big: in a shared apartment all the corners of the shared area must be something specific, plus corridors should not exist since they are only a lost of space. Finally, if the **bathroom is shared** between two or more residents is important that it would be placed in a correct number and dimension proportional to the resident.



THE UNIT

Units should have **different configurations** that can be used for **different type of users** and can offer different typologies of spaces. This characteristic was not always present in all the case studies, some of them in fact offers units only for couples or singles; others are offering small spaces that would not be capable to host an elderly.

Inside the unit is also important to **define a day area, a night area** and if it is possible a **buffer zone** that separate the shared area from the private one. In almost all the case studies with one single room apartment, the bed was not divided by the rest of the room by any filter; the consequence is that there is no division between night and day area. In the case of units composed by more than one room, the separation between night and day area was given by the rooms themselves, even if some of the rooms were not equipped by all the furniture. The insertion of a buffer zone helps the separation from the shared to the private area, it is a filter that can be occupy by the bathroom, kitchen or the dining area.

Living in a **private apartment** inside a shared house is a great advantage: these types of units are equipped with all the facilities and the furniture need: a private bathroom, kitchen and dining area are instruments that will create the co-habitation easier and harmonic; when people would like to eat together or socialize they can always cook or eat in the shared area. They are particularly useful for families since they can have all the privacy needed.

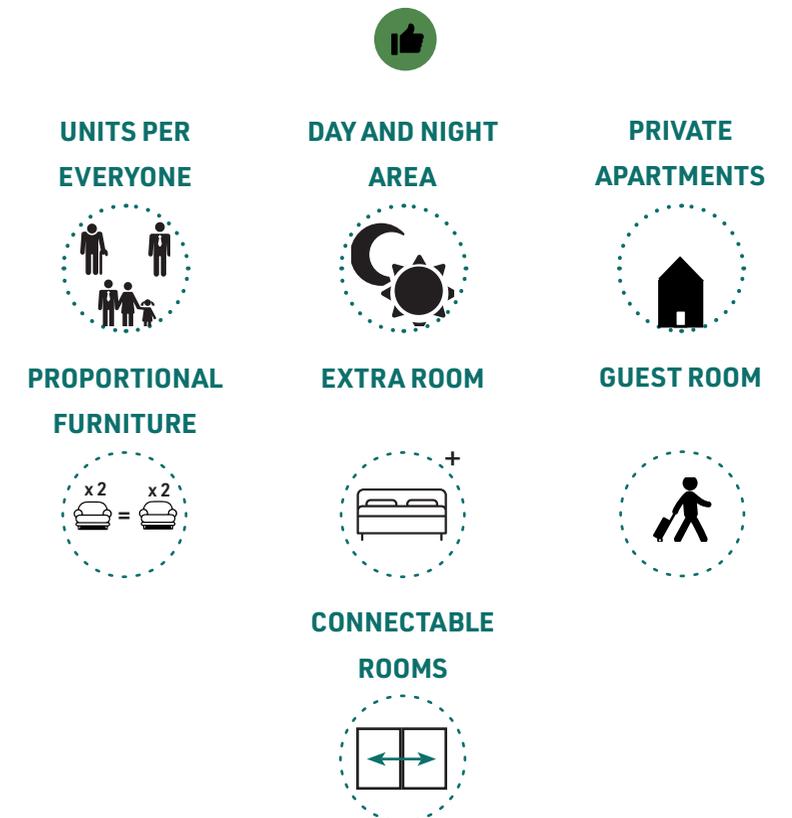
Related to the presence of extra facilities there are cases where the bathroom is shared and the only private space is composed by a bedroom. This is an uncomfortable living situation since sometimes the dimension of the **shared bathroom** is not enough for everyone; at the same time if the only private space is composed by a bedroom is a negative side since all the units should have a social area inserted to relax without using the common one.

Inside the unit is then really important the attention given to the **furniture and their disposition**: their disposition can change a lot the layout of the room or the house and create a more interesting living environment; as the shared space also inside the unit the furniture should be proportional to the number of people living inside.

The units have also other positive characteristics. First of all the presence of a **second room** that work as extra space and extra room: it gives the possibility

to have an extra space that can be used as living or dining room, but also as working area or as an extra bedroom. Inside the unit would be interesting to create spaces that can be **unify one to another**; this was visible in one case where thanks to the sliding door inside the wall, the units can be unified or leave separate.

Finally, A good strategy is also the insertion of a **guest room**, a room designed to host tourists, guests or relative visiting; can be an extra way for the residents to gain money for the community, it can be located far from the residents part and not directly connected to the shared area, in this way guests will have a personal private space without interfering with the life of the residents.



V.

PROJECT

CO-LIVING

WHAT IS A CO-LIVING APARTMENT?

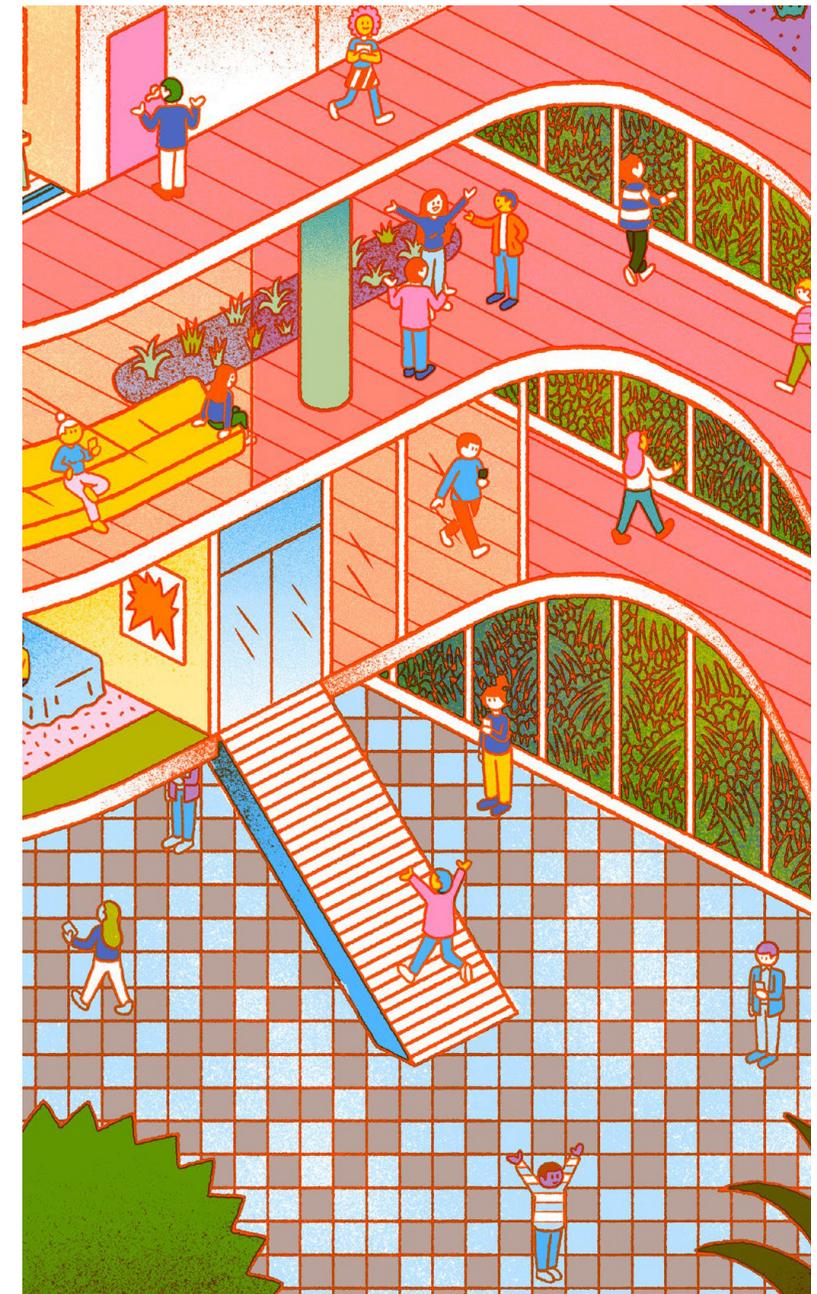
Co-Living is one of different existing typologies of shared living; the choice to focus our attention on this typology of habitation is given by multiple reasons. First of all, it is in our interest to analyse and study a typology of living that can be a permanent solution for the people of today and next generation: it is always harder satisfying the residents request in terms of dimensions, facilities, location and price and it is always harder for contemporary people to have a permanent house in their life that can satisfy all the characteristics and be adequate for them in the future. Secondly, it is in our interest provide a residential solution to the widest range of population: from the youngsters to the oldest, with a mixed type of users in terms of ages, work and backgrounds. Third it is also important to choose a typology of accommodation that better reflect the reality and actual living conditions, already explained in the first chapter which are the economic crisis and the social changes. Finally, the idea was to study an habitation typology that could become one of the main choice in the future, based on what are the current data and requests of the market.

But what exactly is a Co living apartment? Called by the Swiss “Cluster-Wohnungen” or by the French Architecture company Star Architect “Co-Residence”; it is an evolution of the swiss housing typology call “Wohn-Gemeinschaft”, shared apartments with a number of bedrooms from six until twelve and shared bathrooms. A Co-Living apartment is characterized by the aggregation of small units independent to each other but connected to a shared common space. Each unit, owned by a single family, is composed by one or two bedrooms with generally a small bathroom and sometimes small kitchen and living room; while the shared space is an assemble of different spaces connected one another, living room, dining room, kitchen, bathroom, play room, study room and work place. These solutions are not designed for a type of user in specific but for everyone who would like to live in a shared apartment, for people who are alone or in a traditional family and would like to live inside a big group of people and in a more affordable house; where of course, they can always take their private time in their private space, whenever they like. (Guidarini, 2018) It is totally different from the other forms of co-habitation like the co-housing or living as service apartments: units can be variable and include all the facilities of a normal apartment or few of them. Each family are sharing with the other residents living room, dining room and kitchen, sometimes also shared bathroom, guest room, study room and laundry. Another difference is given by what the co-living offers to their residents and the contract of accessibility: co living apartments are rentable or owned, but inside the residents are free to

furnished their unit as they prefer. In the others housing forms, contracts are fixed at a specific price and offer specific spaces and facilities, but inside each unit residents find a furnished apartment who can not be modify; basically, the diversion is that co-living offer a real house solution, while the other forms offer a house more similar to an hotel. Co- Living can be developed both by social institution and private development companies, reducing the house price for the owner, the developer and the resident; in the other typologies the developer is more specific and it has a strong influence on the house price; in the case of apart hotel, living as services or student resident where the developer are private big companies the houses offered are not generally affordable to the user's request. Co-housing owners are generally social institutions, prices are more affordable, but the conditions of entering the house are stricter than the other cases; moreover, they include a big participation from their residents to the communal activities.

A typical Co-Living situation is what actually is happening today in the metropolis that are attracting young students and workers, the presence of many important universities in one city, the major possibility of find a job and have a better career are increasing the requests of living in a metropolis, with a consequence of increasing the price and having less options for finding a house. It is then always more popular that students or workers are not renting an entire house, but a single room, and they are sharing the rest of the house with the other residents which may be their friends or may be strangers. In any case, the **co-habitation is still seen more as a necessity** than a choice: in order to not pay an incredible amount of money for a personal house or for a lack of available single houses, people are forced to live in apartments not design for a co-habitation and they have to adapt their lifestyle to the condition of the room/ apartment choose. The co-habitation can be consequently a good or bad experience depending on the approach to this new lifestyle of the residents, the residents itself and the atmosphere that is going to be created after sharing facilities and rooms in a space not suitable for it. Even if co-living can be a great experience and can create connection between the residents and new strong friendship, it is generally common the idea of finding a personal house as soon as it is possible, even if sometimes it is not more convenient. The highest number of people living in co-habitation are young adults until 35 years old; the article of Stephen Green and Linsley McCarrthy show the opinions of this generation in UK about shared living: the reluctance of living with strangers or friends after the first years in the university or after their first year leaving the parental house. Would it be the same if a co-living apartment would be design specifically for let people live harmonically one with another?

Massimo Bricocoli & Stefania Sabatinelli (2016) House sharing amongst young adults in the context of Mediterranean welfare: the case of Milan, International Journal of Housing Policy, 16:2, 184-200



Living together by Space10
Space 10 (2018). IMAGINE:
explore the brave new world
of shared living. Space 10.

Would it be the same if each user will have his own personal space and will share only the facilities we feel to divide? (M. Bricocoli, S. Sabatinelli, 2016).

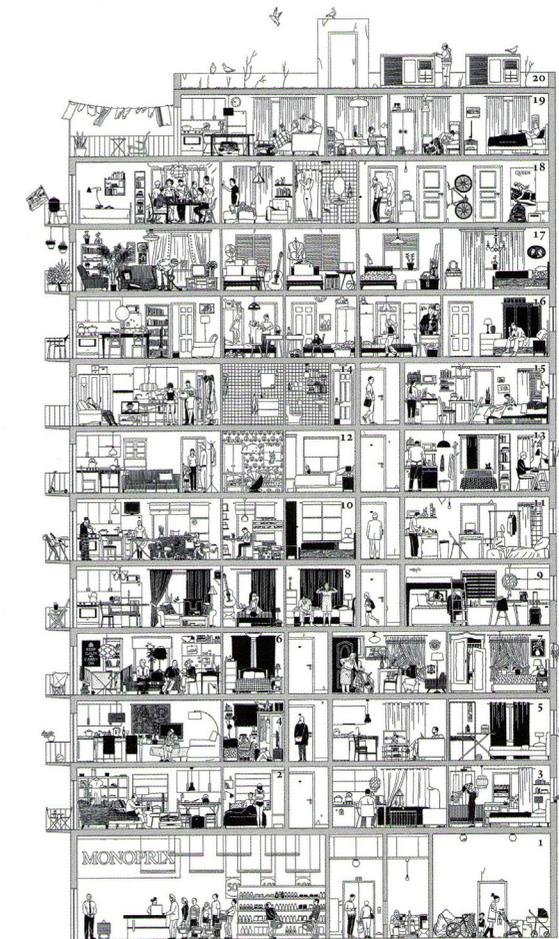
THE STUDIES OF STAR ARCHITECTS: CO-LIVING AND METROPOLIS

The architecture French group Star Architects has focus their attention on the phenomenon of Co-Living, which they refer with the name **Co-Residence**. The company apply the Co-Living as an answer to many housing problems that are afflicting the city of Paris and France in general, however the points of their studies are not afflicting only the city of Paris, but the biggest metropolis in the world. Starting from an analysis of the actual housing market situation and if people are satisfied or not with it, their conclusion is that there is not an adequate answer to the user's requests: the world has deeply changed from thirty years ago, people require new typology of accommodation that are still not fundable in the housing market.

Particularly, the main problematic is the increase of the house price and at the same time, the decrease of the space available in one house: the renting price in the metropolis of Paris and the suburban areas are rising quicker and higher than the cost of living itself, consequently the apartment became less affordable and people for reducing the house price are constrict to choose between living further away or living in a smaller space. In addition, the number of apartments available are not enough: it is calculated that for the year 2030, 70000 new apartments should be built in order to satisfy the number requested, in this number are included also the fact that new apartments since 2005 must be accessible for a wheelchair user, which requires an extra space of 8 m², corresponding to 9000 of the 70000 apartments required; in order to satisfy this law in fact constructor are building a larger toilet and main bedroom, sacrificing the living spaces. But it is not ended, the last and stronger house problem is the un-match between the house and the residents: 50% of the existing apartment are under – populated. The standard one floor type plan composed by a living room / kitchen / entrance, a generous bathroom, a large toilet and the bedrooms seems to be the most popular apartment typology in Paris, the answer that the real-estate companies offer to solve the house market crisis.

While the apartments are following a similar layout, architects prefer to play with the façade or the exterior, in order to make it more fashionable from the exterior; but as Star Architect underline this approach is increasing the big gap existing between the household and the house, forcing inhabitants to

Star Architect (2016). The interiors of metropolis. Star Architect: Strategies + Architecture.



SECTION OF A FRANCIEN BUILDING ON JANUARY 1ST 2016
— 12 FLOORS OF UNSUITABLE APARTMENTS —
by STAR strategies + architecture

LEGEND :

- 1. THE SMALL ENTRANCE HALL - PASSING THROUGH A DARK AND OPEN DESERTED SPACE 2. THE YOUNG COUPLE HOSTS THEIR GUESTS IN THEIR T2 - WELCOMING THE HARBORING AND ON THE OTHER ROOM SIDE 3. THE COUPLE WITH THEIR (FIRST) CHILD IN THEIR T2 - IN SEARCH OF A HOUSE THAT COULD STILL GROW JUST LIKE THE FAMILY 4. THE SINGLE MOTHER AND HER TEENAGE SON IN THEIR T2 - SLEEPING IN THE LIVING ROOM AT 21 5. THE 13-YEAR OLD BACHELOR IN HIS T2 - BEING SUCCESSFUL IN LIFE - WHILST EXPERIMENTING WITH SOLITUDE 6. THE HOME-WORKER IN HER T2 - STARTING AN OFFICE IN THE LIVING ROOM 7. THE SENIOR BACHELOR IN HIS T2 - AN OLD ONE, BUT STILL SELF-SUFFICIENT AT ALMOST 60 YEARS 8. THE ELDERLY COUPLE WITH THEIR ADULT SON IN THEIR T3 - DISCOVERING HOW SATISFIED THEIR SON IS WITH HIS COUPLED LIFE 9. THE BUSINESSMAN IN BETWEEN TWO CITIES, HALFWAY IN HIS T1 - SAYS 2, PAY 7 10. THE FAMILY IN HIS OVERCROWDED T3 - COOKING IN THE VERY CHAOTIC AND CHILDISH LIVINGROOM 11. THE PRECARIOUS WORKER IN HIS T1 - INTERIM LIFE AND CANNED FOOD 12. A DIVORCED FATHER IN HIS T3 - FEELING OBLIGED TO HAVE A ROOM THAT IS EMPTY 87% OF THE TIME 13. THE STUDENT IN HIS T1 - MOVING THE TABLE TO DEPLOY THE ROOM 14. THE "ACCESSIBLE" AND "STANDARDIZED" APARTMENT T3 - ENJOY A BATHROOM AS LARGE AS A LIVING ROOM 15. THE YOUNG MOTHER AND HER CHILD IN THEIR T1 - BEING A MOTHER, STUDENT AND WORKER, ALL AT ONCE 16. THE LARGE FAMILY IN ITS T5 - FALLING ASLEEP EVERY NIGHT LISTENING TO JUSTIN BIEBER 17. THE SENIOR IN HIS UNDERPOPULATED T2 - MAINTAINING A CASTLE - ONLY HALF USED 18. THE FIVE ROOMMATES IN THEIR T5 - BRUSHING TEETH IN THE CORRIDOR AND FALLING ASLEEP IN THE NOISE 19. THE STEPFAMILY IN ITS T4 - EVERY WEEKEND CAMPING IN THE LIVING ROOM 20. THE TECHNICAL ROOF - AVAILABLE FOR PEOPLE, NOT FOR PEOPLE



costs of living, a great advantage for single but also for families. Sharing a house means sharing facilities and common spaces like kitchen, living room and dining room; means paying less for a house that have all the basic rooms plus some extra like a library, a laundry or a study room, means also paying less bill in electricity and heating since electro domestics, water and heating system are shared between the residents. Particularly, Star Architects calculate that the application of co-living in Paris can reduce of 33% the energetic consume por apartment, reinforcing the use of the space and the sharing of electro-domestics; plus, they calculate that the reduce of 35% of the single house apartment can produce more facilities inside the co-living. In Zurich the benefits are also visible: a solution for the high-density space in a city, the Cluster- Wohnungen reduced the overcrowding factor from 50 mq/habitant to 33-35 mq/habitant. Another important point is the possibility of receiving **help** and favours from their housemates: the presence of many people living together implies that residents are willing not only to share their space with others, but they may also be available to help with commissions or **looking after the youngers or the elderly** in a community. Since not only young single adults are increasing, but also the single parents with children, divorced people or elderly, it is important receiving some support and find someone that can help in case of an urgency or an appointment. Third one of the main advantages is the **socialization and the creation of a small community**: the choice of living with other people is also due by a necessity or a willing to meet new people and make new friends to spend time with, especially in case someone move from a city to another. In this sense, the co-living really help the people to connect one another, help them to socialize and create strong relationships that **prevent loneliness and isolation**. This is also important for a specific category of people, the elderly, which are often alone and without the company of their family or friends; in this sense living with other people from their age or different, help them to feel more active loved by many people. One of the last advantage is that living in a Co-Living apartment is nothing different or strange from the normal house typology we are living in: the harmonic proportion for **each family** to provide them a **private and personal unit**, plus a shared space with the facilities that only a family wants to share, help in order to keep the sensation of living in a standard and private home. Finally, another advantage is that this new type of living can be a solution of the current urbanisation problems and crisis: proximity, governance, densification and activities are main features that the co-living movement can solve, the minimum scale can solve the metropolitan scale, creating proximity without affecting the intimacy or finding the new forms of micro-governance that are necessary. (Star Architect, 2016)

Star Architect (2016). The interiors of metropolis. Star Architect: Strategies + Architecture.

ADVANTAGES OF CO-LIVING

SHARING COSTS



CARE AND HELP
TOWARDS EACH
OTHER



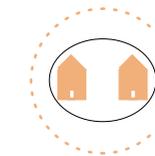
SOCIALIZATION



PREVENT
LONELINESS



PRIVATE SPACE
INSIDE A SHARED
ONE



It is not always easy to accept and be persuaded of sharing their personal life space, and for this many people still do not understand the great possibility of sharing. For this reason, the Danish company Space Ten is developing an entire research programme about the shared living and Co-Living specifically, underlining the advantages and the possibility of spread this alternative of living. In order to understand what people would like to share and what not, the company made an online survey in collaboration with the designers Anton Repponen and Irene Pereyra titles “**One shared House 2030**”, a playful research that made the people imagine to live in a shared space in the year 2030. Almost 13000 people from 175 countries in the world have joined the survey, helping the architects how to approach and design a co-living space; the questions touched different things that can be shared, from the car, to the exterior spaces and the garden, to the single rooms and utilities inside the house. What came up from the survey is that the main reason why people would like to live in a co-living space is for **socialize and meet new people**; socializing was the option which overcame also saving money, living in a neighbour that otherwise would not be affordable and having the access to common facilities. A result that is not a big surprise since in our century the family composed by a single person are increasing: young adult who wants to leave the family house before getting married, divorced people, young students or workers who moved in another city or single elderly whose partner passed away; even if people are living alone it does not mean that they are happy to do that, more and more single people are suffering from isolation and loneliness, consequently they would like to recover a sense of community and being around familiar faces. Even if people are looking for socialization, they would prefer to live in a **small community** from 4 up to 10 people, with the exception of families that would prefer to be from 10 until 25 people per community, a different approach from what the Apart hotel or the student house are developing today; despite the number of people, the interviewed will prefer to live in **heterogeneous group**, composed by people having different background and ages; the most request were single adults and couples without children, while the family with children and teenager are the less request. The strongest **limit** of shared living is the privacy: the **lack of privacy** is in fact the major concern for the people; everyone express the preference of having a defined space of what is my property, what is the personal property of each other residents and what is shared between all, moreover people would **not share** their own private **bedroom**, which would love to furnish and decor as they like, **bathroom and groceries** are also the facilities that people would prefer not to share, while they will not have problems in sharing internet, garden and workspaces. (An-

Anton&Irene, Space10 (2017). How will we live in the year 2030?. [online] ONE SHARED HOUSE 2030. Available at: <http://onesharedhouse2030.com/survey/> [Accessed 21 Jun. 2019].

ONE SHARED HOUSE 2030: THE RESULTS

WHY?

SOCIALIZE AND MEET NEW PEOPLE



HOW?

SMALL COMMUNITY UP 4 TO 10 PEOPLE



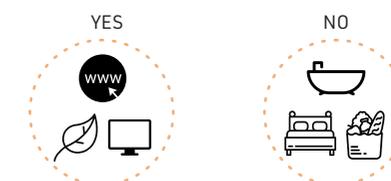
WHO?

HETEROGENEOUS GROUP



WHAT?

INTERNET, GARDEN, WORKSPACE



ton&Irene, 2017)

The positive effect of Co-Living is well visible, as well are the connection with the real life that we found ourselves today; however, must be underline how this type of model is not receiving much attentions by constructors and developers. If shared models like Student apartment or Apart hotel are receiving more investments, Co-Living as Co-Residence is not receiving enough support by the administrations. The main problem is that there is a lack in producing diversity in architecture, in terms of typologies and models of living; moreover, there is a **gap for the access power, with a typology of access that is limited for rent and buy**. The contract typology is also more complicated and it must be considered by the investors and the real estate tenants which have to rent or sold a unit inside the Co-Living without forgetting the affordability for the people, basically they should develop a new business method. If in fact the standardised co-living options like WeLive or The Collective are set up a precise and different form of ownership and renting, in the case of a co-living apartment it is harder to define specific and affordable contracts. Guidarini for instance, illustrate the contracts propose in the Coop Swiss model Apartment, which include clusters apartment as well. In this case all the habitants are following a rentable contract and they are associated with the cooperative; they have to pay a quote of participations so that each of them is responsible of the activities and the public spaces in the house. The community inside is creating a society that have to be responsible of the main cooperation for the renting payment, the organization of the shared living and the research of new residents in case one has to leave the house. All the interventions are done with a private capital that came from the housing founding or other societies, they are the direct manager of the public constructible parts with the concession of surface right. To avoid social problems, it is also insert a quote of social building subsidised, with a strong cooperation made by subscription in order to increase the integration between the families. (Guidarini, 2018)

The second point architects need to focus is the **design of the apartment itself**; without a good design it is impossible to create a community and achieve the advantages of Co-Living. The main principle is that the architecture should encourage and help the creation of a community, helping the residents to sharing a meal, to meet people and have a personal balance between privacy and shared area. It also has to be able to encourage making activities all together, that goes beyond the dinner and the chat during the day, but that will be able to create strong relationship of trust and friendship. Star Architects in their manifesto explains what in their opinion will be the main architecture feature

Guidarini, S. (2018). New urban housing. Milano: Skira.

that will be able to generate a community inside the Co-Residence. First of all, the apartment should be design as a repetition of single plan apartment as many apartments are required: in this way it will be easier to implement a single apartment in case of changes in life of the residents or his necessity, and to keep the balance with the common shared part. Second it is important design it for a smaller group of people, as visible by the survey of Ikea, people are not willing to share their house with too many people, moreover a huge number of residents will afflict in negative the co-habitation; people have their own rhythm and privacy in life which they feel compromise living with a smaller group of strangers, if the group will be bigger it will be impossible to keep a good environment in the house; a group of twelve residents it is calculate to be a good number. Talking about the private units, each of them should be design having multiple variations: a bedroom apartment, a bedroom plus bathroom or a tiny private apartment with all the facilities, they will have to answer and be adaptable to the resident life and necessity, plus they will need to keep his privacy sphere outside the other member of the community. For these reasons, the architects thought that the insertion of a buffer zone intimacy would be a good idea to keep the privacy from the rest of the house: a place where all the services like kitchen, dining and living room are included, as a filter between the private sphere of the bedroom and the public ones of the shared facilities; a possibility given by the people to choose to spend more or less time with the other residents. Another key point will be the presence of secret doors or extra rooms, that will be able to increase the unit's space if necessary. Talking about the shared area, it is important design this space as a circulation space: residents must meet other residents naturally while they are doing their daily activities, only in this way everyone will be able to connect to each other and experience the great benefits of Co-Living. An addition to the shared spaces will also be the insertion of a guest pavilion or the presence of an extra room useable by the entire community and that can increase the common founding of the apartment. Last point is designing the space making it accessible to people: all the backgrounds and the typologies of families must be able to live in this kind of apartment, especially if the users will come from different ages and background, the Co-Living typology will be more useable

Space 10 (2018). IMAGINE: explore the brave new world of shared living. Space 10. Star Architect (2016). The interiors of metropolis. Star Architect: Strategies + Architecture.

RETHINK THE BUSINESS MODEL + **DESIGN FOR SHARING** = **MAKE CO-LIVING HAPPEN!**

DESIGN STRATEGY

The process through the practices and the case studies helped us to define a strategy useable for designing the apartment for the shared living. The practices show the contradiction and the main problematics of living in co-habitation in a standard apartment: the lack of privacy for each user, the absence of a personal living or working space, the sharing of facilities who should be private, the limited number of furniture for everyone inside the shared area and finally, the private space designed as a bedroom, where sleeping is the main possible activity. The case studies show buildings or projects realized specifically for a shared living, exhibit important aspects and tips that facilitate the co-habitation and at the same time, some limitation that also these projects can have. The most important aspects that we recall are: the insertion of intimate facilities like bathroom and kitchen inside the unit, the creation of an extra room for guests, the creation of different typologies of units, the meander shape of the shared space and the direct access from the private units to the shared area, the creation of a core in the house composed by the kitchen and the dining table and last the creation of different areas inside the shared space. Moreover, the research about the principles of shared living and co-living itself by the architect groups Star Architect, Space 10 and Stefano Guidarini help to understand the advantages and problematics that this typology of living is facing.

These elements all contribute to define what can be the rules of designing an apartment building for shared living inside a traditional building, so a building which was originally designing for locate standard apartments for the traditional family. The rules do not consider to touch any of the existing structure, but they impose the demolition (when need it) of the wall partitions and not structural walls.

RULE 0.

TERMINOLOGY AND DEFINITIONS

RULE 1.

THE PRIVATE UNIT

RULE 2.

THE SHARED SPACE

RULE 3.

THE ATTENTION TO THE USER

RULE 4.

POSSIBILITY OF AGGREGATION

RULE 5.

MARGINS AND BORDERS

RULE 0: TERMINOLOGIES AND DEFINITIONS

Talking about nucleus not number of people. Nucleus are a group of people bound together by blood or family relationship. They are the core of the unit, each of them defines a family and each of them need a specific space for the private and collective activities. In a shared housing typology is important to speak and count the nucleus, so the real family or blood relation between the residents, not the general number of people.

Rooms became units: in a shared apartment rooms became units; each unit is the personal private space of the nucleus members; every unit must have a social space and a bathroom.

A group of units is a cluster: the units all together define a cluster, they contain all the rooms for the nucleus.

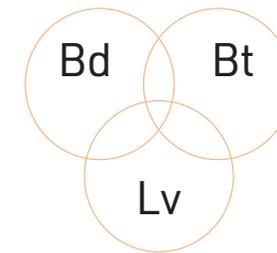
Cluster became aggregation: a group of clusters define an aggregation; this constellation of clusters is composed by a tissue of collective facilities that connected the clusters all together.

NUCLEUS



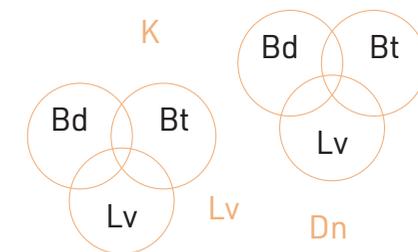
group of people bound together by blood or family relationship

UNIT



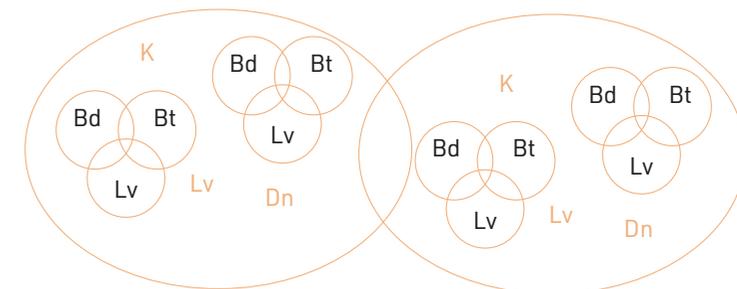
basic room typology

CLUSTER



constellation of units

AGGREGATION



constellation of clusters

RULE 1: THE PRIVATE UNIT

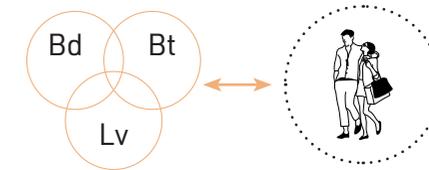
Inside the private unit sleeping is not the predominant activity anymore: working and socializing are other activities included in the private space, there must be furniture that create social or working area. Each unit should contain a bathroom and a social space.

For this reason, the **bed is no longer the centre of the room**, but it can be located in a niche or a corner facing the social / working part, it is also not necessary that the bed will have direct light and the dimension can be reduced to a half-size, 140 cm to be precise. It is important that the **bed is separated through a filter from the social area**, in order to define a night and day zone inside the unit; the filter can be a curtain or a panel.

Every extra person connected with the family need a room as well: they can be siblings, caregivers, sons or other relatives. Each of them should have a personal room with a social area but not an independent bathroom (the exception can be in case of a caregiver or if the extra person is an adult with an independent life from the main nucleus).

The **social area** is located **inside the unit** and it is **one for each nucleus**; it should contain minimum a table with chairs and a couple of armchairs or one sofa.

A UNIT PER FAMILY



Each family has his own private unit. Family can be composed by one or more nucleus

BED NICHE



Bed is no longer the centre of the room. It can be placed in a niche separated with a filter from the rest of the room

THE SOCIAL AREA



Each unit should have a social area provided with a couple of armchairs or a sofa and a table

PRIVATE BATHROOM



Each unit should have a personal private bathroom.

THE EXTRA ROOM



Every person connected with the family need a room as well

RULE 2: THE SHARED SPACE

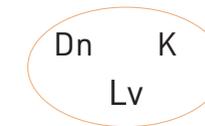
The shared space is the tissue between the clusters or the units. All the units should have a direct access to the shared space.

The shared space should be divided into **different areas**, which can be recognize not by walls or vertical partitions but using different furniture: in this way the common space will still be one single area that can host many facilities inside connected one to another.

Furniture should be proportional to the number of residents; they also should be placed in a number that can allow their simultaneous use. The space which need more attention is the kitchen: sinks, cookers and countertops should be comparable to the number of nucleus living inside.

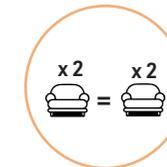
The shared area should **increase and facilitate the relationship between the residents.** Two tips that can be applied are: 1. The insertion of a correct number of furniture and the creation of one single space. 2. The insertion of a dining table that can allow the residents to eat all together.

COMMON SPACE



One big space accessible by all the units that include many facilities.

FURNITURE PROPORTIONAL



Furniture should be proportional to the number of residents

INCREASE THE SOCIALIZATION



The shared area should increase and facilitate the relationship between the residents.

RULE 3: THE ATTENTION TO THE USERS

Designing the unit for single, couples, adults, teens or young adults do not require a different strategy or exceptions one to another; on the contrary some categories of people may need some extra devices.

Children for instance should have a **bigger space** for their room for playing or studying without interfering with the adults' social area.

Elderly or disable people should have a **bigger space** inside the unit, so that they can move with more freedom. Their bed should be located not in a niche but on one side of the room, leaving empty spaces on both sides of the bed.

The wall that separate the unit from the shared space should be a **folding glass partition**: this system, in addition to curtains that filter the light or create a dark space, can be completely open or close, related to the situation that the user wants to create. If the user would like to be in a close space separated from the shared area, he can close all the systems. Otherwise, if the user would like to stay in their room but at the same time be connected with other residents, he can simply open all the systems. This strategy is particularly efficient for elderly or disable with big problems of movements: it allows them to stay inside their private space, but at the same time they can relate with other people.

ATTENTION FOR CHILDREN



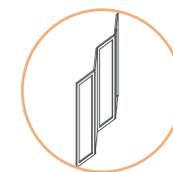
Children for instance should have a bigger space for their room for playing or studying

ATTENTION FOR ELDERLY



Elderly or disable people should have a bigger space inside the unit, so that they can move with more freedom.

FOLDING WALLS FOR ELDERLY



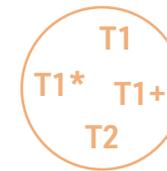
Elderly or disable people are separated by the shared space with a folding wall, so that they can always be connected with the other residents without leaving their unit

RULE 4: POSSIBILITY OF AGGREGATION

It is important to create **different typologies of units** that are related to the multiple nucleus that can live inside a shared apartment. The units created should start from a basic module (T1) composed by one single standard room; from this typology we can assemble them, and depending on the number of assembly there can be double room apartment (T2), three room apartment (T3) and so on. The basic module itself can be declinate to different typologies: a standard unit with an extra room useable for hosting an extra person, create a working space or making other activities (T1 plus); a standard unit with extra space useable when the user need a bigger space (T1 bonus); a single unit with special furniture and dimension designed for disable or elderly with low capacity of movements (T1*) and an independent unit from the shared area of the cluster designed for tourist or guest (T1 guests).

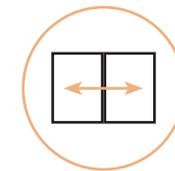
The different typologies when are located one to another should be separated by doors, so that two different **units can be unified and create a bigger space**. This system is really useful in case of a family with adult children or a relative member living with the main nucleus; but it is also useful for the elderly who may need the help of a caregiver or a relative living next to them. In all the case each nucleus can keep their own privacy, but at the same time be more connected with their relatives.

MANY UNITS



It is important to create different typologies of units that are related to the multiple nucleus that can live inside a shared apartment.

CONNECTIBLE UNITS

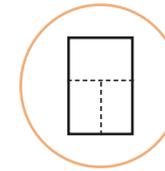


The different typologies when are located one to another should be separated by doors, so that two different units can be unified and create a bigger space.

RULE 5: MARGINS AND BORDERS

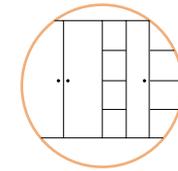
Walls became furniture. Inside a shared house there should not be walls; all the vertical partition should be furniture that divide the space from the shared space to the private one. The exception can be done only for the bathroom, the other systems can be wardrobe walls, library walls, folding glass doors or any other device that became useful from one side and the other. These margins guarantee the maximum flexibility inside the house and let possible the aggregation between a unit to another.

FLEXIBLE SPACES



Furniture guarantee the maximum flexibility inside the house and let possible the aggregation between a unit to another.

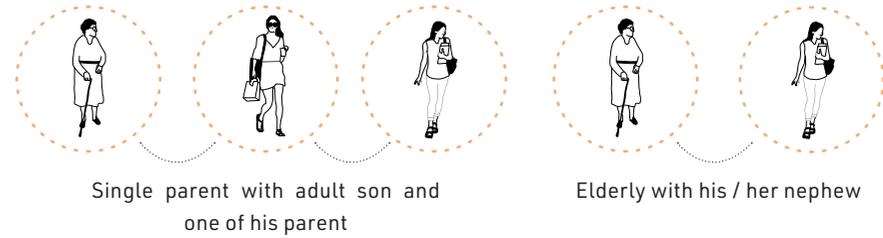
WALLS BECAME FURNITURE



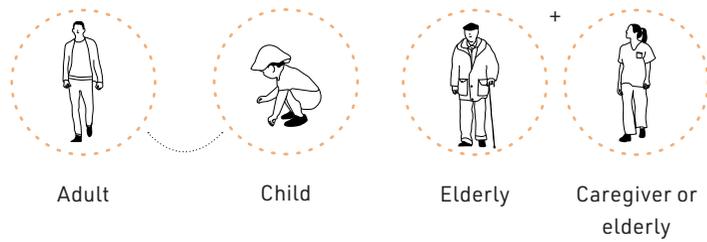
Inside a shared house, all the walls should become systems of furniture of different typologies.

WHO ARE THE NEW FAMILIES?

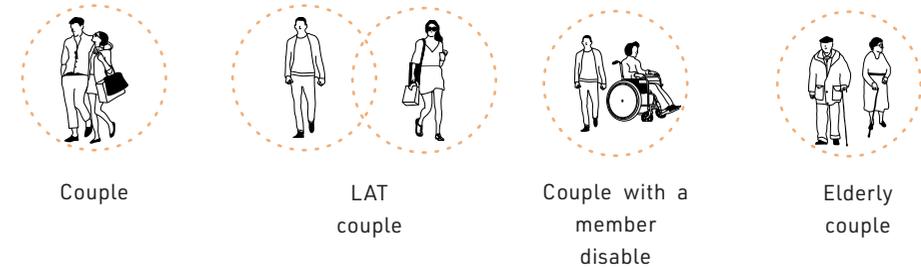
SINGLE PERSON



SINGLE PERSON WITH HOST

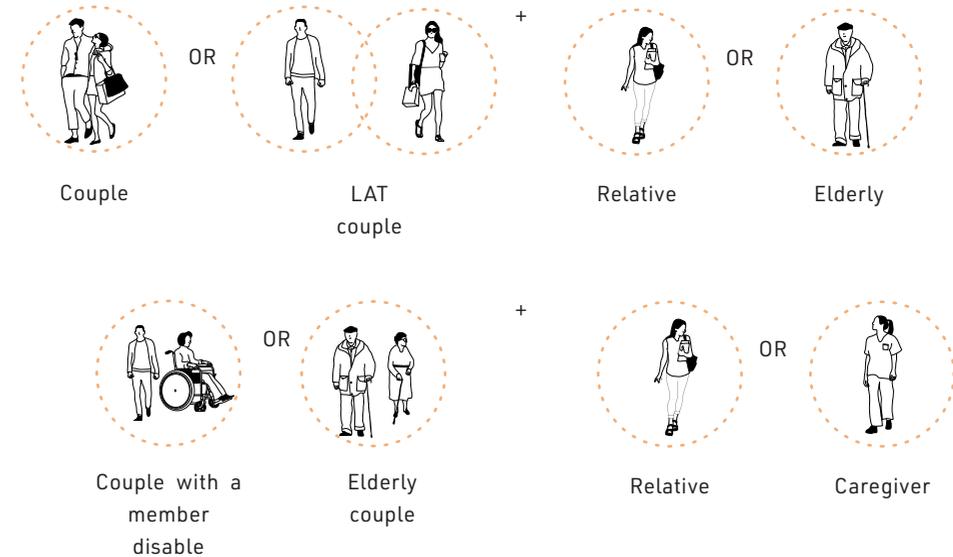
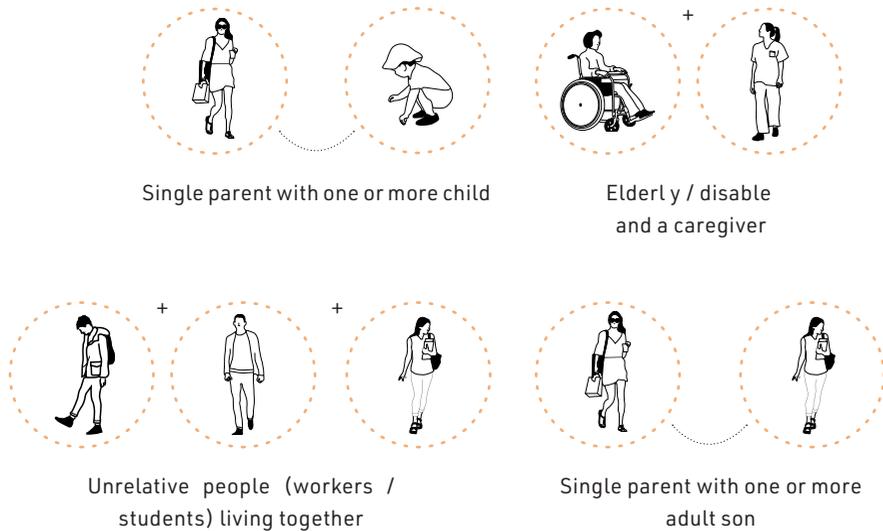


COUPLE



SINGLE ADULT LIVING TOGETHER

COUPLE WITH COUPLES / OTHER NUCLEUS



TRADITIONAL FAMILIES



Family with one / two children



Family with more children

FAMILY WITH AN ADULTS



Traditional family with an extra adult like a relative or a caregiver

STEPFAMILIES



Family composed by a couple and their relative son



Family composed by a couple and their relative son plus the son that they have together

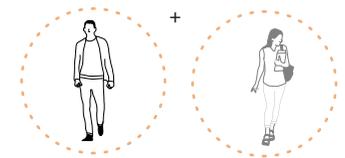
PRACTICES / SITUATIONS



Air bnb or seasonal renting



Home working



Receiving guest some days per week

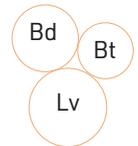
THE UNITS

THE SINGLE ELEMENTS



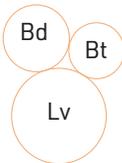
1° COMBINATIONS

T1



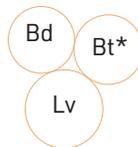
Basic module

T1 BONUS



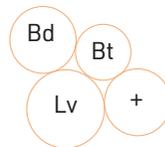
Basic module with extra surface

T1 *



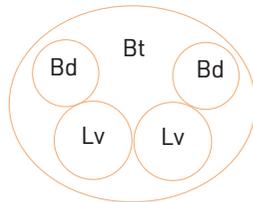
Basic module adaptable for wheelchair

T1 +



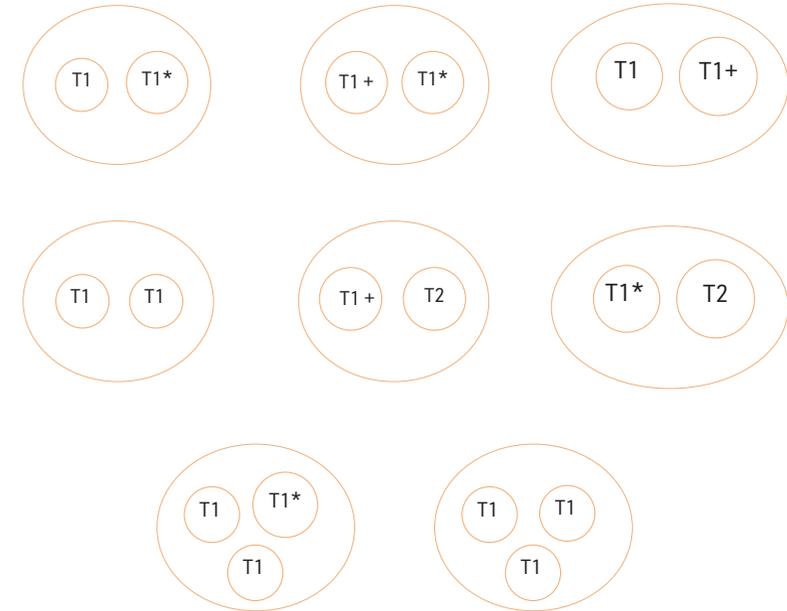
Basic module with an extra room

T2



Double room apartment

SOME OF THE OTHER COMBINATION POSSIBLE



...AND MANY MORE!

The first combinations are created by the union of the single elements. Thanks to these five aggregation it is possible to generate many typologies of aggregation. The new typologies will depend from the space and the number of people of the entire apartment. In co-living apartment we do not create apartments typologies but different aggregations.

MILAN AS CASE STUDY

The studies of Housing Anywhere reported in the article of F. Colombo (2019) show how the rent prices of Milan are one of the highest also in the continental scale: more expensive than Madrid, Vienna, Rotterdam, Bruxelles and Berlin; **Milan** is classified at **ninth position** in the city in Europe **for its highest rental income**.

The economic crisis, the mobility of work and the perspective of attraction of work and universities inside a big city like Milan determinate a new trend in the housing market inside the city, which is following an opposite path than the other towns of Italy. If in the middle – small city the request is looking for a ownership contract for houses, in Milan people are looking for rentable houses. Until five years ago the rentable housing market was determinate by the necessity of students, youngers with a first employ or family who can not afford a house. In the last five years the choice of choosing a **rentable house became a necessity** due to the new life style and the new mobility of work, people are not looking for buying a house and they do not aspire to buy it one in the future. Following the principles of the sharing economy, the possession is not anymore, a priority; the answer of rentable apartments is calculated will consequently grow during the time.

However, if the request of rentable houses has increased, Milan appear to be far from satisfying the request of the market: most of the houses offered on the market had an ownership contract, while the high request and the low answer determinate an incredible increase of the housing cost.

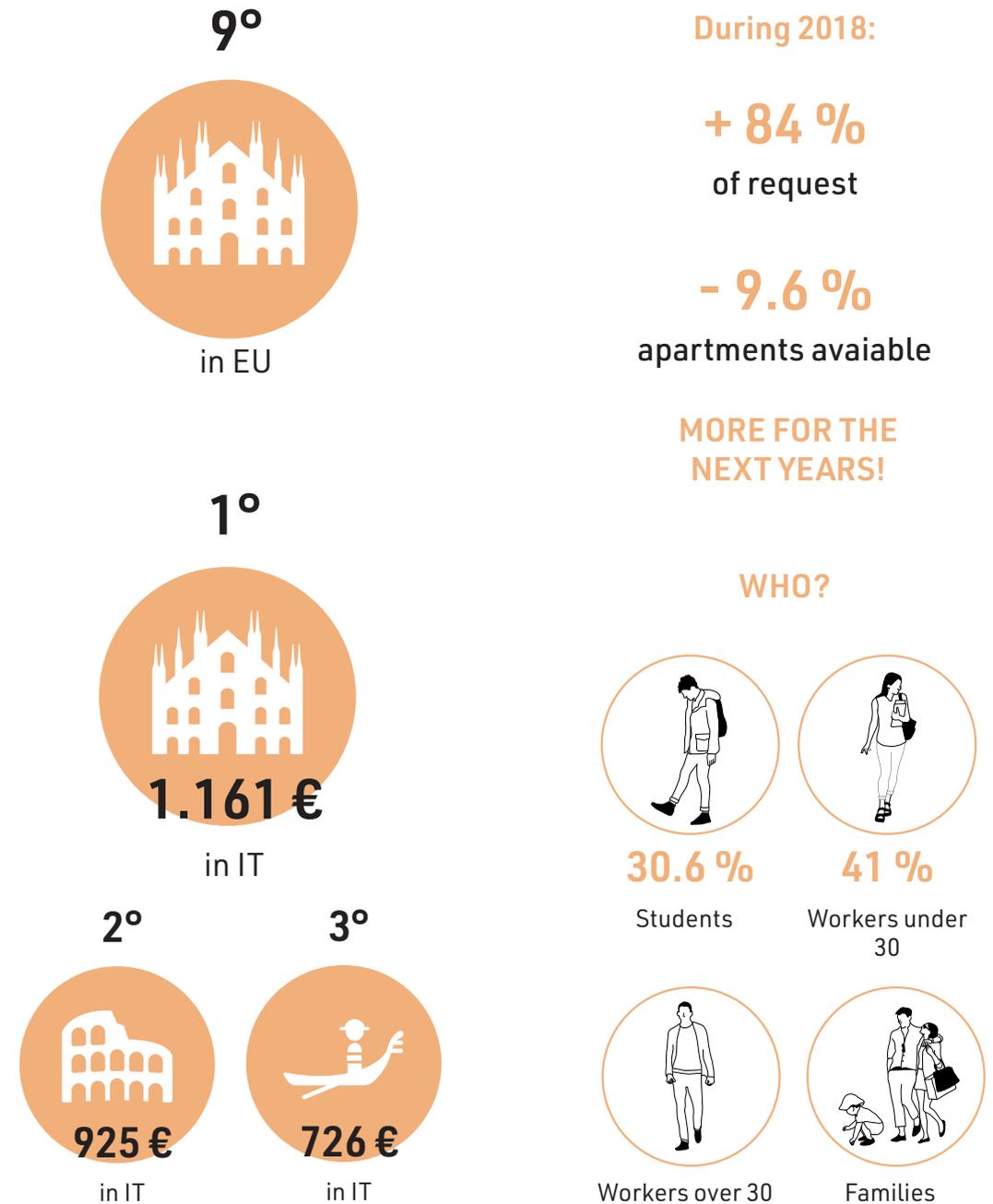
Milan is the urban centre with the **highest rent prices of the entire Italy**, with an average of 1.161 euro, followed by Rome 925 euro and Venice 726 euro. (Gianni A, 2019) The request of rentable houses grow of the 84% during the year of 2018, especially in the area of the historic centre like Porta Vittoria, Navigli and Bocconi. However, the available apartment decreased of 9.6 % during the same year. (Il Sole 24 ORE, 2018). Today in Milan one tenant out of three choose to share an apartment with other people in order to reduce the rental income who grow up of the 10,2% in 2018 (three times more than the national average of 3,1%). Students, young workers and workers over 30 years old, families who can not afford a single apartment are the characters of this practice of shared living; but also people who prefers to spend the same price of a house in a suburban area for a room inside a shared house in the centre of Milan. The highest percentage can be found in posted workers (41 %) and university students (30.6 %).

The prices which had more increase are for the single room apartment (+ 13.4 %) and double rooms apartment (+11.5%); the average of rental income are of 732 euro for the apartment of one single room and 1654 for four

Colombo, S. (2019). Per risolvere il caro affitti a Milano servono misure drastiche. [online] The Submarine. Available at: <https://thesubmarine.it/2019/02/22/per-risolvere-il-caro-affitti-a-milano-servono-misure-drastiche/> [Accessed 13 Jun. 2019].

GIANNI, A. (2019). Sos affitti a Milano: casa condivisa per un inquilino su tre - Il Giorno. [online] Il Giorno. Available at: <https://www.ilgiorno.it/milano/economia/affitti-1.4588380> [Accessed 13 Jun. 2019].

Il Sole 24 ORE. (2018). Affitti a Milano: boom della domanda e canoni in rialzo. [online] Available at: <https://www.ilsole24ore.com/art/casa/2018-06-14/affitti-milano-boom-domanda-e-canoni-rialzo-124339.shtml?uid=AE27TE6E> [Accessed 13 Jun. 2019].



rooms apartments. The highest rate can be found in the centre with 1120 euro per single room apartment and 2510 for four rooms apartments; in the middle-centre the prices decrease to 790 euro and 1750 euro; while in the suburban area they are 590 and 1340. (Gianni A, 2019)

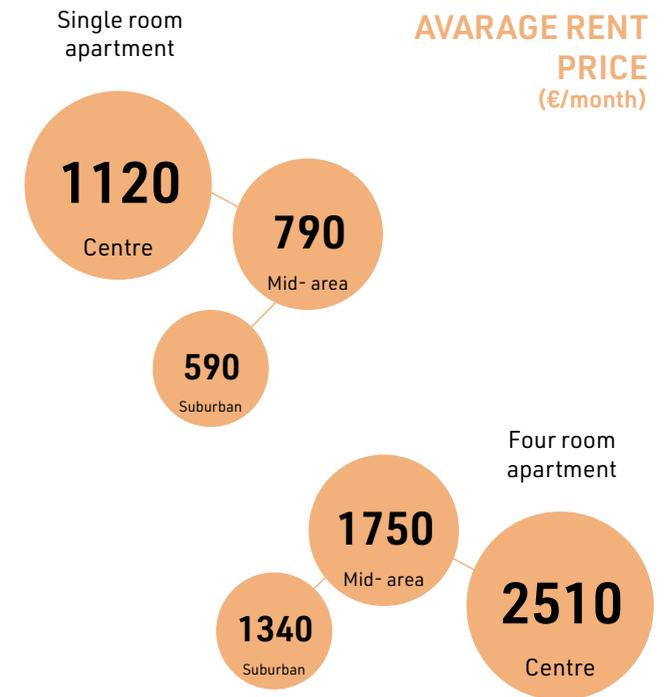
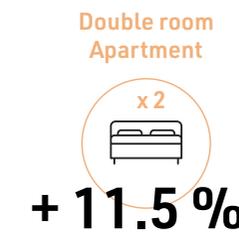
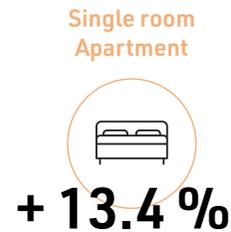
With such an high request of rentable houses or rooms people have to face illegal typologies of contracts, houses in a big state of degradation or excessive prices. In front of this big problematic Sunia and the association of tenants are trying to promote the contract with tenancy agreement, contract 3+2 with a reduced price and fiscal advantages for the owners of the apartment. However, the diffusion of this contract is still rare: from June 2015 until today only 2 thousands reduced contract have been signed out of 30 thousands contract per year. The agency of rentable houses “Milano abitare” is trying to save the emergency living situation which is trying to persuade the owners to accept the economic condition proposed by the city hall. At the same time, Milano Abitare is also promoting the development of social houses, which will help to solve in part the high request of rentable houses. Other options are the student houses which provide an accommodation to the students who are a big percentage of people looking for a rentable house. However as reported by the article of Bricocoli and Sabatinelli (2016), the student accommodation still represents a not convenient solution, with a price that is almost equal as a private house. The prices are in fact around 350 euro for a shared bedroom and 550 euro for a single room; with the disadvantages of shared facilities, like kitchen, dining room and laundry and strict rules in terms of guest and cleaning.

The high rent costs are so deeply influence the living condition of the people in Milan: in order to pay the monthly rent some of the youngers are not able to save money at the end of the month, or in some case they have to ask some of them to their original family. The high rent also obligates people to live in apartments or rooms who are not suitable for their necessities and where they are obligate to share sometimes even the bedroom with a not blood related person. Working, living with a family, hosting relatives or children, is almost impossible in the actual rooms or apartments offered by the market of Milan; Milan is not only **not able to answer to the rent market requests**, but it is also not able to face the new economic and social issues of the contemporary age. The houses and the rooms available are not considering the different typologies of families and life-style of the people today.

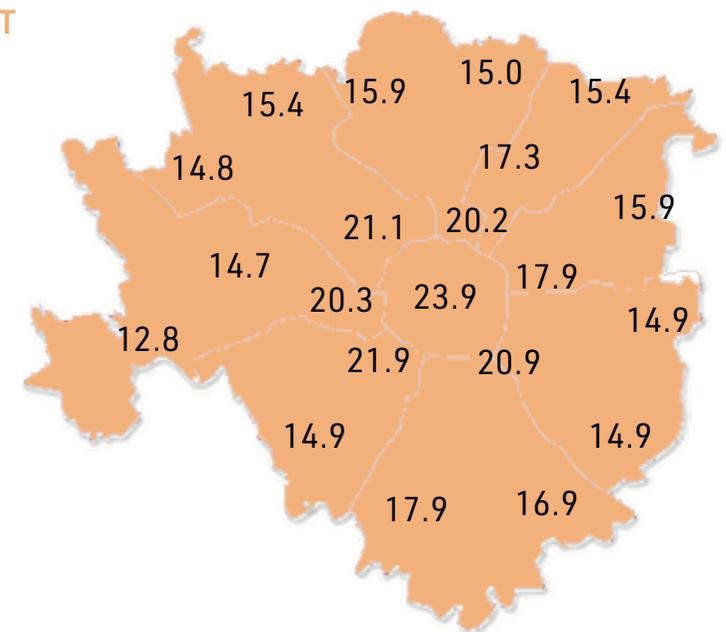
GIANNI, A. (2019). Sos affitti a Milano: casa condivisa per un inquilino su tre - Il Giorno. [online] Il Giorno. Available at: <https://www.ilgiorno.it/milano/economia/affitti-1.4588380> [Accessed 13 Jun. 2019].

Massimo Bricocoli & Stefania Sabatinelli (2016) House sharing amongst young adults in the context of Mediterranean welfare: the case of Milan, International Journal of Housing Policy, 16:2, 184-200

INCREASE OF PRICES:



AVERAGE RENT PRICE PER AREA (€/month)

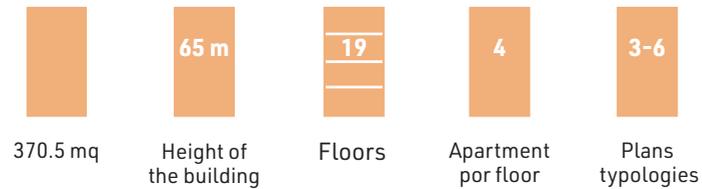


GRATTACIELO BASELLI: THE CASE STUDY

Guido Baselli & Pietro Portaluppi

Piazzale Biancamano 2, Moscova, Milan (IT)

1960-2008

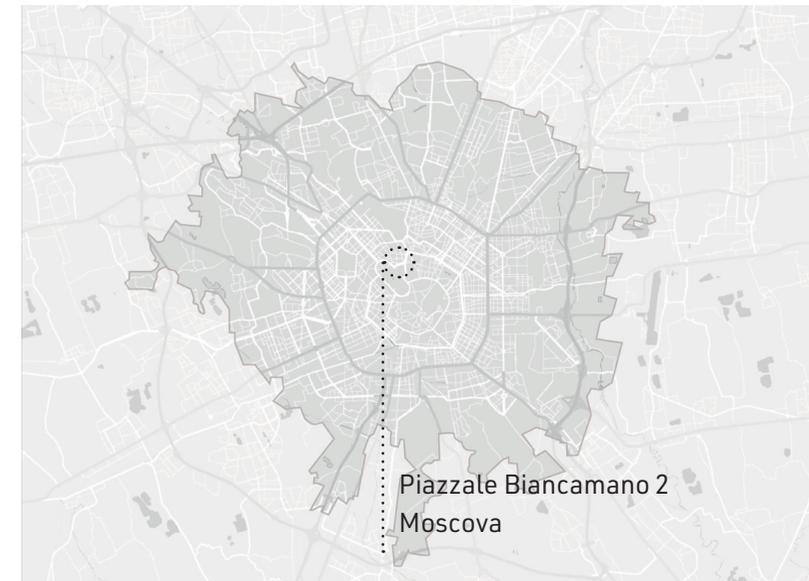


URBAN CONTEXT

Grattacielo Baselli is located in the centre of Milan in an area defined by Via Porta Tenaglia, Via Moscova, Piazzale Biancamano and Piazza Lega Lombardia. The area is inside the spanish walls (“Cerchia dei bastioni “) and it is in front the Arena and Sempione park. It is consequently well connected with the rest of the city and the centre: approximately 200 m distance on the east from the tower there is the metro station of Moscova (line 2, also know as green line); 1 km distance on the north there is the railway and metropolitan station of Garibaldi FS and Garibaldi; and nearby the tower there are the bus lines 43, 57,94 and the trams line 2,4,12,14. The area is constantly under an intensive traffic, by cars, public transportation and people.

The context around the tower is represented by an historical-monumental part, represented by the Arena, Sempione park, Porta Garibaldi and Porta Nuova; and a more contemporary side represented by the ethnical part of Chinatown and the new constructions of Porta Nuova and Fondazione Feltrinelli. Considering the position and the big attraction offered by the area, the real estate values and rents are one of the highest inside the whole city of Milan which, on the contrary from the city centre, they constantly grew during the years.

The buildings around Grattacielo Baselli are similar one to another: historical buildings from three until seven floors height and the skyscrapers further away on the horizon. Grattacielo Baselli fit perfectly in this context since represent an exception of style and aesthetic aspect from the rest of the buildings.



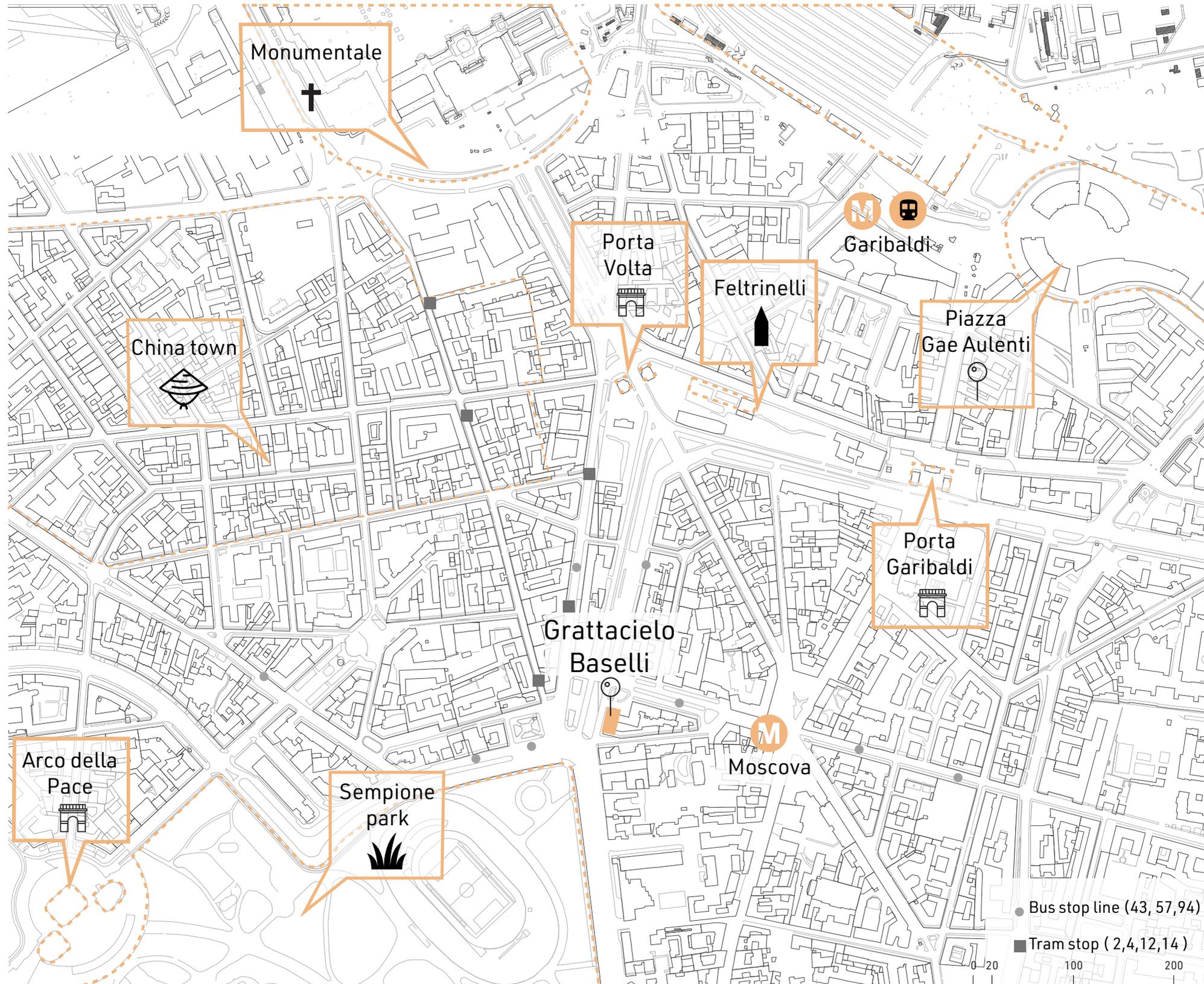
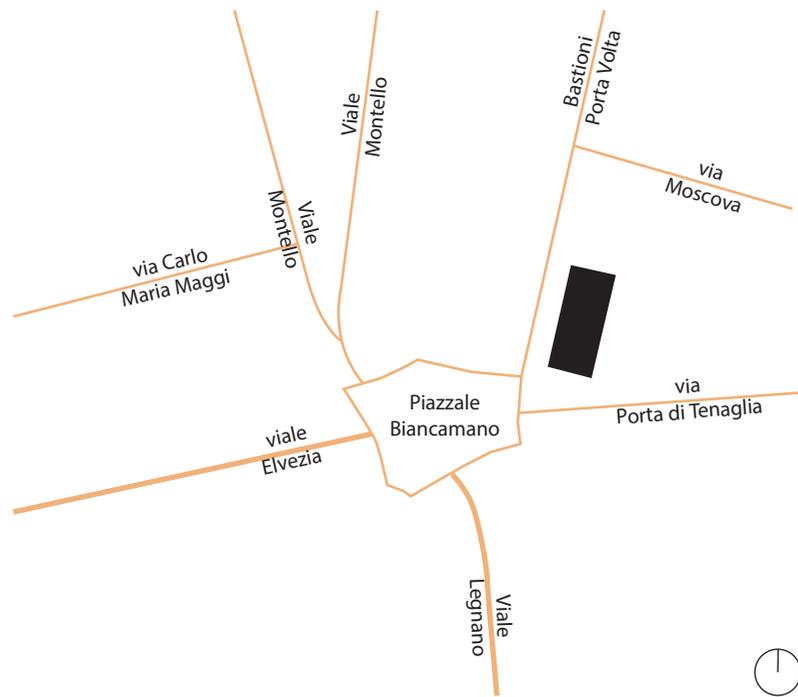


PHOTO SURVEY OF THE AREA



View from Piazzale Biancamano to via Carlo Maria Maggi



View from Piazzale Biancamano to via Legnano



View from Piazzale Biancamano to Porta Volta



View from via Porta Tenaglia to Piazzale Biancamano



View from Piazzale Biancamano to via Bramante



View from via Moscova to piazzale Biancamano

HISTORY OF THE BUILDING

Baselli tower was built in 1956 in a site seriously damaged during the second world war; the society “Immobiliare Piazzale Biancamano S.r.l.” bought the land in order to built new residential complex with the company “Bertani Baselli & C.”. The original projects proposals were two: the construction of low-rise building and the construction of **high residential tower** with two low buildings. For reasons of aesthetics, better aeration and illumination the second idea was the one choosen.

Several were the proposals for the façades. The one proposed by Portaluppi is especially important, even if it was not realized: he drew a compact parallelepiped placed on a basement of offices, extended to the entire block. It was useful for Baselli to reshape the façades with lodges that modified also the internal distribution.

The tower was completed in **1960**, with **19 floors** (the two last floors were added later) and a **height of more than 65 m**: a symbol of reconstruction for Milan after the second world war and an important landscape mark.

In 1965 the society RAS S.p.A. (Riunione Adriatica di Sicurtà) bought the whole tower for its employees: they were apartments at high price, so only few group of wealthy people could afford to rent or live here. After, with the “Tupini” law, owners were able to join different apartments in order to enlarge their house. In 1978 the “equo canone” put a control on the price rent, living in grattacielo Baselli became then accessible to people from different social class, but at the same time, a reduction of the maintenance level of the tower. In 2003 the society Immobiliare Biancamano 2 bought the building from RAS S.p.A; they invested in the common spaces like the hall restyling, the cleaning of facades and paintings. In 2003 the owners decide to select a condominium management (Piazzale Biancamano 2) in order to improve the control of consumption and costs. In 2008 the Piazzale Biancamano company develop a project to renew the two floors of the attic and add a further attic floor for an apartment. The works are still ongoing but the final project will see grattacielo Baselli with 20 floors and a rooftop with a swimming pool.

The **residential tower** today is made up of a basement with three underground floors that host 30 parking lots, 2 elevators and a ground floor with commercial spaces (used in particular as banks). From the 1st to the 17th floor, there are only residential apartments, generally six per floors, but in some case, they are less (depending if the residents own other apartments to increase the dimension of their house). The last two floors are the attic and they are composed by two prestigious apartments, an exception from the rest of the Grattacielo Baselli.



Historical drawing of Grattacielo Baselli. Piero Portaluppi's study drawing

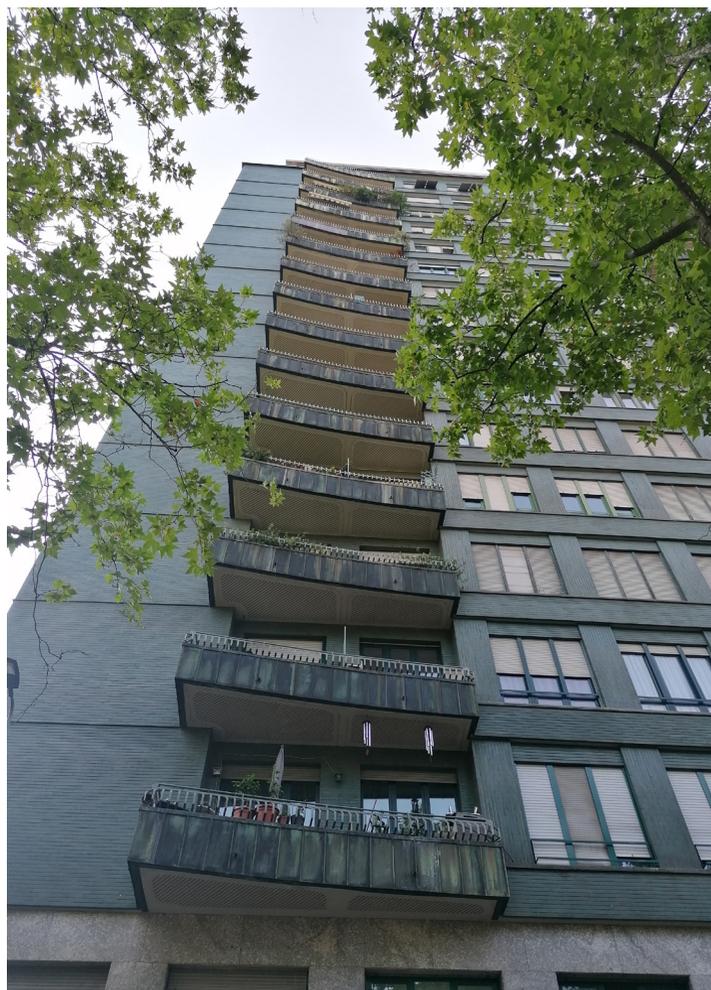
PHOTO SURVEY OF THE BUILDING



North facade of the building



West facade of the building
from Piazzale Biancamano



North facade of the building
from Bastioni di Porta Vittoria



South facade of the building
from via Porta Tenaglia



Context of the building. North facade.
View from via Moscova



Context of the building. West facade.
View from Piazzale Biancamano

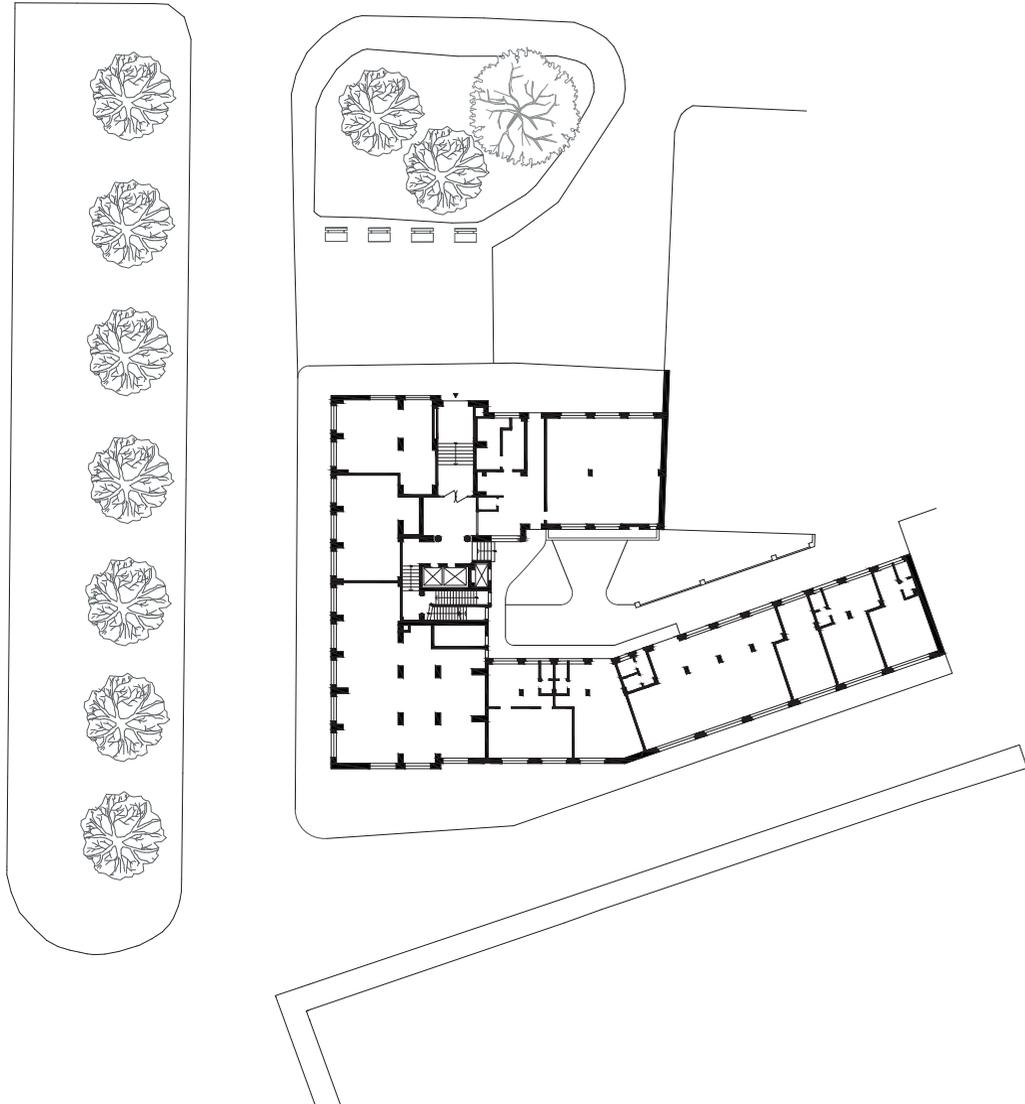


Detail of the building.
Up: tiles on the balcony
Under: entrance

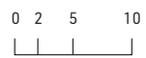


View from the terraces
Up: from the 18th floor
Under: from the 4th floor

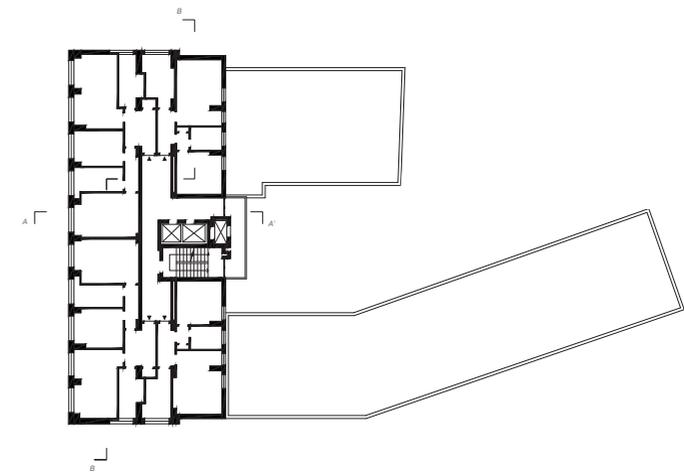
PLANS TYPOLOGIES



Ground floor plan



N

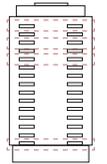
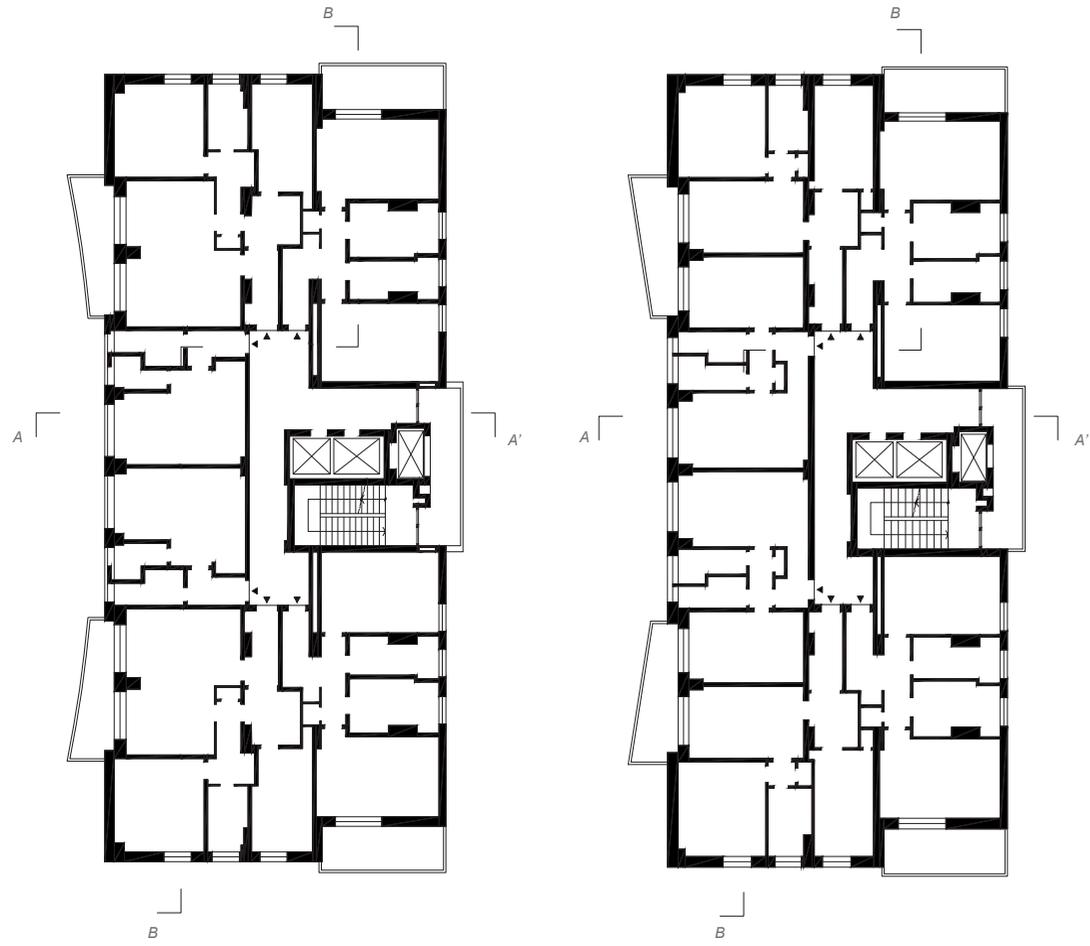


First floor plan

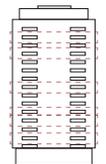


N

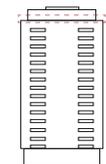
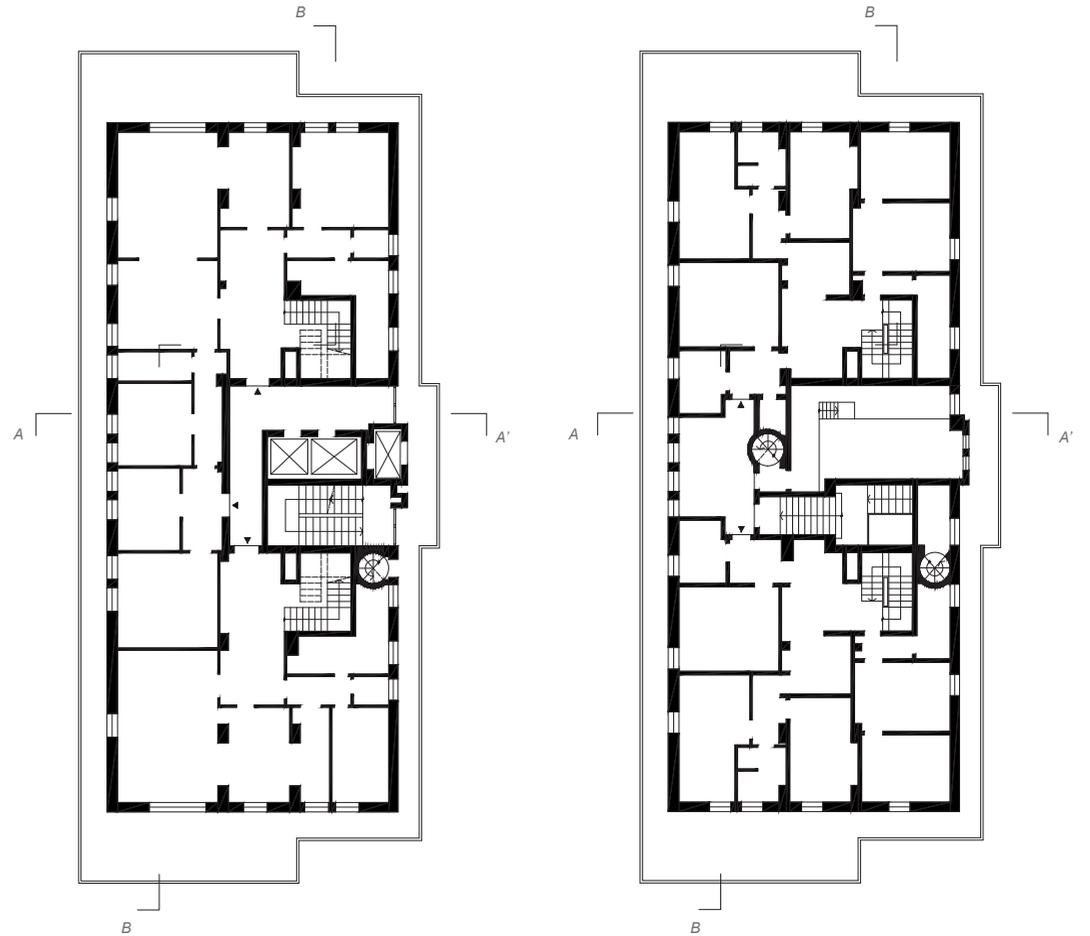




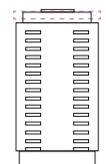
Plan type A



Plan type B

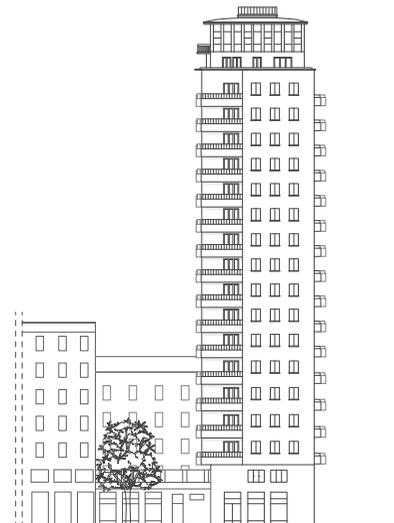


Plan 18th floor

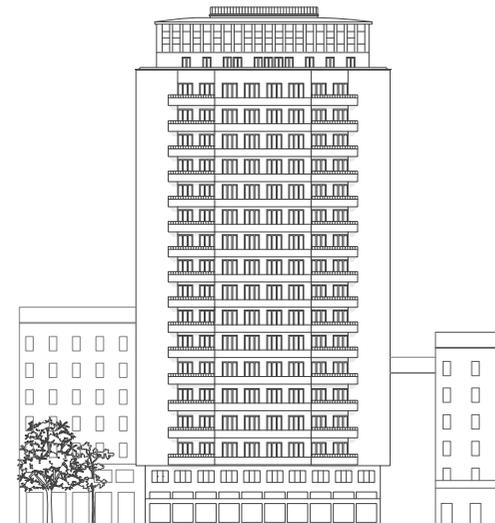


Plan 19th floor

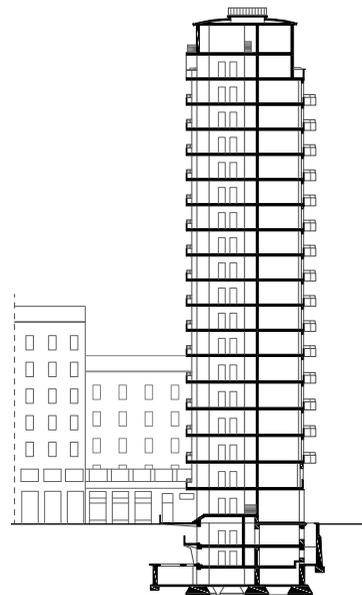




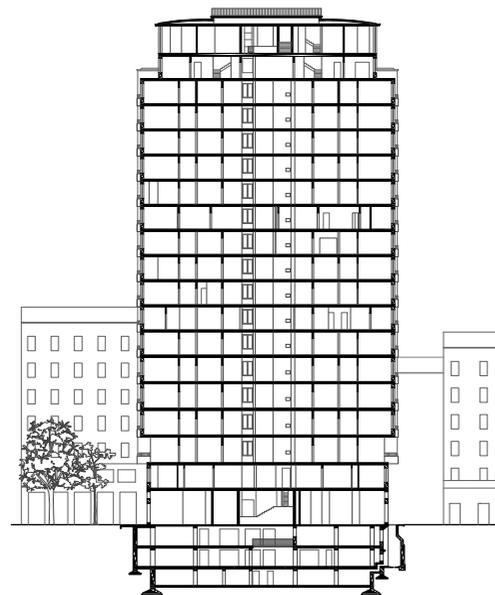
North view
1:1000



West view
1:1000

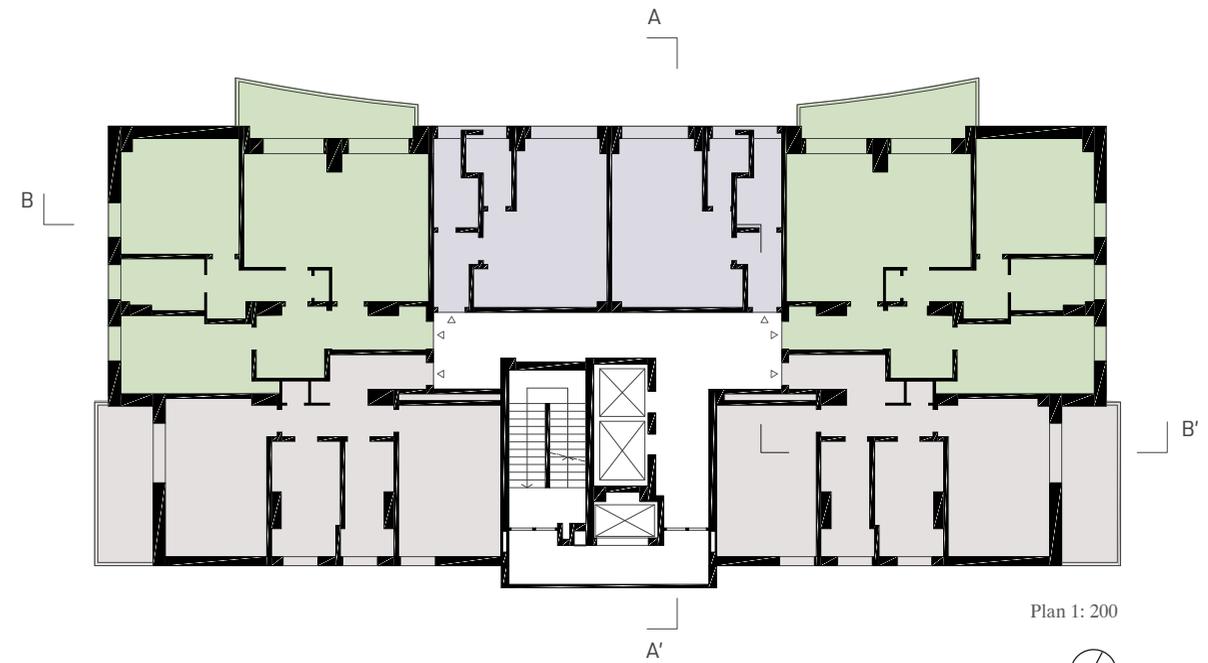


Section AA'
1:1000



Section BB'
1:1000

PLAN TYPE A



Plan 1: 200



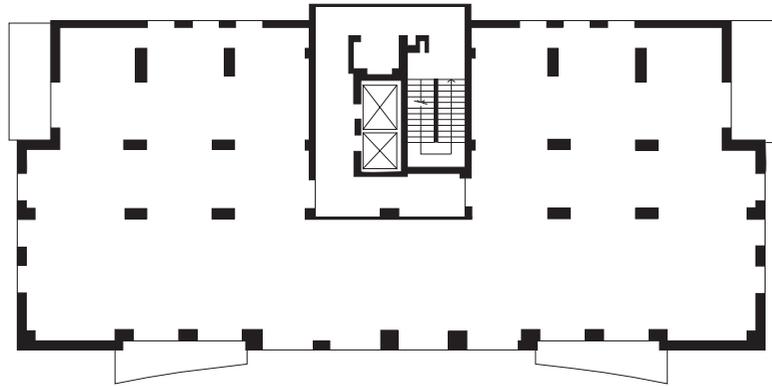
- THREE ROOM APARTMENT**
88 mq
Corridor 13 mq
Services 15 mq
- THREE ROOM APARTMENT**
70 mq
Corridor 7 mq
Services 15 mq
- DOUBLE ROOM APARTMENT**
90 mq
Corridor 6 mq
Services 8 mq

PROJECT PROPOSAL



THE EXISTING STRUCTURE

The existing structure is composed by bearing walls which helped the design of the space. The existing not bearing wall were all removed, in order to leave a free plan that can generates different private units inside a shared space.



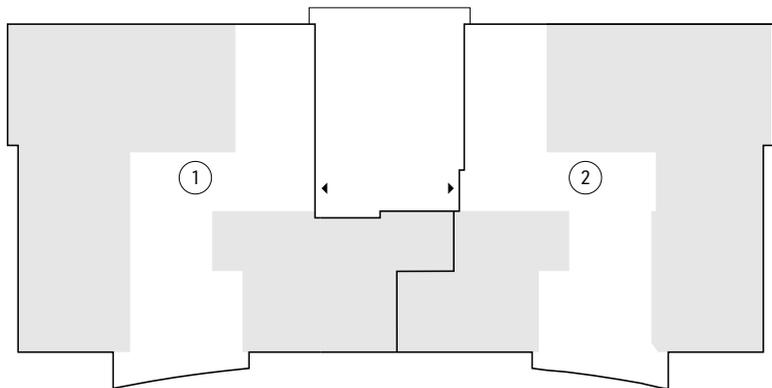
THE CLUSTERS

CLUSTER 1

Tot: 187.1 mq
Private: 120.2 mq
Shared: 66.9 mq

CLUSTER 2

Tot: 183.4 mq
Private: 117.7 mq
Shared: 65.7 mq



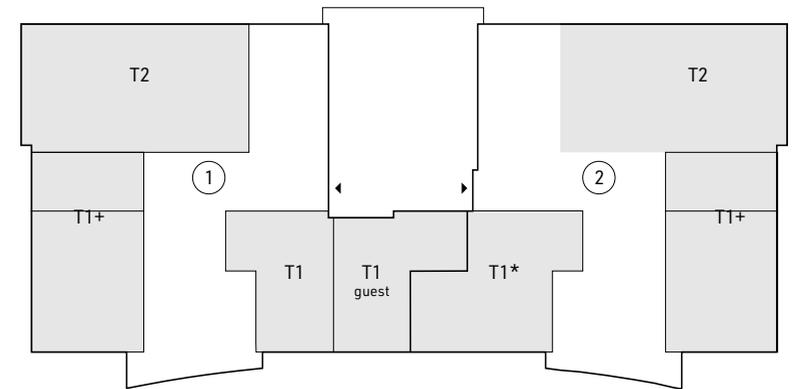
THE UNITS

CLUSTER 1

N° of units: 4
Person per cluster: 6/8
Mq per person: 23.4

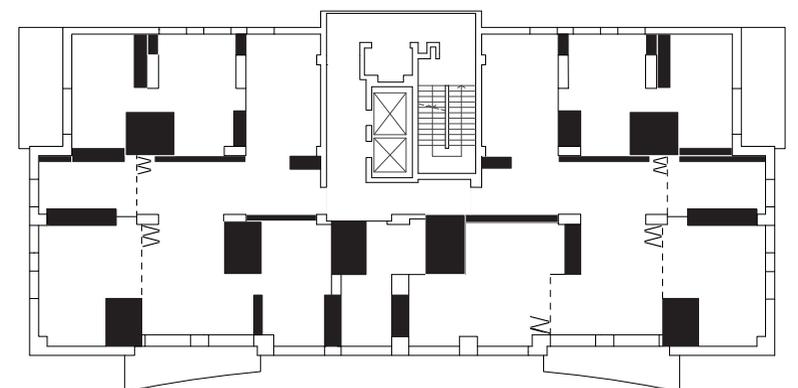
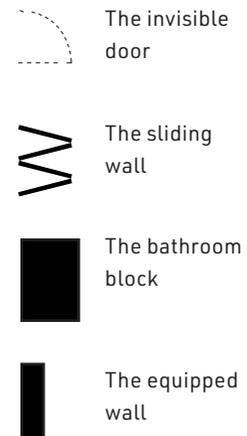
CLUSTER 2

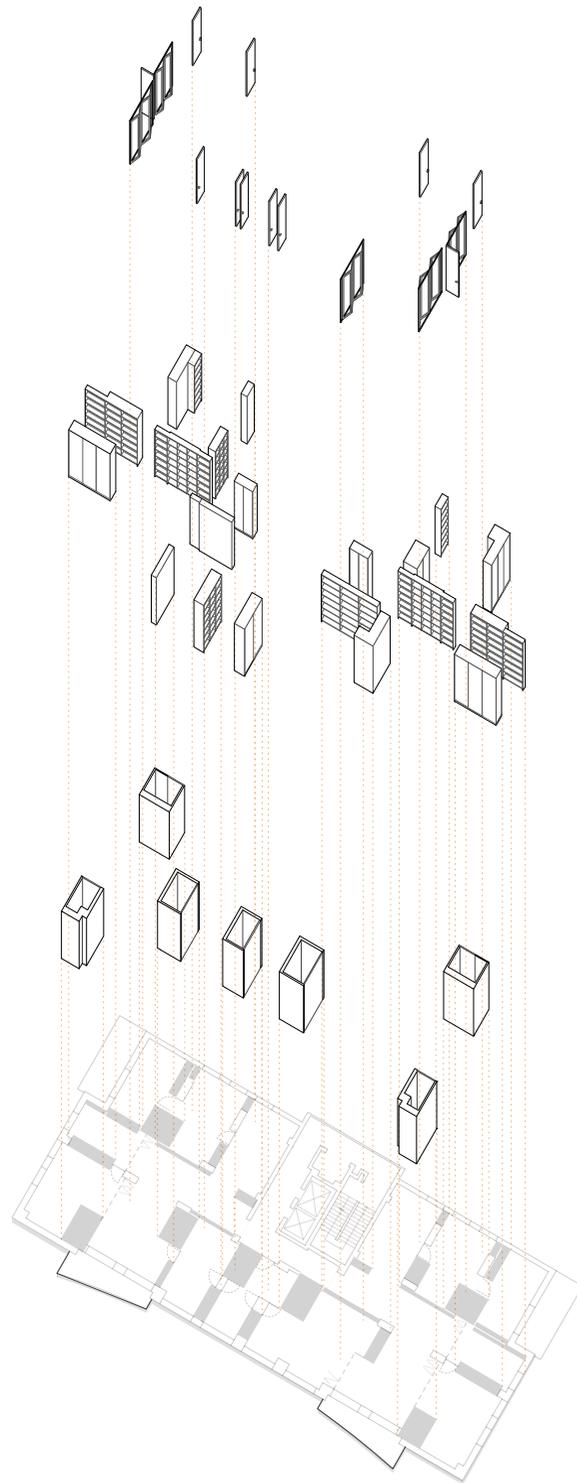
N° of units: 3
Person per cluster: 7/8
Mq per person: 22.9



FOOTPRINT

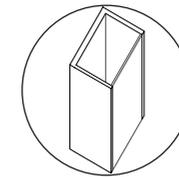
Furniture divide the spaces, not walls!





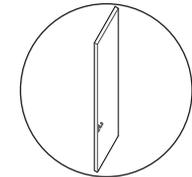
THE BATHROOM BLOCK

the bathroom is conceived as a box composed by two different materials, a polycarbonate panel and drywall partitions. It is a strong division from the shared area, but at the same time, a light division inside the private units.



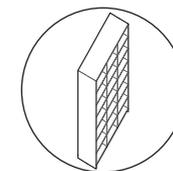
THE INVISIBLE DOOR

The invisible door is used to enter inside the private units. This door can be high as the height of the floor otherwise it can be tall as a normal door and have a small closet on top. The invisible door can be then a piece of furniture or a light moveable wall.



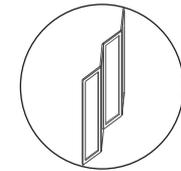
THE EQUIPPED WALL

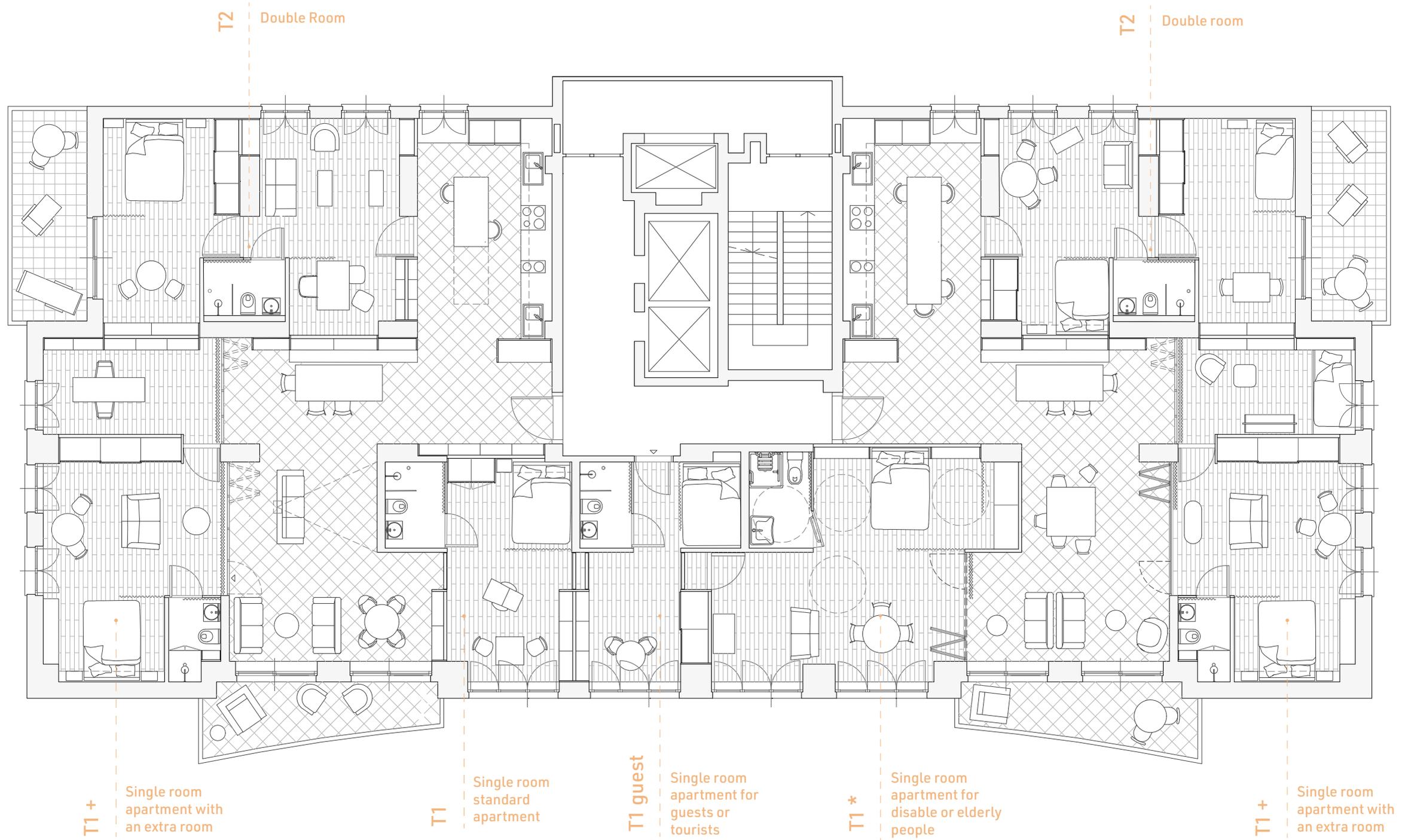
Wardrobe and libraries became walls themselves. Thanks to a layer of insulation and a double wood panel, they are able to divide the spaces keeping the privacy between the private units. The equipped wall can be made by the single wardrobe, single library or wardrobe plus library.



THE FOLDING WALL

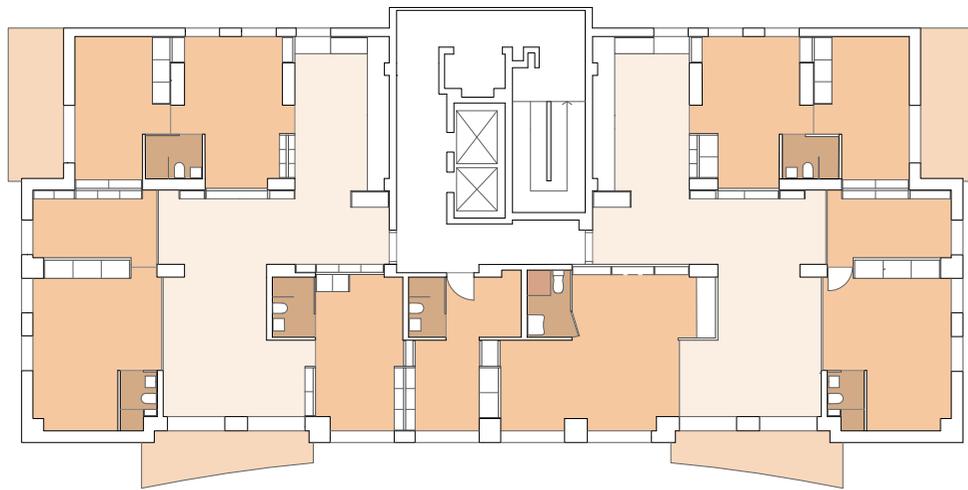
the folding wall is a system designed for the elderly and disable people: thanks to the folding glass wall and a double layer of curtains, it is possible to create different levels of privacy from the shared area. In this way, the elderly can stay in his room without losing the interaction with the shared area. When the privacy is need the folding glass, the blackout and the semi-transparent curtains can be close.





MATERIALITY

ORIZZONTAL SURFACE_FLOOR



WOOD FLOORING



Private unit's floor
Listofloor
Oak wood, Grand
(110*800, t= 10) mm
2 layer prefinished

RESIN



Bathroom's floor
Eleckta linea resine Tinta
Unika. t= 30 mm
MT 445.445 Finishing
Polycoat 722S

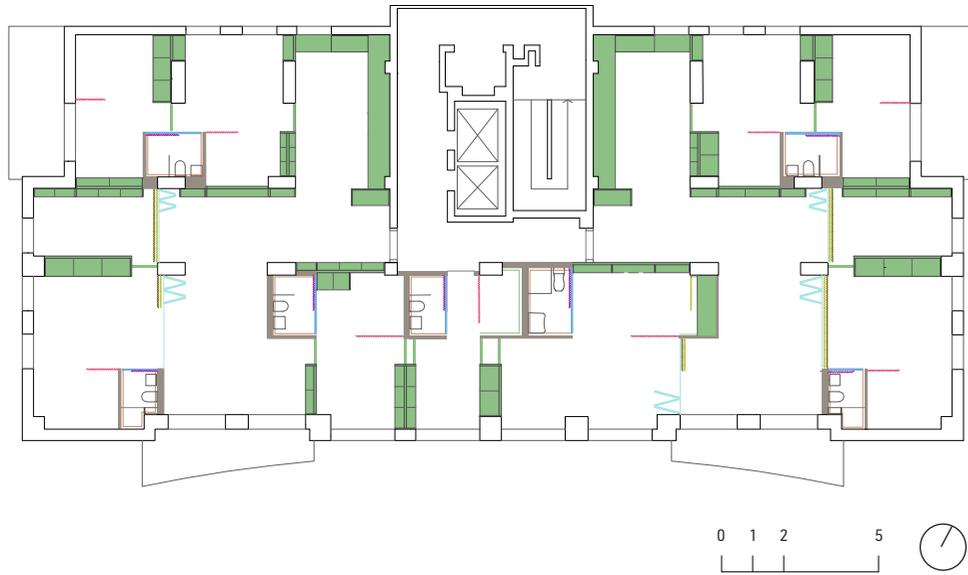
PORCELAIN TILES



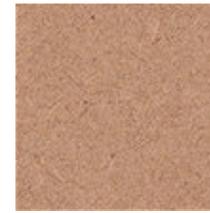
Shared area's floor
National Tiles
Belgium Stone
(300*300, t= 50) mm
Colors: Ice, Bruno, Artico.
Finishing Polycoat 722S

MATERIALITY

VERTICAL SURFACES



MDF WOOD PANEL



Library, wardrobe, invisible door

Listofloor
Oak wood, Grand
(110*800, t= 10) mm 2 layer prefinished

GLASS



Glass for the folding wall

Single glass
Non-thermal system
44.1 mm

POLYCARBONATE WALL



Bathroom's wall on the private room side

Opaque alveolar polycarbonate:
t= 50 mm
white color

SOUND ABSORBING CURTAINS



Folding wall:
Blackout system

layer 1: acustic insulating curtain Textilia focus lab.
layer 2: velvet curtain Green colors

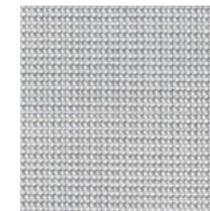
DRY WALL



Bathroom's wall structure

Dry wall panels
2 layers t= 25 mm
White plaster on the private room side.

BATHROOM CURTAINS



Bathroom curtains

Semi- trasparent curtains. polyester applicable in humid area. Silent Gliss, Colorama collection.

RESIN



Bathroom's cover drywall

Eleckta linea resine
Tinta Unika t= 30 mm MT
445.445 Finishing
Polycoat 722S

BED NICHE CURTAINS



Curtain as separation of the bed niche from day area

Velvet blackout curtain customizable color

SEMI-TRASPARENT CURTAINS



Folding wall:
light filter curtain

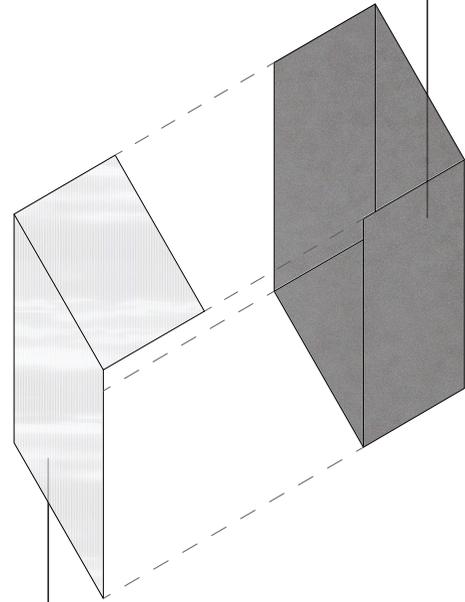
Semi- trasparent curtains .polyester. Silent Gliss, New Life collection

THE PRIVATE BATHROOM

MATERIALS

DARK GREY RESINS

Walls connected with the shared area; floor



POLYCARBONATE PANEL

Ceiling and wall connected with the private space

DARK GREY RESIN



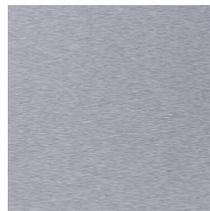
Resins is used to cover the floor and the three walls connected with the shared area. It is used to guarantee the privacy from the collective space.

POLYCARBONATE



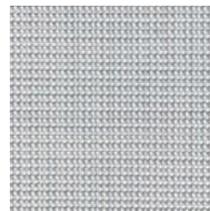
The polycarbonate panel is used for the ceiling and the partition that divide the bathroom from the rest of the room. It is used to create an effect of continuity inside the private units. It is also used for create a bright space inside the bathroom.

DIE CAST ALUMINIUM

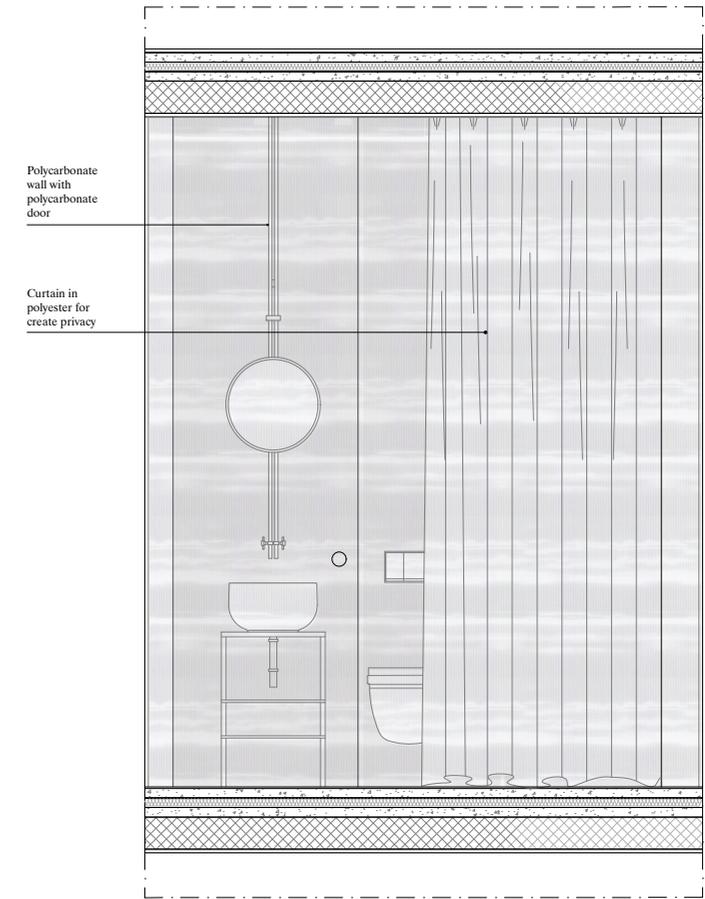


The aluminium is used for the sink pipes, the supported for the sink and the mirror.

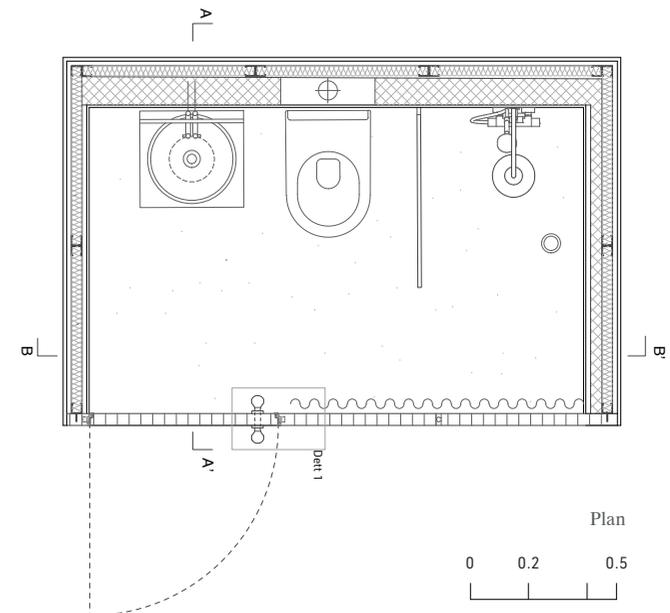
POLYESTER CURTAIN



The curtain is insert in the bathroom to create intimacy from the rest of the room when need it. It also create an elegant space, since it is made in polyester. The textile is from the collection Colorama 2 from the company SIlent Gliss.

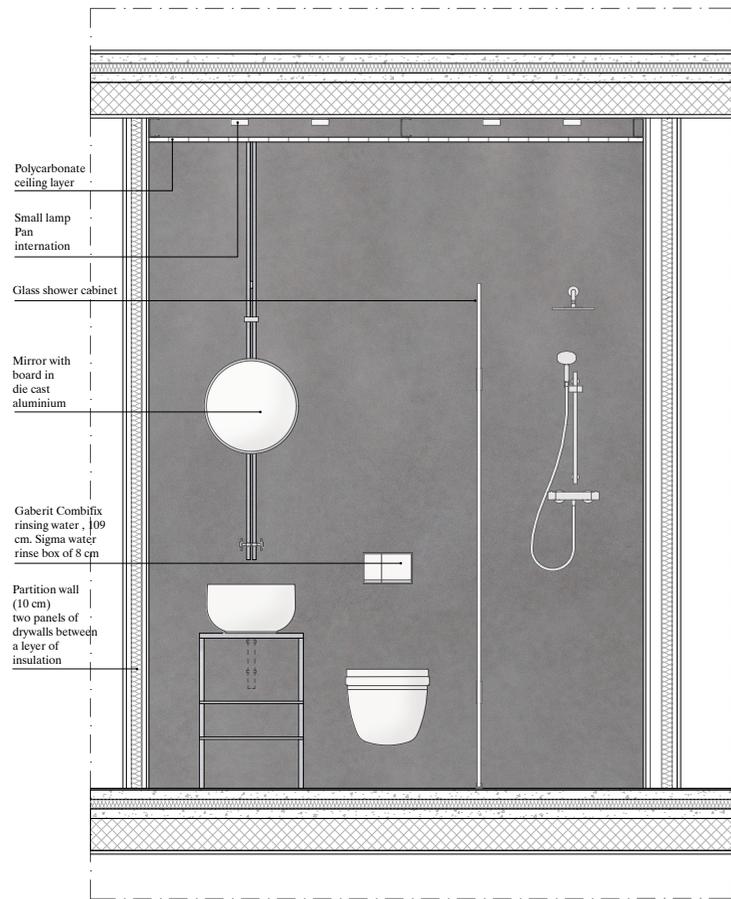


View of the bathroom from outside

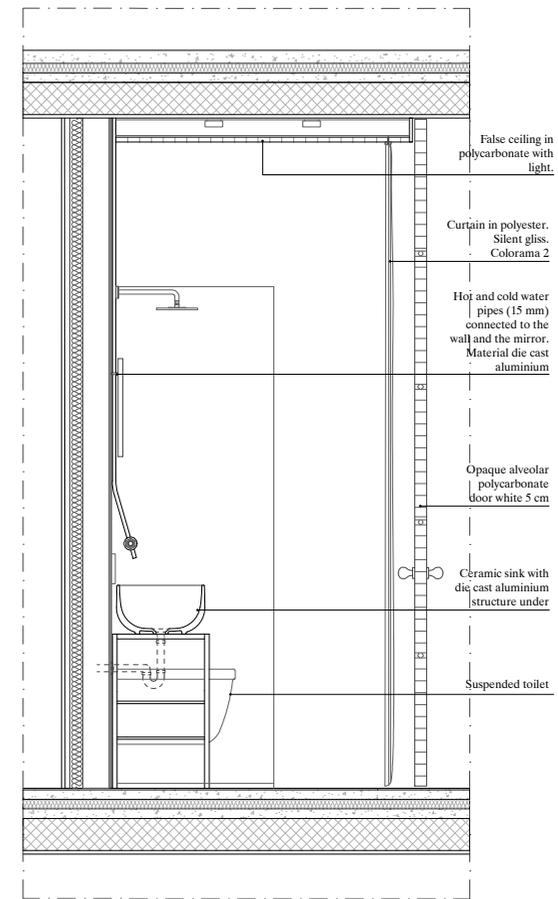


Plan

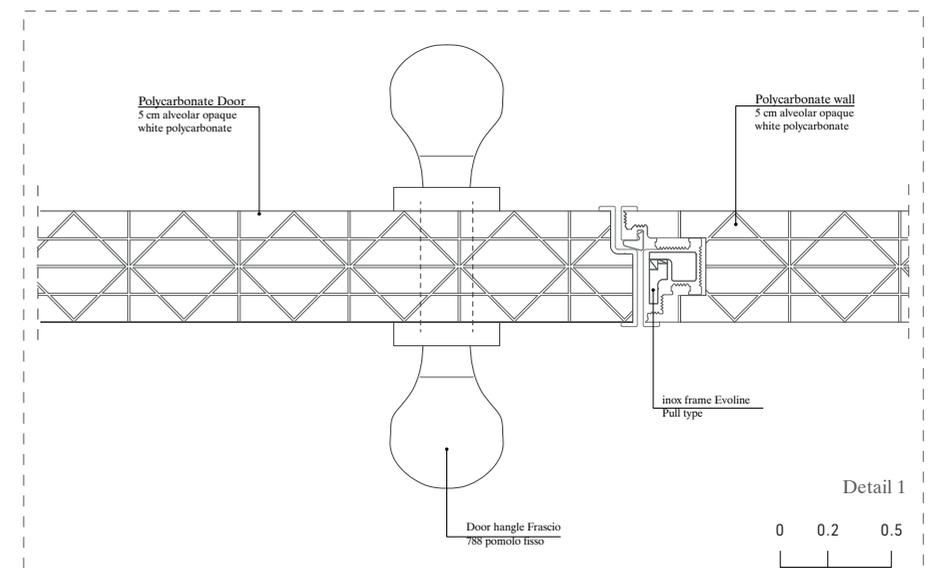
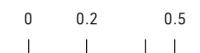
0 0.2 0.5



Section BB'



Section AA'



Detail 1



1 TRADITIONAL FAMILY

DAVID, CRISTINA & MARIA

1 STUDENT

CONNIE

1 ELDERLY COUPLE

ZHANG YILIN & WANG WEI

2 COUPLES WORKING FROM HOME

DAVIDE & PAOLA

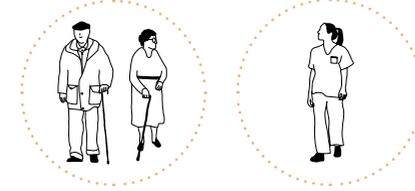
ALESSANDRO & ELISA

1 AIR BNB' GUEST

TOURISTS

1 ELDERLY COUPLE + CAREGIVER

GIUSEPPE, DINA & CRISTINA



GIUSEPPE, DINA & CRISTINA

(95 years old, Retired

85 years old, Retired

50 years old, Caregiver)

Eldery couple + Caregiver

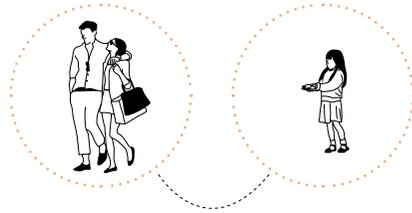
2 nucleus

3 person

"I think Giuseppe and Dina made a good decision to live here. They have a nice apartment with a big shared area, where they can spend time with the other residents and receive their friends over. They are really happy with the choice made, I am happy too, I have my private room which is good for sleeping here half days per week!"

Cristina

Dina and Giuseppe are husband and wife, they have three sons. They had a really active life, but now that they got old, they like to spend more time in the house: Dina spends a lot of time cooking or receiving friends and family in the living room. Because of their age and an accident of Giuseppe, they decide to hire a caregiver, who will be change every six months. Now they are hosting Cristina, a polish woman that worked in a bank in Poland. She speaks good Italian, she works all days of the week except during the weekend, where she spends some time with other polish friends or her boyfriend. She helps them with house manners, she takes company and she helps Giuseppe to walk and does his exercises. They have an harmonic life all together, they like living in the co-living apartment so they can have a bigger space to receiving friends and family and they can also enjoy the company of the other residents.



DAVID, CRISTINA & MARIA

**(43 years old, Fire figher
40 years old, Journalist
5 years old, Student)**

Traditional Family
1 nucleus
3 person

"We love living here! Me and my husband are working all day, so we can receive help by our neighbour to look after Maria. We are also travelling a lot during the weekend, so we feel more safe knowing that there are always people around our apartment".

Cristina

The couple David and Cristina has one children, Maria. David works as firefighters and he has 24 hours on-call service; Cristina is a journalist in an important Spanish radio and she is really concern about the environment situation. When they are not working, they spend their free time with the family or doing sports, a hobby that the couple has in common. The child is going to school and she is practising sports as well; she is also following english lessons. Maria needs more space than her parents, so she has a private room for playing and doing her homework. The family is also spending a lot of time together in the living room, where they can play or watch a movie. Since David and Cristina are often at work they like living inside the co-living apartment because they can be helped by the other residents to look after Maria.



DAVIDE & PAOLA

**(63 years old, chef
58 years old, phycologist)**

Couple with one member working from home
1 nucleus
2 person

"What I like most of this house is that I have my private space to work, a nice apartment to share with my boyfriend and a big area to share with friends or our lovely neighbours"

Paola

Paola and Davide were both married with two daughter each. They felt in love some years ago and they decide to move together in this apartment. Davide is working as chef in one hotel in Milan, while Paola is working as phycologist in the hospital and privately at home. She generally received at home according to the hospital schedule and when the husband is working. She receives the patients in the living room who is also her work-place. When she is not working this space became a big living room for the couple, where they can chill on the sofa or watch a movie. They love living here since the house offer a big space when the daughter came to visit; but also because they can have the opportunity to work and live in the same place paying an affordable price. They also love being surrounded by other people, since the daughters are not living with them anymore.



ALESSANDRO & ELISA

(40 years old, Architect
38, Teacher)

Couple with one member working from home

1 nucleus
2 person

"I am so happy with the choice of living here. Me and my husband do not have children so it is nice meet people around the house. I am also glad that Alessandro was able to find a place where he can insert his studio, in this way we can spend more time together!"

Elisa

Alessandro and Elisa are a married couple without children. Alessandro is working as architect while Elisa is a teacher. Elisa is teaching history in high school; she is working every morning and some afternoon per week. Alessandro is working in a small architecture company who is owned by him and other two colleagues. Since the studio has a lot of work, sometimes Alessandro continue to work during the evening or the weekend from home, but also during the week if he has some bussness to do during the day. They decide to live in an apartment with an extra room that become the studio of Alessandro (and that can be used by Elisa as well when need it). They like living here since they can enjoy the company of other people, especially Elisa, since her husband his working a lot. They have the possibility of working from home and also receiving friends in the big living room when they need.



CONNIE

(21 years old, Student)

Student
1 nucleus
1 / 2 person

"I like the co-living apartment! It is affordable: at the same price I could get an apartment only in suburban area or a room in a shared house without all these facilities and privacy. Here I have my own private space with a bathroom as well, plus I can always use the shared area when I have to invite people over for studying or chill."

Connie

Costanza is studying History of Art.

Connie is a positive person, very creative, in good vibes every day of the year. She enjoys cooking and eating, especially bakery products, she has many books about it and she likes to experiment when she has some free time. She lives alone, but she likes inviting people over. She has a pet, a rabbit called Lea, which moves free inside the apartment. She likes living here since she has a big kitchen for make her cooking experiments and a big living space for inviting his friends for studying together.



AIR BNB GUESTS

(different ages and professions)

Tourists or guests
1 / 2 nucleus
1 / 2 person

"All my guests are really happy with the unit that I am providing them: the price is good, they have all the equipment need it and they use the big shared area as well. They can also receive suggestions to the other residents about place to visit or eat here in Milan"

Claudio

Claudio is the owner of the room who was occupied before by his son Milo. Since his son has left he decided to rent a room to Air' Bnb and he is having a great success. The main occupation of Claudio today is so taking care of the house and managing the guests. The guests are independent from the other residents, but if they need to use kitchen or living room, they can use the one of the cluster 1. They have a private entrance in the room and they have to enter in the shared area through the main door. Since the apartment is located in the middle of two other rooms, Claudio is ready in some years to rent the apartment to one of the two families living closer, so they can have a bigger apartment. For Claudio this unit has many advantages, for a tourist it is independent from the rest of the units, while in the future could become an extra room to add to the next door apartments.



ZHANG YILIN & WANG WEI

(63 & 61 years old, Retired)

Elderly couple
1 nucleus
2 person

"We always like live in a co-living apartment. This one is really nice and comfortable! We have everything we need, a big area to interact with our neighbours and receive friends over. We never feel alone! Moreover in some years when we will be more old, we can rent the room next door from Claudio and host a caregiver that can help us."

Zhang

The couple moved in Milan from Shanghai, where they were living in a shared apartment as well, the chinese residential call Shi Ku Men, a cheap and easy build solution where the apartment in one floor contain several rooms for each resident, plus kitchen and bathroom shared. Zhang Yilin and Wang Wei are married and retired, they have a daughter of 25 years old who lives and work in Milan. Due to an accident, the husband is forced to move and live on a wheelchair; fortunatly, he is still able to live independently without much help. When need it, his wife can help him or his daughter who came to visit different time per week. They like living here so they can have the company of their neighbours and also in a future, when it will be necessary, they can rent the next door house and host a caregiver for Zhang.

CLUSTER 1: THE SHARED AREA

Dimension: 66.9 mq

N° of residents: 6 / 7

Target: No specific

The unit include:



3 Living Area



Kitchen

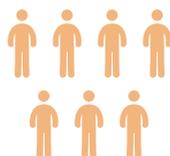


2 Dining Area



Terrace

66.9 mq



The shared area of cluster 1 contains a big kitchen with a big table for eating and cooking. It also contain three different living area composed by two sofa looking each other, a table for reading, working or studying and a cinema area composed by a sofa looking towards the wall (movies will be projected through a projector attached on the ceiling). There is a big table that can be use as dining table or living area: it si located in the centre of the house and it is the core of the shared area.

The shared area contains a small balcony as well.

"I am happy of the shared area, when I invite my friends over we can use the big table for studying, then relax watching a movie and I can experiment a lot in the big kitchen"

Connie

"It is a nice apartment to rent, you can always meet the residents and ask them many information about the city. Plus we have all our privacy in our independent unit"

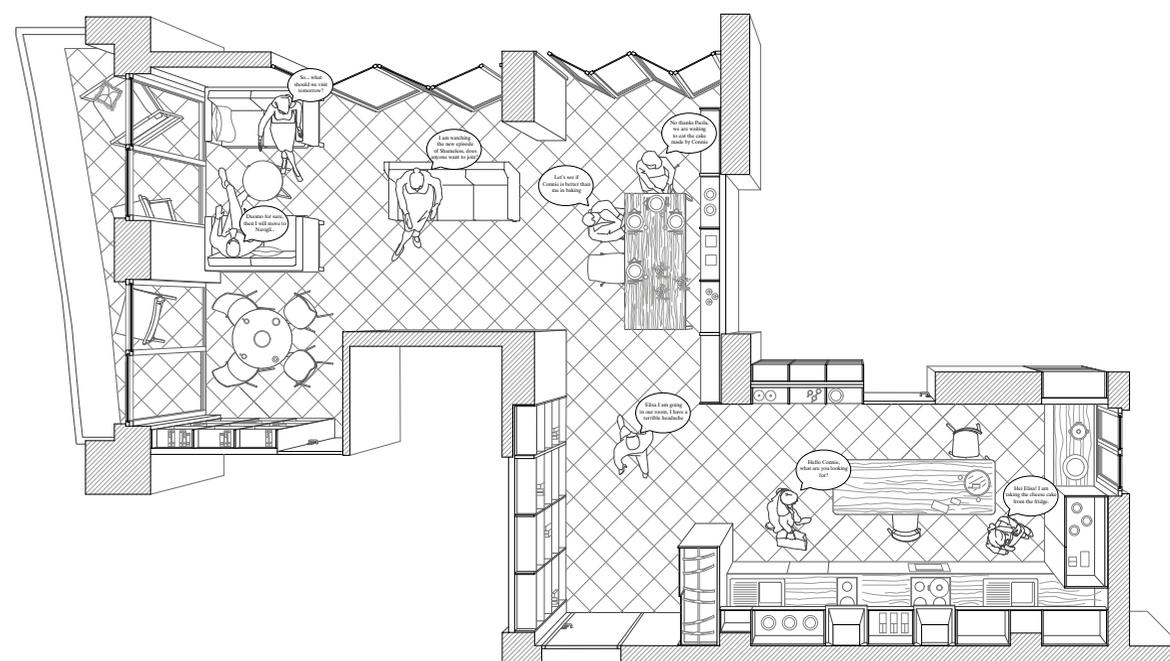
Tourist

"I love this common area, we all became really close to each other thanks to the many opportunities of sharing"

Elisa

"What I like more is the presence of table and sofa that we have, we can work, eating or watch a movie all together"

Paola



CLUSTER 1: THE PRIVATE UNITS

UNIT T2_DOUBLE ROOM APARTMENT

42.4 mq

DAVIDE & PAOLA



Dimensions: 42.4 mq

N° of residents: 2

Target: No specific

The unit include:



Bathroom



Night area



2 Living Area



Working area

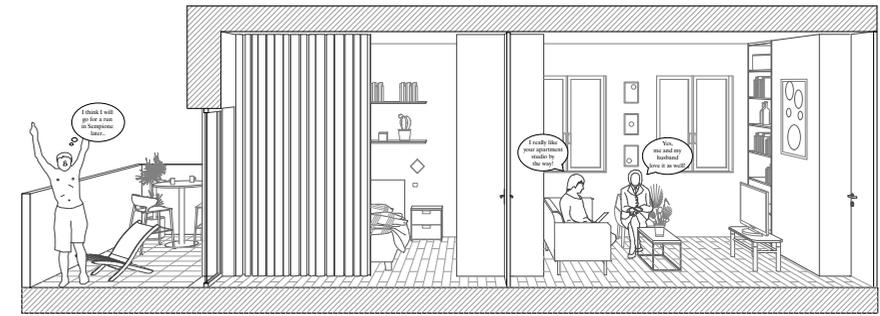


63 years old, chef
58 years old, phycologist

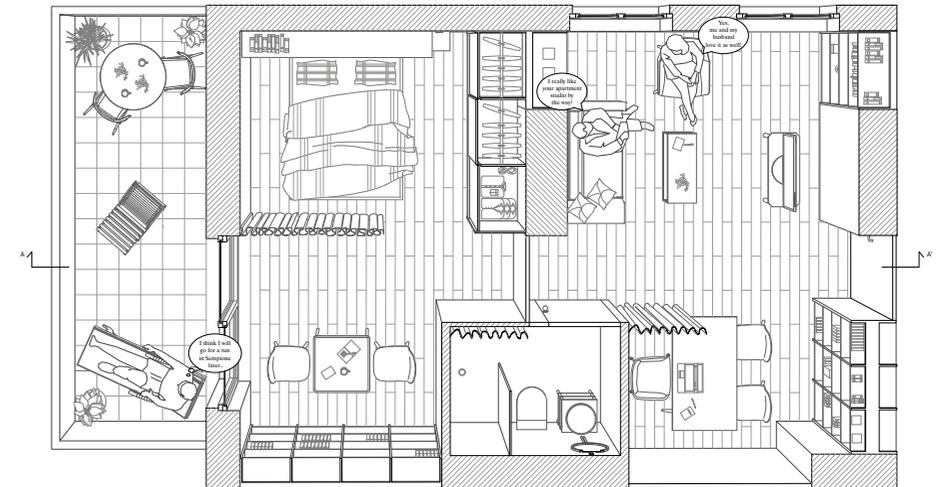
Davide and Paola were married before with two daughter each. They moved here since they find an affordable apartment where Paola can also exercises her profession. The couple have different working hours, but in their free time they like watch movies or spending time with the other residents.

"What I like most of this house is that I have my private space to work, a nice apartment to share with my boyfriend and a big area to share with friends or our lovely neighbours"

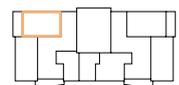
Paola



Section AA



0 1 2 3



UNIT T1 PLUS_SINGLE ROOM APARTMENT

38.8 mq



ALESSANDRO & ELISA

Dimensions: 38.8 mq

N° of residents: 2

Target: No specific

The unit include:



Bathroom



Night area



Living Area



Working area



40 years old, Architect
38, Teacher

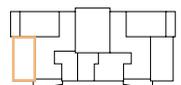
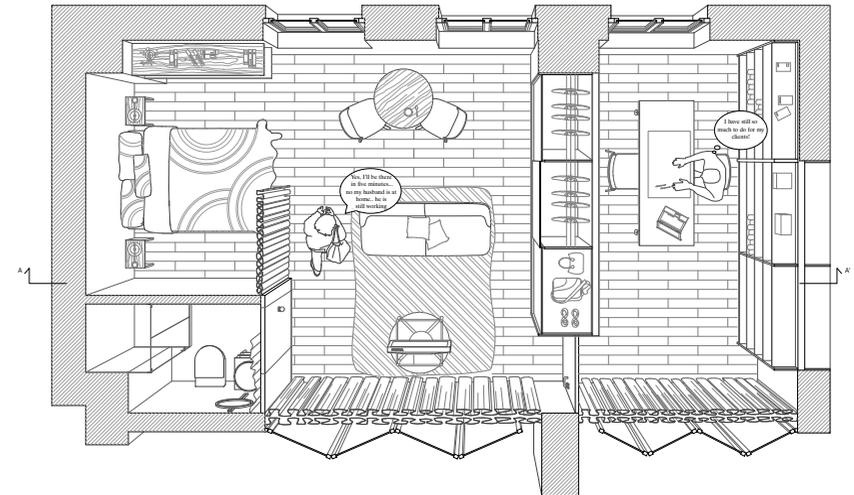
Alessandro and Elisa are a married couple without children. They like spending their time with friends and the other residents. Alessandro is often busy with his work, in order to spend more time with her wife he decided to live in an apartment with a personal studio, that the wife can use as well for her job.

"I am so happy with the choice of living here. Me and my husband do not have children so it is nice meet people around the house. I am also glad that Alessandro was able to find a place where he can insert his studio, in this way we can spend more time together!"

Elisa



Section AA



UNIT T1_SINGLE ROOM APARTMENT

20.2 mq



CONNIE

Dimensions: 20.2 mq

N° of residents: 1

Target: No specific

The unit include:



Bathroom



Night
area



Living
Area

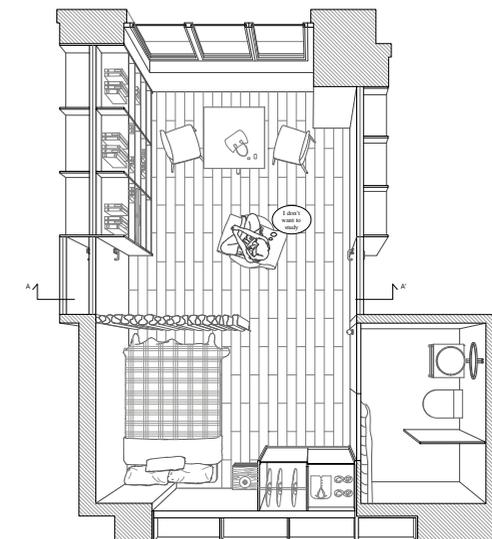
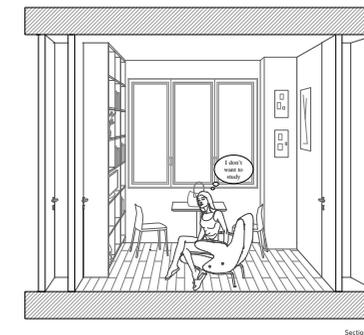


21 years old, Student

Costanza is a student of history of arts. She loves cooking, spending time with her friends and watch movies. She moves to Milan for the university so she is happy to have found a place in a shared house. She also like hosting and receiving friends at home.

"I like the co-living apartment! It is affordable: at the same price I could get an apartment only in suburban area or a room in a shared house without all these facilities and privacy. Here I have my own private space with a bathroom as well, plus I can always use the shared area when I have to invite people over for studying or chill."

Connie



0 1 2 3



UNIT T1 GUEST_SINGLE ROOM APARTMENT

18.8 mq



AIR BNB GUESTS

Dimensions: 18.8 mq

N° of residents: 1 / 2

Target: Tourists

The unit include:



Bathroom



Night
area



Living
Area

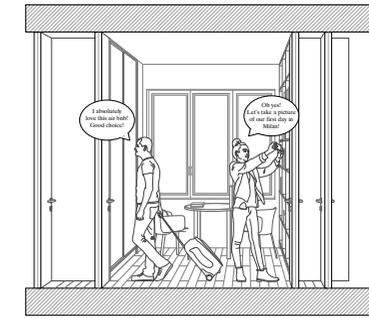


63 years old, chef
58 years old, phycologist

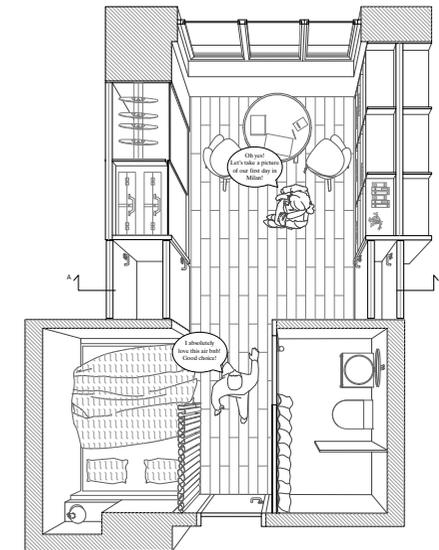
The owner of the apartment is Claudio, who bought this apartment for the son Milo. Now he is renting it through Air bnb and its having a great success. The room is equipped with all the needs and the tourists can also use the shared area as well. They have an independent entrance from the rest of the residents.

"All my guests are really happy with the unit that I am providing them: the price is good, they have all the equipment need it and they use the big shared area as well. They can also receive suggestions to the other residents about place to visit or eat here in Milan"

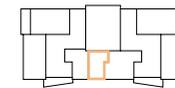
Claudio



Section A-A'



0 1 2 3



CLUSTER 2: THE PRIVATE UNITS

UNIT T2_DOUBLE ROOM APARTMENT

42.4 mq

DAVID, CRISTINA & MARIA



Dimensions: 42.4 mq

N° of residents: 3

Target: No specific

The unit include:



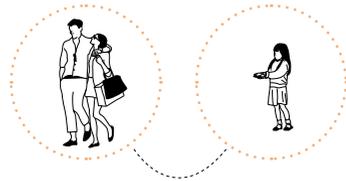
Bathroom



2 Night
area



2 Living
Area

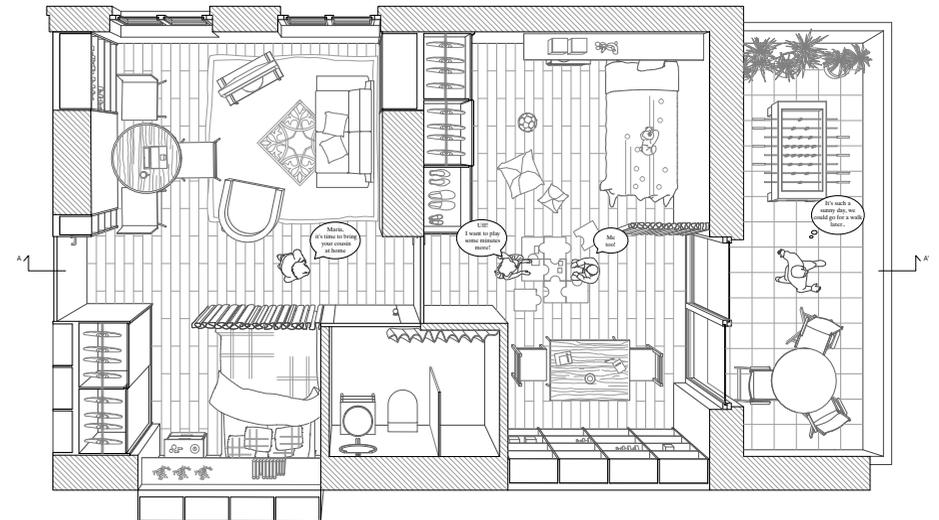
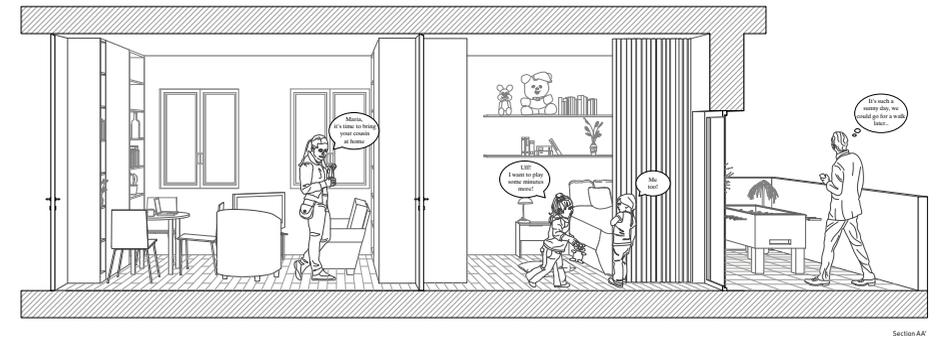


43 years old. Fire fighter
40 years old. Journalist
5 years old. Student

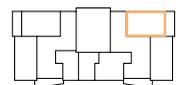
The family is spending a lot of time together especially during the weekend. When David and Cristina are working, Maria is taking care by a baby-sitter or the other residents.

"We love living here! Me and my husband are working all day, so we can receive help by our neighbour to look after Maria. We are also travelling a lot during the weekend, so we feel more safe knowing that there are always people around our apartment".

Cristina



0 1 2 3



UNIT T1 PLUS_SINGLE ROOM APARTMENT

38.8 mq



GIUSEPPE, DINA & CRISTINA

Dimensions: 38.8 mq

N° of residents: 2 / 3

Target: No specific

The unit include:



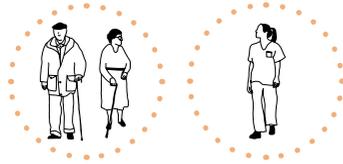
Bathroom



2 Night area



2 Living Area



95 years old, Retired
85 years old, Retired
50 years old, Caregiver

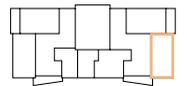
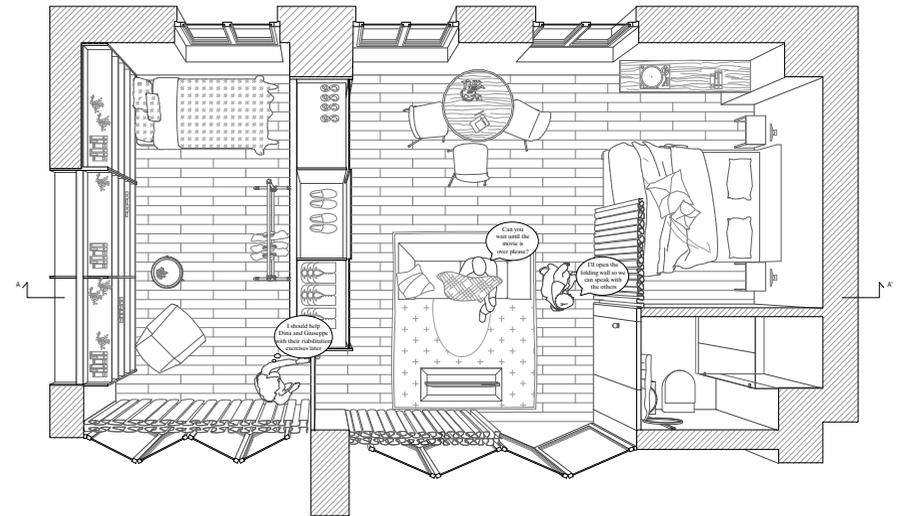
Giuseppe and Dina are a married old couple who likes spending a lot of time at home receiving friends or relatives. Since their age, they decide to host a caregiver that can help them with the house matters and exercises. They hired Cristina from Poland, who stays with the couple half days per week.

"I think Giuseppe and Dina made a good decision to live here. They have a nice apartment with a big shared area, where they can spend time with the other residents and receive their friends over. They are really happy with the choice made, I am happy too, I have my private room which is good for sleeping here half days per week!"

Cristina

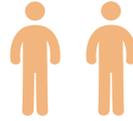


Section AA



UNIT T1*_ SINGLE ROOM APARTMENT
FOR DISABLE

36.5 mq



ZHANG YILIN & WANG WEI

Dimensions: 36.5 mq

N° of residents: 2

Target: Elderly / Disable

The unit include:



Bathroom



Night
area



Living
Area

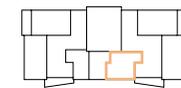
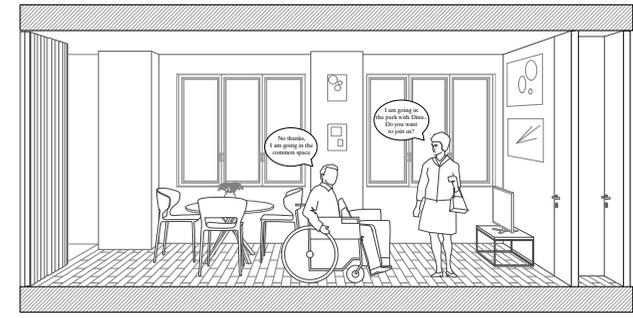


63 & 61 years old, Retired

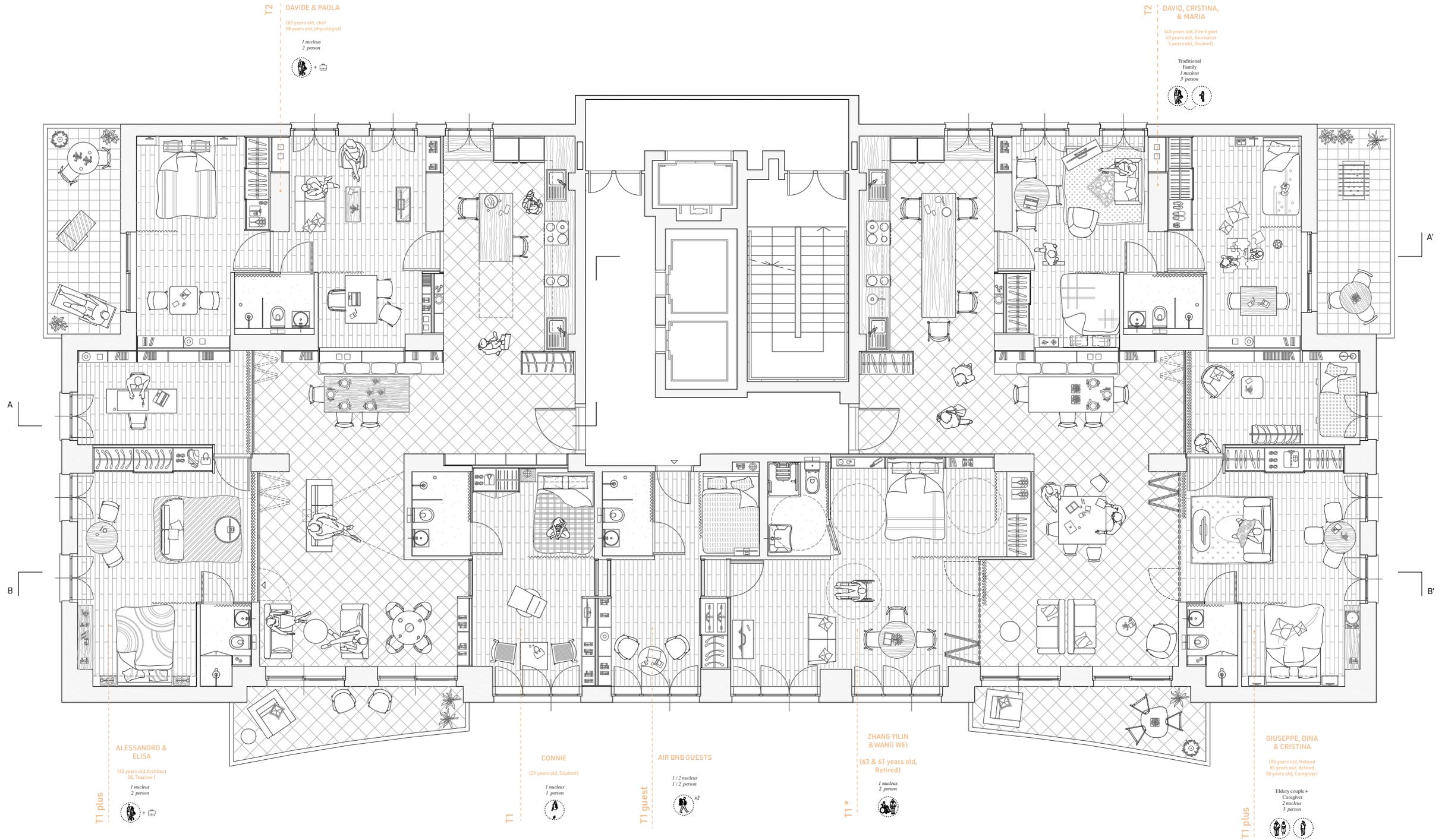
The couple moved to Milan from China with her daughter many years ago. They are living alone, however Zhang due to an accident is forced to use the wheelchair. He is still able to do everything by himself, and when he need, his wife can help him. They like spending their time outside in the neighbourhood.

"We always like live in a co-living apartment. This one is really nice and comfortable! We have everything we need, a big area to interact with our neighbours and receive friends over. We never feel alone! Moreover in some years when we will be more old, we can rent the room next door from Claudio and host a caregiver that can help us."

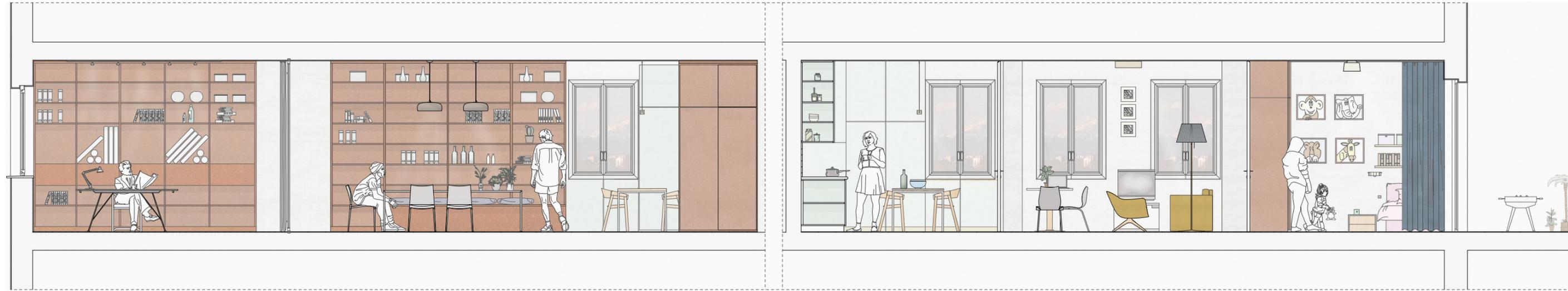
Zhang



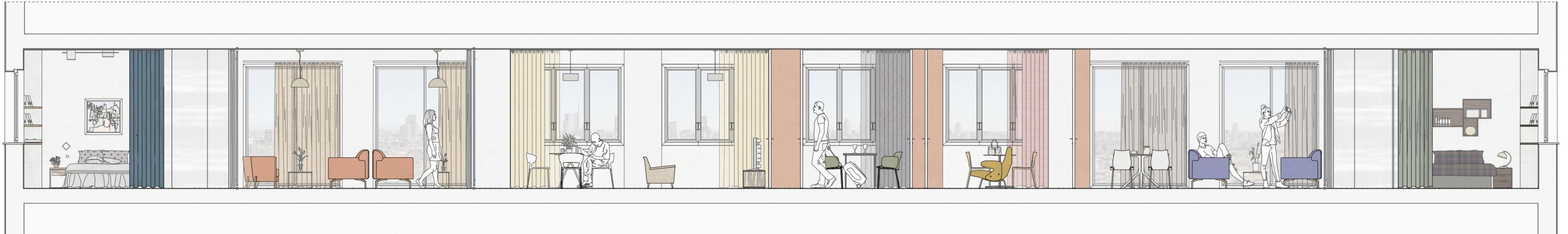
PROJECT: PLAN



PROJECT: SECTIONS



Section AA'

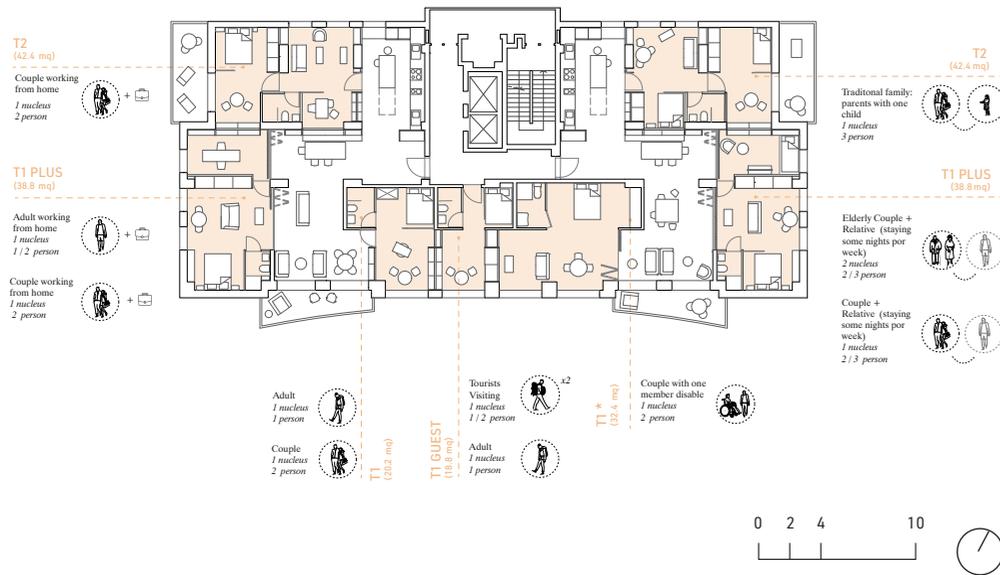


Section BB'



**FLEXIBILITY:
CO-LIVING IS FOR EVERYONE!**

AGGREGATION 1



Cluster 1

N° of residents: 6 / 8

N° of units: 4

N° typologies of residents: 7

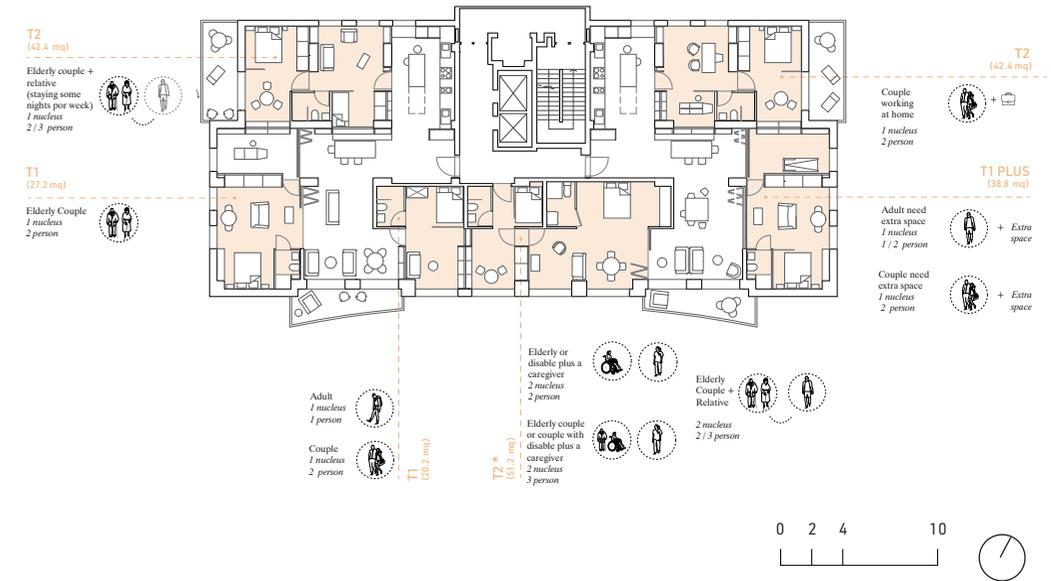
Cluster 2

N° of residents: 7 / 8

N° of units: 3

N° typologies of residents: 4

AGGREGATION 2



Cluster 1

N° of residents: 5 / 7

N° of units: 3

N° typologies of residents: 5

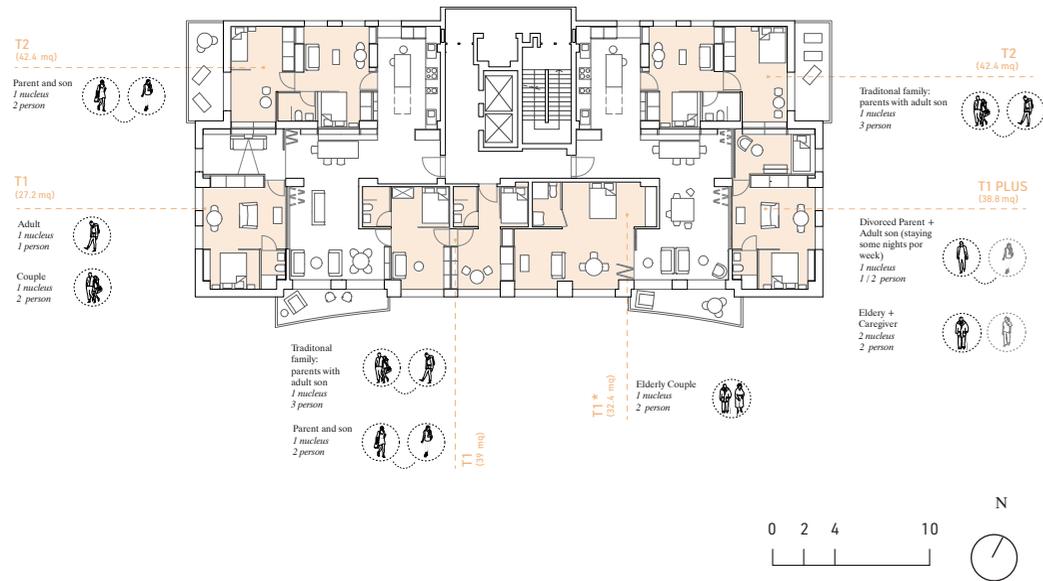
Cluster 2

N° of residents: 5 / 7

N° of units: 3

N° typologies of residents: 6

AGGREGATION 3



Cluster 1

N° of residents: 5 / 7

N° of units: 3

N° typologies of residents: 5

Cluster 2

N° of residents: 6 / 7

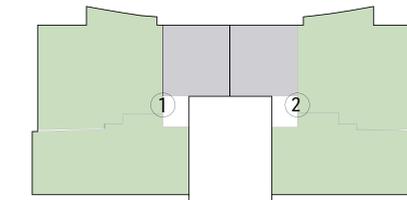
N° of units: 3

N° typologies of residents: 4

AFFORDABILITY

A GOOD INVESTMENT

BEFORE



Cluster 1

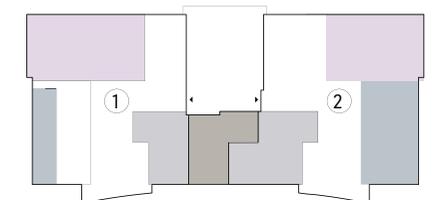
4000 € / month

Cluster 1

4000 € / month

Tot
8000 € / month

AFTER



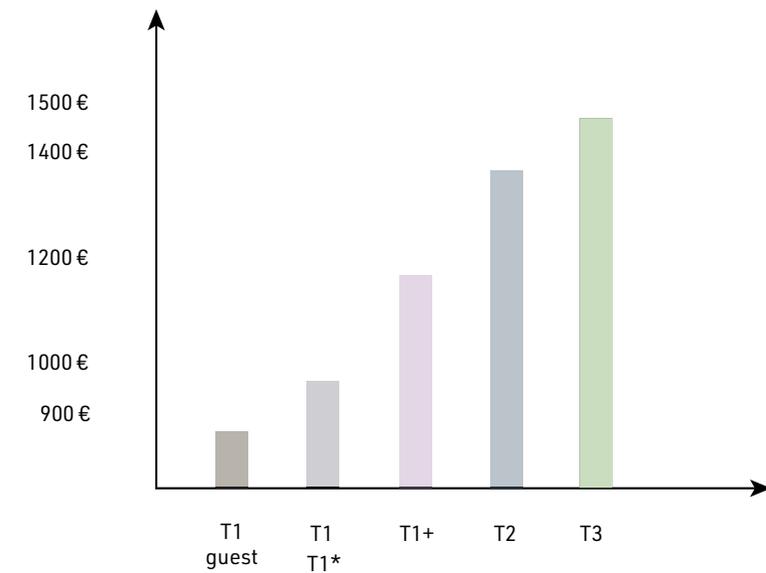
Cluster 1

4500 € / month

Cluster 1

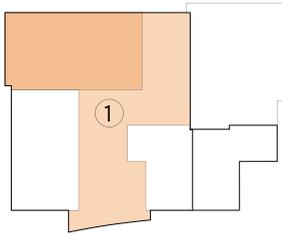
3600 € / month

Tot
8100 € / month



MORE SPACE AT THE SAME PRICE

T2



42.4 m² + 66.9 m²

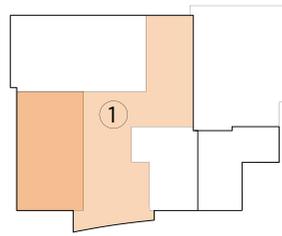
109.3 m²

paying

1400 € / month

~~not 2000 € / month~~

T1 PLUS



38.8 m² + 66.9 m²

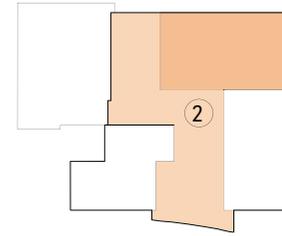
105.7 m²

paying

1200 € / month

~~not 1800 € / month~~

T2



42.4 m² + 65.7 m²

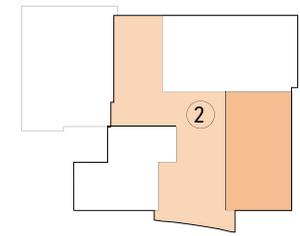
108.1 m²

paying

1400 € / month

~~not 2000 € / month~~

T1 PLUS



38.8 m² + 65.7 m²

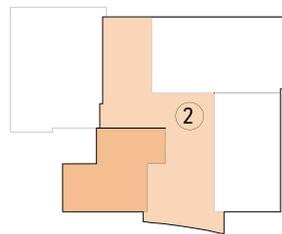
104.5 m²

paying

1200 € / month

~~not 1800 € / month~~

T1*



38.8 m² + 65.7 m²

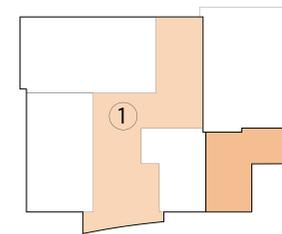
104.5 m²

paying

1000 € / month

~~not 1500 € / month~~

T1 guest



18.8 m² + 66.9 m²

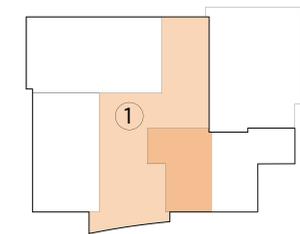
85.7 m²

paying

900 € / month

~~not 1800 € / month~~

T1



20.2 m² + 66.9 m²

87.1 m²

paying

1000 € / month

~~not 1500 € / month~~

CLUSTERS



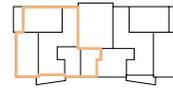
CLUSTER 1

Tot Area: 187.1 mq

N° of units: 4

Person per cluster: 6 / 7

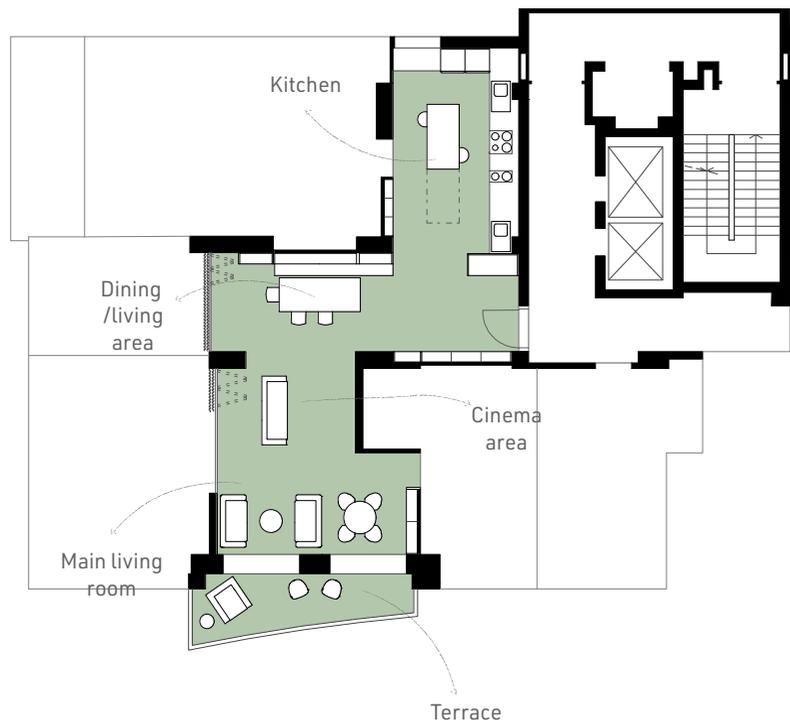
Mq per person: 23.4



THE SHARED SPACE

66.9 mq

Mq per person: 8.3



Scale 1:200



PRIVATE SPACE

120.2 mq

Mq per person: 15.1



Scale 1:200



THE SHARED SPACE

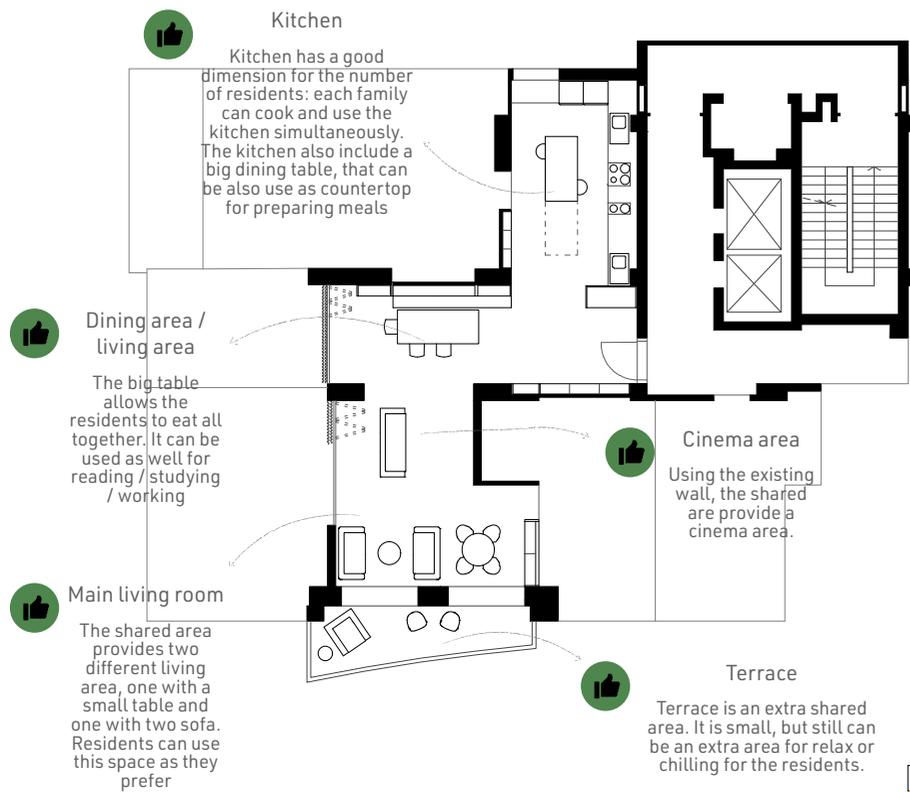
66.9 mq

Dimension: 66.9 mq

N° of residents: 6/7

Target: No specific

The unit include:



Scale 1:200

THE PRIVATE UNITS

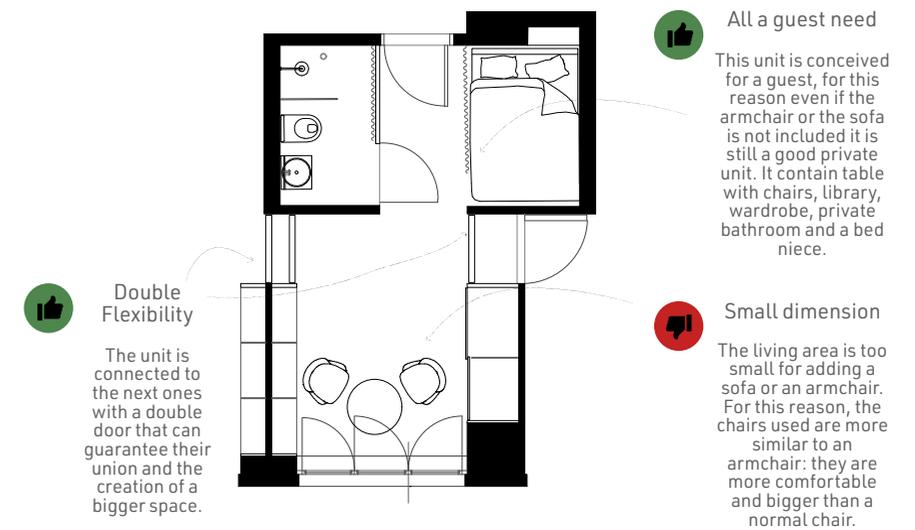
Unit -T1 Guest-
Single room Apartment

Dimension: 18.8 mq

N° of residents: 1 / 2

Target: Tourists

The unit include:

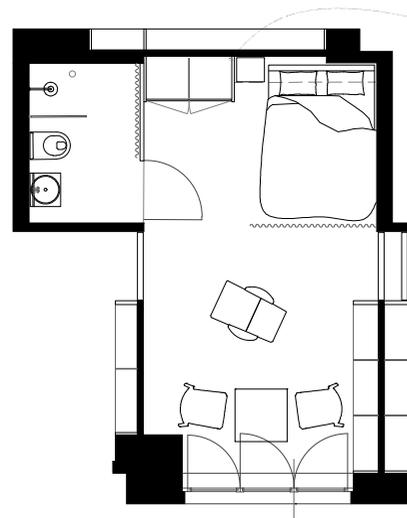
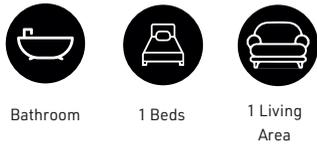


Scale 1:100

Unit -T1- Single room Apartment

Dimension: 20.2 mq
N° of residents: 1
Target: No specific

The unit include:



Small dimension
The unit provide a small wardrobe for two person. The living area is too small for adding a sofa as well.

Flexibility
The unit is connected to the next one with a double door that can guarantee their union and the creation of a bigger space.

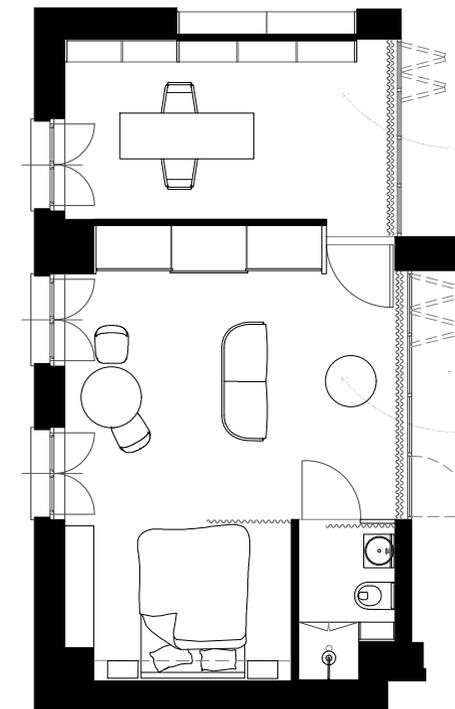


Scale 1:100

Unit -T1Plus- Single room Apartment with an extra room

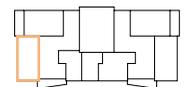
Dimension: 38.8 mq
N° of residents: 1/ 2
Target: No specific

The unit include:



A working space
The unit contain an extra space that can be used as working space for people who are working from home

A comfortable single room apartment
The unit guarantee a good comfort to couples or single users; it provides all the equipment needed and it offers a wider space than the other unit.



Scale 1:100

Unit -T2- Double room Apartment

Dimension: 42.4 mq

N° of residents: 2

Target: No specific

The unit include:



Bathroom



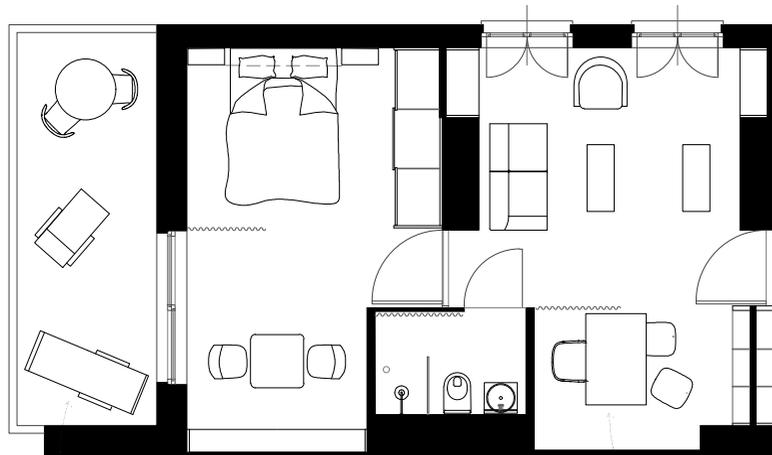
1 Beds



2 Living
Area



Working
area



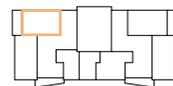
Private terrace

The private terrace is a plus of the unit. It is an extra space that can be used as living / chilling area.



A working space

The unit contain a room that can be used as working space and when residents are not working it can become a living area. The other room contain the bedroom and private living facilities. In this way there is a good separation between private and working life.



Scale 1:100

All the units also have:



Private bathroom

The unit include a private bathroom



An equipped private space

The unit include living facilities, a table, chairs, a library and an armchair



Furniture proportional to the number of users

Furniture are proportional to the number of people living inside the house, which can be 1 or 2 person



Separation between night and day area

Night and day area are separated through a curtain. Night areas' furniture like wardrobe, bed and cabinet are located behind the curtain. Armchair or sofa, libraries and table with chairs are in

CLUSTERS



CLUSTER 2

Tot Area: 183.4 mq

N° of units: 3

Person per cluster: 7 / 8

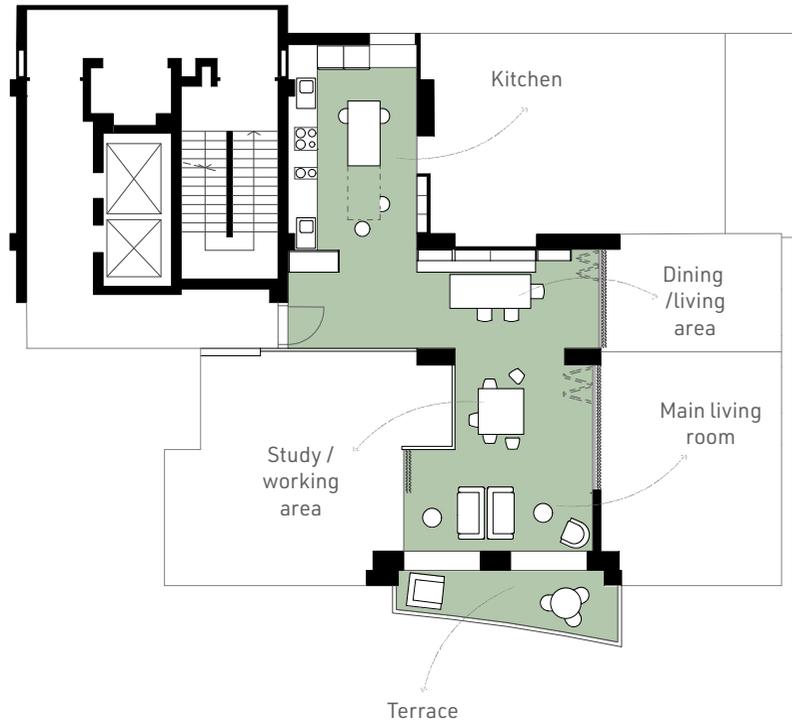
Mq per person: 22.9



THE SHARED SPACE

65.7 mq

Mq per person: 8.2



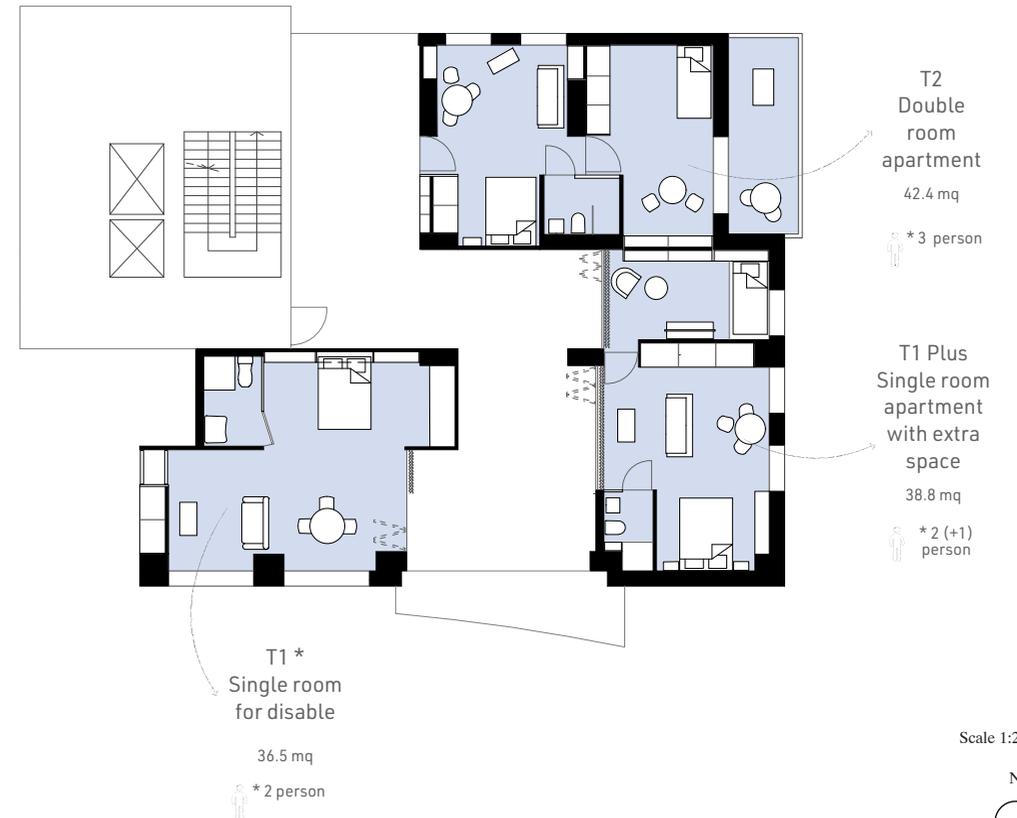
Scale 1:200



PRIVATE SPACE

117.7 mq

Mq per person: 14.7



Scale 1:200



THE SHARED SPACE

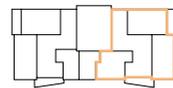
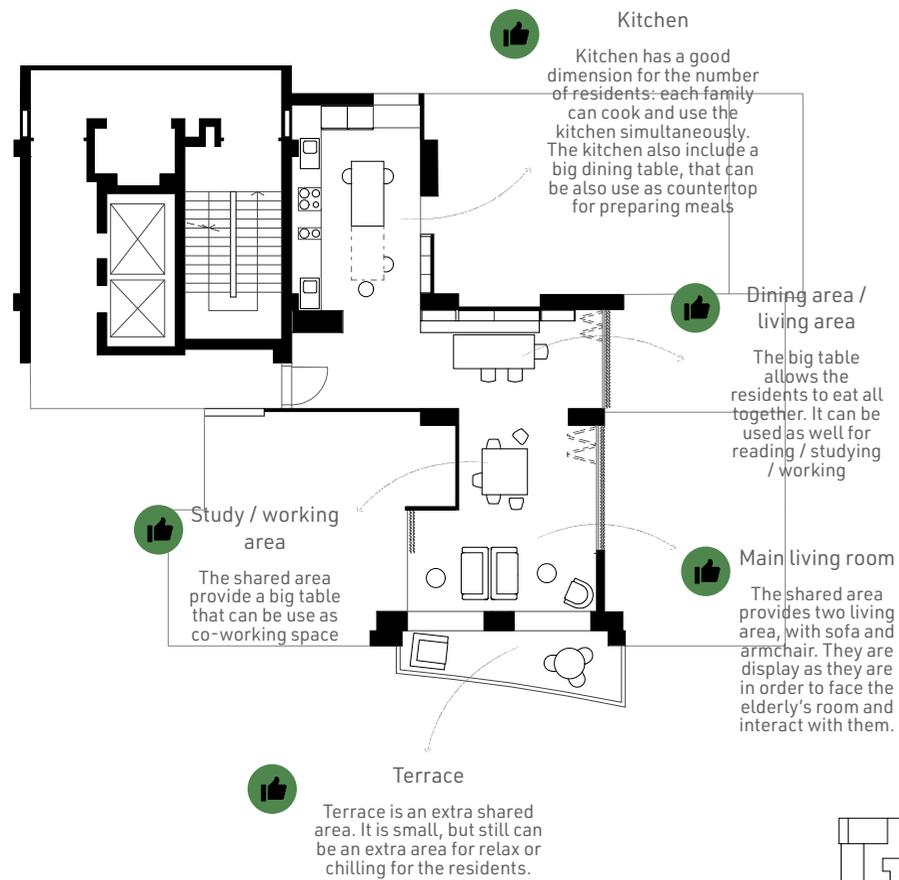
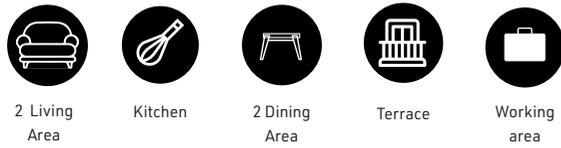
65.7 mq

Dimension: 65.7 mq

N° of residents: 7/8

Target: No specific

The unit include:



Scale 1:200

THE PRIVATE UNITS

Unit -T1*-

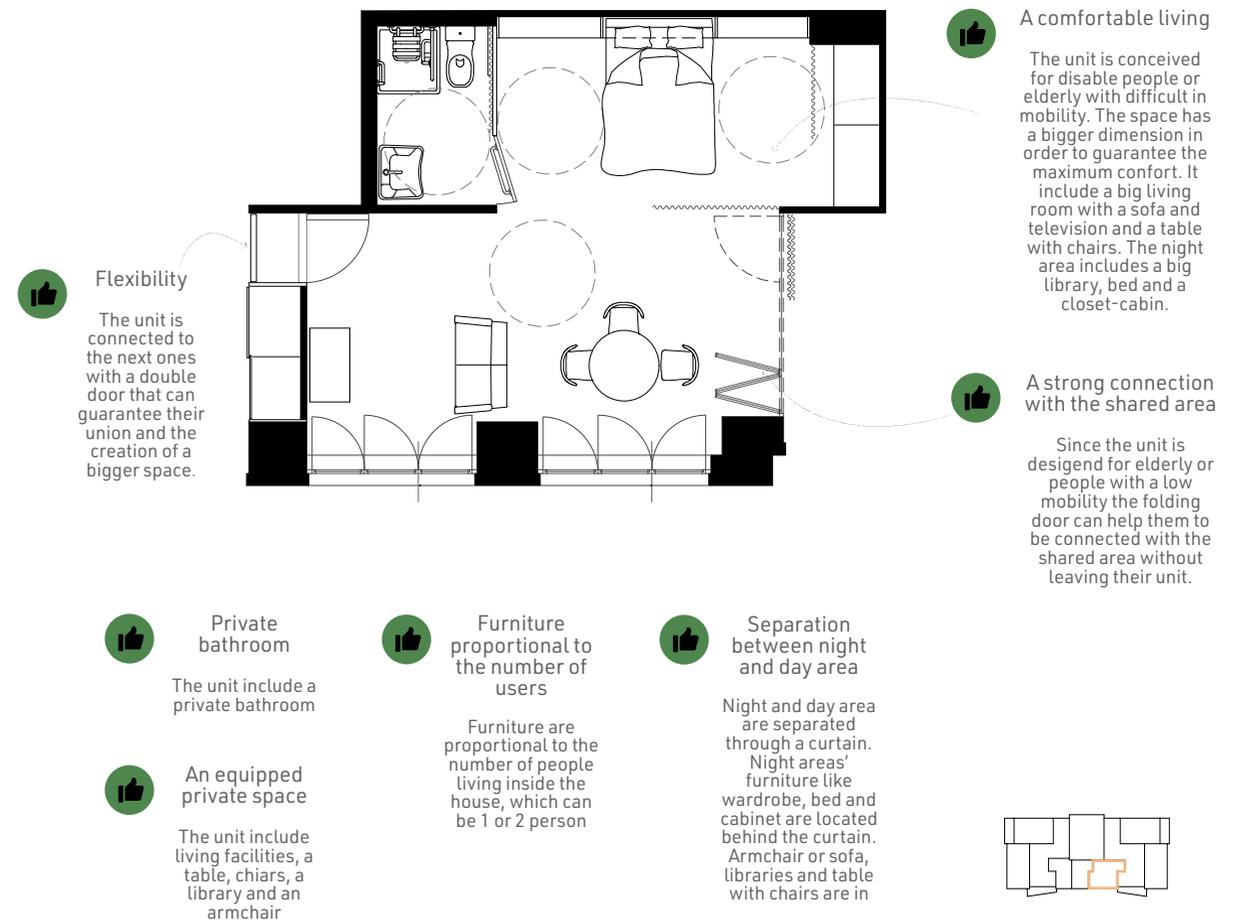
Single room Apartment for disable

Dimension: 36.5mq

N° of residents: 1 / 2

Target: Elderly / disable

The unit include:

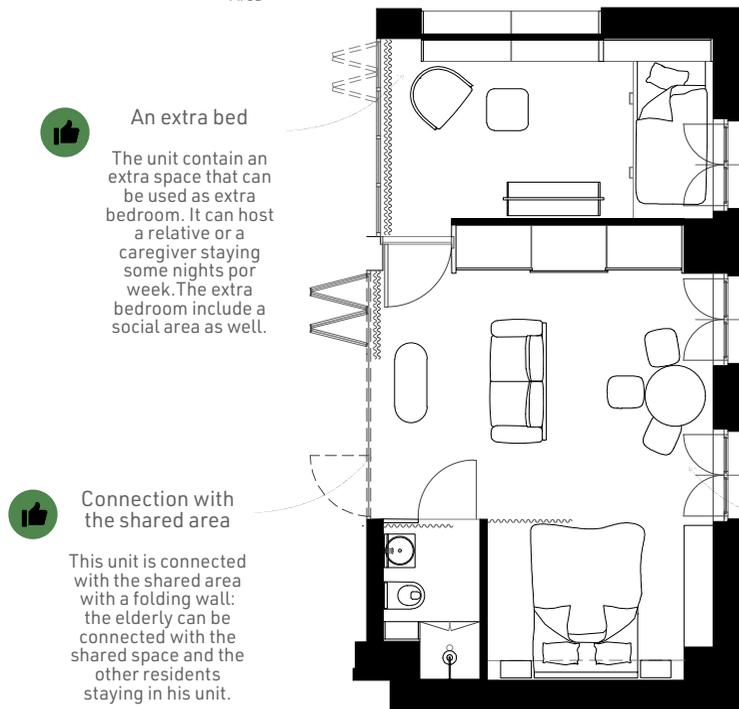


Scale 1:100

Unit -T1 plus- Single room Apartment with extra room

Dimension: 38.8 mq
N° of residents: 1/2
Target: No specific

The unit include:



An extra bed
The unit contain an extra space that can be used as extra bedroom. It can host a relative or a caregiver staying some nights per week. The extra bedroom include a social area as well.

Connection with the shared area
This unit is connected with the shared area with a folding wall: the elderly can be connected with the shared space and the other residents staying in his unit.

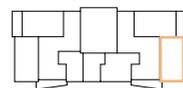
Private bathroom
The unit include a private bathroom

An equipped private space
The unit include living facilities, a table, chairs, a library and an armchair

Furniture proportional to the number of users
Furniture are proportional to the number of people living inside the house, which can be 1 or 2 person

Separation between night and day area
Night and day area are separated through a curtain. Night areas' furniture like wardrobe, bed and cabinet are located behind the curtain. Armchair or sofa, libraries and table with chairs are in

A good environment
The space is a good environment for an elderly couple since it provide a wider living area with a comfortable sofa, a big wardrobe and a table with chairs.

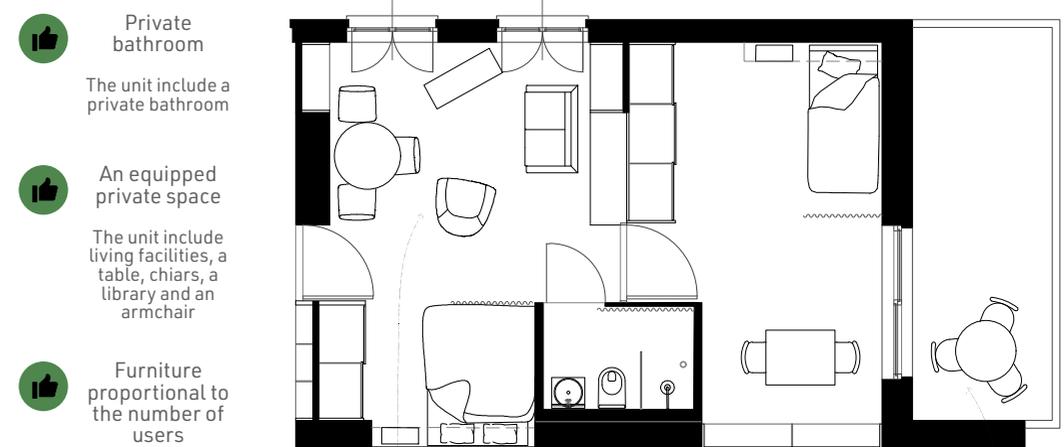


Scale 1:100

Unit -T2- Double room Apartment

Dimension: 42.4 mq
N° of residents: 3
Target: No specific

The unit include:



Private bathroom
The unit include a private bathroom

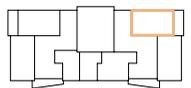
An equipped private space
The unit include living facilities, a table, chairs, a library and an armchair

Furniture proportional to the number of users
Furniture are proportional to the number of people living inside the house, which can be 1 or 2 person

Separation between night and day area
Night and day area are separated through a curtain. Night areas' furniture like wardrobe, bed and cabinet are located behind the curtain. Armchair or sofa, libraries and table with chairs are in

What a small family need
In the case of small family it is possible to have a living room for the entire family and a bedroom for the child. The main living room became also the private space of the couple, while the child has a bigger space to play / study without interfering with the adults activities.

Private terrace
The private terrace is an extra of the unit. It is an extra space that can be used for many activities, as extra space for play for the children or as an extra living area.

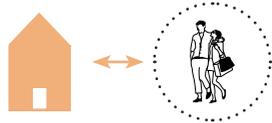


Scale 1:100

CLUSTERS



A UNIT PER FAMILY



Each family has his own private unit: a personal space where they can have all the independence and intimacy from the rest of the residents



SPACES FOR EVERYONE



The shared area contains many facilities and areas that correspond to a specific function. All of them include furniture proportional to the number of people living in each cluster.



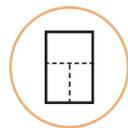
MEANDER LAYOUT



The shared area is one big space directly accessible by all the units.



FLEXIBLE AND FURNISHED WALL



Spaces are divided through furniture and not walls. In this way is possible creating apartments and division with the maximum level of flexibility.



AFFORDABILITY



Co-living apartment reveals to be more affordable than a standard apartment: paying the same monthly rent residents will have 60 mq extra of space



DINING CORE



The dining area assume a central position inside the cluster. It is the meeting place for everyone, the core of the house and the place where the residents can eat all together.



INCREASE THE INTERACTION



The shared area is designed in order to increase the interaction and the relationship between the residents.

UNITS



DAY ARE AND NIGHT AREA



The separation of the bed through a curtain from the rest of the unit, allow the creation of a night and day area.



EQUIPPED PRIVATE SPACE



The private spaces are not bedrooms. They include a social area and a private bathroom as well, like a normal apartment



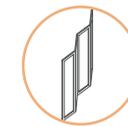
GUEST ROOM



Guest room is a possibility for the house to have a space for tourists or guests. It is an independent unit and in the first case can be a source of profit



FOLDING WALLS FOR ELDERLY



Elderly or disable people are separated by the shared space with a folding wall, so that they can always be connected with the other residents without leaving their unit



MANY UNITS



The house offers four different typologies of units that can satisfy almost everyone: from single to couples, from elderly to family with children



CONNECTIBLE UNITS



Some units have the possibility of being connectable one to another when is needed , in order to create a bigger unit



THE EXTRA ROOM



The extra room is a plus for some units: useable as extra bedroom or working space.

CONCLUSION

The economical and sociological instable situation of our age create a new housing demand, characterized by a high request of rentable apartments or rooms: new habits and new problematics are creating a new demand which do not find a fully answer in the current market. People have found the solution sharing standard apartments between one or more families, even if the co-habitation resulted to be uncomfortable. As the practices confirmed, the traditional apartments do not offer what the residents needs and they do not respect the privacy of the residents.

It is obvious then how co-habiting in a standard apartment can not be the solution for the housing demand, but it could be if apartment will be designed for sharing. As history reveals us, co-habiting is existing since man was create, sharing and living in a community is then inside man's nature, while in some countries it is still a widespread form of living, so why do not try to make it a practical alternative for the people today? As the research testifies there are many recent projects of co-living buildings which correspond to different housing models and contracts. At the same time, projects of co-living as co-habitation are set all over the world, with the aim of creating apartment conceived as aggregation of private independents units which are sharing a common space. The case studies reported helped to define the strength and the weakness of co-habitation, as well have done the practices before. In a world where architects are still expressing their creation on the façade of the building creating new apartments with standard floor plans, what we asked ourselves is "does it make any sense at all to even talk about housing standardization during a time when the diversity of households and living practices is bigger than ever?" (Star Architect, 2016) In this research we developed design strategies that could be applicable for design apartments where the life style of the residents and the characteristics of the inhabitants' determinate the space where they are living.

The co-living apartment is the agglomeration of different private and independents units which are connected by a shared common space. These units are one for each family and they are the only private and personal space where they can have all the independence needed from the rest of the residents. Each unit must contain a day and night area, which will be creating locating the bed inside a niche and separate it from the rest of the room with a curtain. Since this is the only private space for the residents it must contain a bathroom, a bed and a social area as well, provided with table and chairs and a sofa or a couple of armchairs. The private units should be able to host as many users as possible, for this reason there must exist many typologies of units: double rooms, single rooms for disable or single rooms with an extra room

or a bigger space. Some units should also have the possibility of inserting an extra room that can be useable for hosting a temporary guest, work or other reasons. Lastly, the private units should pay a particular attention to children, guest or elderly: in case of children the space should be bigger, in case of a guest or tourists there should be inserted an extra and independent unit from the rest of the shared area; while in case of an elderly or disable person, there should be created a system that allow the people to be connected with the rest of the shared area, without leaving their private space. On the contrary, the social area is a space of relation, socialization and integration: it is a common one space with a meander shape that should contains all the facilities residents will need, with some extra ones that will not be possible to found inside standard apartments. Inside the shared area there must be a core point: the point of maximum aggregation where the residents can meet all together. The margins between shared and the private space are not walls but furniture; in this way all the space is useable, no corridors and walls which can be useable on both sides. The furniture wall will also help the creation of flexible units, which in some case can be joinable one to another with the possibility of creating a bigger space. Finally, the co-living apartment should be affordable for the residents and at the same time convenient for the owner: the apartments should gain equal or more as the traditional apartment insert before, but at the same time paying the price of a standard apartment with the advantage of having more space and more facilities than a standard one.

The case study choosen is Grattacielo Baselli in the city of Milan, one of the urban centre which feel mostly the problem of co-habitation. The challenge of creating affordable apartments with private units and shared spaces that will guarantee the maximum level of privacy, interaction and socialization was succeed. The apartment is also suitable for everyone in terms of its economy: with a slightly reduced price and dimension from traditional apartments you have around 65 mq of extra shared area.

Choosing the co-living means lives in one apartment of the same dimension of a traditional one, but with a bigger area to share paying the same amount of price, without renouncing the personal privacy and comfort. The creation of affordable apartments that will be adaptable depending their inhabitants and the residents starts from the interiors: it is where the revolution of houses can start!

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The real revolution in housing is indoors!

-Star Architect-