

New Domestic Rentscape. A critical insight into middle-class housing

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The background of the cover is a grainy, high-contrast photograph of a building facade. A prominent sign on the building reads "FROM HOME AWAY HOME" in large, bold, capital letters. The sign is slightly tilted and appears to be part of a larger architectural element. The overall color palette is a mix of dark and light tones, with a grainy texture that gives it a vintage or documentary feel. The text is overlaid on the left side of the image in a white, outlined font.

Federico Coricelli
New
Domestic
Rentscape
A Critical
Insight
into
Middle-class
Housing



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Doctoral Dissertation
Doctoral Program in Architecture, History and Project (32th Cycle)

New Domestic Rentscape

A Critical Insight into Middle-class Housing

Federico Coricelli

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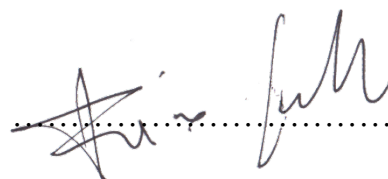
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July 17, 2020

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A handwritten signature in black ink, appearing to read 'Federico Coricelli', written over a horizontal dotted line.

Federico Coricelli
Turin, July 17, 2020

Summary

Major Western cities are experiencing an increasingly unaffordable private rental market and the diffusion of the single person household as its typical dweller.

Since post-war times, the constant grow of rent prices did not match the stagnating trend of salaries. Already for Engels this was the inevitable trajectory of capitalist market economy, penalizing cash renters that have not found stability in the 70% majority of homeowners in Western democracies.

Looking at the long run of *modernization* as the history of *privatization*, it is possible to observe how the enclosures of land initiated in England in sixteenth century were coupled by a cultural process of individualization of the self—in terms of worship, labor, and quest for autonomous dwelling space.

This shift culminates in the modern industrial home, where a functionalized domestic sphere tends to separate places of privacy from the ones of social representation. For lower incomes this distinction collapses in the single room of the living-kitchen unit.

In order to combine the quest for privacy with necessary and optional collective spaces, several collective housing formats were conceived since the nineteenth century.

The hotel is the first housing typology and social technology conceived to host a community of *strangers*, capable to combine in a single building the generic space of the room with collective and public services.

In the late 1920s urbanists and thinkers as Hilberseimer and Teige already proposed hotel-like residential models as the most efficient housing form for a future egalitarian city. This would happen with the abolition of domestic unpaid labor through professional housekeeping, and the inclusion of services into the building.

In the digital era, co-living combines the principles of the hotel with the logics of sharing economy. Giving place to a hybrid model redefining the typical residential mixed-use building.

This dissertation aims to investigate the transformative potential of the existing residential Italian real estate, and its capability to absorb new collective housing models as co-living.

Banks, charities, insurances, and property companies rent thousands of units in Italian main cities, mainly located in central areas. Institutional landlords played a key role during the twentieth Century in the simultaneous expansion of the middle-classes and the neighborhoods they inhabited.

Distributed in major Italian cities, and built between the 1920s and 1980s, these buildings share an *ordinary* character, as they were designed to embody the values of domestic comfort and self-representation of the modern European middle-class. The case studies considered are entire buildings owned by a single landlord –a rare feature in a private rental market almost monopolized by an archipelago of isolated individual-owned units.

Contemporary housing demand in Italy has radically changed from the previous generations both in socio-economic terms both in the cultural understanding of comfort.

Major socio-economic shifts contributed to distance potential tenants from the available stock, provoking a dual mismatch between demand and offer. Firstly, an overall aging population of 6,3 millions of over-65 individuals is currently living alone, often in a house of five or more rooms. Secondly, sixty-six percent of the population between 18 and 34 years old still lives with its parents.

If data and statistics suggest a mere quantitative solution –namely subdividing further the available stock– this research aims to investigate by means of architectural design and spatialization the effective potential of the Italian middle-class housing stock.

The hypothesis is that a set of stress tests of downsizing on the residential unit can raise several open-ended questions. As the architectural limits to flexibility, the financial limits to a ‘micro-unit’ housing stock, and the contested status of shared and collective space within the domestic.

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PART 1

Introduction

“Planners and politicians should also stay away from housing standards in terms of unit sizes, unit mixes, etc. Here too, the market has the best chance to discover the most useful, productive and life/prosperity-enhancing mix. The imposition of housing standards protects nobody, they only eliminate choices and thus make all of us poorer”¹

With these words, Patrik Schumacher, architect and leading partner of Zaha Hadid Architects, addressed the audience of the Berlin World Architecture Festival in 2016. Proposing an eight-point manifesto for total privatization of cities, elimination of social housing, and complete trust in the intelligence of the market. Are downsizing and deregulation the way to pursue housing affordability and ultimately reduce inequalities?

These seem the ‘natural’ tendencies of the market economy since industrialization. While the market proposes increasingly larger houses as assets for homeowners, the private rental sector opts to increase the value of the minimum living space. The withdrawal of the state praised by Schumacher has taken a long way starting from the neo-liberal impulses of the 1980s. The below-the-standard living unit has been an architects’ brain puzzle since the early international gatherings as the CIAM.

The present dissertation addresses housing as a crossing point between politics, economy, and technology.

The political context of the last century promoted the identity homeownership=stability. While the value of properties skyrocketed globally to become the first asset class in terms of volume², the increase in mortgage finance allowed buyers to keep the pace of housing prices. The pressure of markets and the quest for private living space made the micro and the compact living formats desirable, but often unaffordable.

¹ Excerpt from the keynote speech of Patrik Schumacher at the World Architecture Festival in Berlin, 2016. Source: <https://www.dezeen.com/2016/11/18/patrik-schumacher-social-housing-public-space-scrapped-london-world-architecture-festival-2016/>. Accessed January 20, 2020

² The global volume of residential real estate assets is valued at \$170,000,000,000,000. Source: Savills World Research, “Around the world in dollars and cents: what price the world? Trends in international real estate trading”, 2016, pp. 4-5. www.savills.co.uk/research_articles/188297/198669-0. Accessed January 20, 2020

The housing crisis is, in most cases, a synonym for the rent crisis. In fact, 'generation rent' describes a privative condition —the condition of those who are not able to own.

Throughout history, different housing typologies adapted to react to the pressure of the market through the optimization and collectivization of domestic space. Co-living is the last iteration in this field, targeting single and young couples with all-inclusive and hotel-like living plans. Although this format is far from solving the housing crisis, its functioning and potential reveal both the minimum standards and alternative design possibilities to the market standard, which is the two-bedroom flat.

In the Italian context, the condition of private rent worsened starting from the 1960s because of various factors. Homeownership is the predominant and politically protected housing tenure, as the family is the primary social subject in charge of housing provision, and the lack of housing policy is balanced by overregulation in terms of preservation of existing housing stock.

The present elaborate focuses on the Italian institutional landlords as the few potential actors capable of offering the space for operability within the current real estate market. Moreover, from an architectural point of view, together with public housing agencies, institutional landlords are among the few still in possession of entire buildings, not fragmented in individual properties.

Through the analysis of the evolution of the residential asset portfolio of a major insurance company, this study aims to provide scenarios of intensification based on the mismatch between the former dimensional standards and the present housing demand condition.

What are the spatial and economic limits that a densification process can face? What is the flexibility of the real estate of the institutional landlords? From a historical perspective, how did the domestic *rentscape* of the middle-classes change in terms of standards and narratives?

The present dissertation aims to investigate these research questions through the lenses of spatial manipulation. Instead of providing a toolkit of problem-solving scenarios, the main objective of this research is to highlight the paradoxes and consequences of a positivist approach. As the market follows a climbing trajectory, the impact on the living space of a constant downsizing and value multiplication is analyzed from a spatial point of view.

Approaching a dissertation on collective housing requires a selective approach in an incredibly vast reference literature. Housing studies developed in the last decades as an interdisciplinary field of research, borrowing knowledge from economics, sociology, law, anthropology, to mention few. The present elaborate focuses mainly on the theory and

research styles put forward by architectural theorists, critics, and historians, interdisciplinary by definition, but relying upon the non-verbal form of drawing as a codified investigation tool to understand space.

In the first place, the work of Ludwig Hilberseimer lies at the core of the present work. His reading of the urban temporary dwelling forms is crucial to understand the multi-scalar implications of housing on the city (Hilberseimer 2012).

The relationship between the economy, society, and the functional program of dwellings was deepened by the research of Karel Teige and Moisei Ginzburg to answer the collectivist aims of the early days of Soviet Russia (Teige 2002; Ginzburg [1934] 2017). Their oeuvres contributed significantly to the critical understanding of the relationship between the individual and the collective in domestic spaces, at the time when housing research emerged at the fore of the architectural discussions of the CIAM (Internationale Kongresse für Neues Bauen und Städtisches 1930).

Recent research by Aureli and Tattara continues the tradition of this research on housing, with a robust dialectical focus between economy and dwelling forms (Aureli and Giudici 2016; Aureli, Tattara, and Dogma 2019; Aureli 2013).

The first part of the present elaborate is influenced profoundly by these researches and the mentioned works of the 1920s and 1930s. The ambition of the present dissertation is to complement and add knowledge to this corpus investigating the emerging housing form of co-living, barely noticed by the academic literature at the present moment, and unveil a portion of Italian middle-class housing stock often shadowed by researches on public and social housing.

The work of Engels is unavoidable to confront with when dealing with the political economy of housing. Nevertheless, the social and political framework developed in this research is corroborated by the critiques of Colin Ward on the state of housing policy and ideology in post-war Europe (Engels [1872] 1970; Ward 1974; 1985). The relationship between the privatization of land and the individualization of societies is studied deeply in Andro Linklater's *Owning the Earth* (Linklater 2013), and serves here as a reference to reflect the social and economic structures behind shared and individual ownership.

The issues of cohabitation also emerge in the works from social theory and sociology of Roland Barthes, Antonio Tosi, and the recent book of Klinenberg (Barthes [1977] 2013; Tosi 1994; Klinenberg 2012). The combined reading of the three draws a trajectory of how human societies progressively built structures to live together and apart simultaneously –not by chance the title used by Elizabeth Cromley for her history of the

apartment building in New York (Cromley 1999). In parallel, the history of American hotels of Sandoval-Strausz is used here as a methodological frame to build the theories on commercial hospitality and its architectural manifestations (Sandoval-Strausz 2007).

Finally, as the subtitle of this dissertation suggests, the vast literature on the ordinary city and middle-class housing produced in the last decade by a part of the Italian school of architectural historians is an essential reference for a work aiming to profit by an unedited housing stock built for an insurance company employees (De Pieri et al. 2014; Caramellino et al. 2015; Caramellino and Zanfi 2015).

The dissertation is structured in two parts. The first part gives a theoretical framework and a review of the social and architectural models developed within the context of private rent and middle-class housing. The second part uses the specific case study of Italy to evaluate a critical insight on the issues of intensification and renovation of the private residential real estate.

Chapter 1 sets the theoretical framework. As rent is marginalized as housing tenure, the housing crisis stems not only by reduced supply but also by the political construction of the property-owning democracy as the dominant model. Therefore, the housing crisis mainly affects the private rental market. Furthermore, following the retreat of the state from housing provision, most of its control is in the hands of families or property managers searching for higher profits. In this context, the ‘housing question’ posed by Engels in 1872 may still be a valid argument to evaluate the current crisis. Finally, this chapter highlights how the increasing privatization of land corresponded culturally to individualization of the self and the legitimation of the individual quest for living space in the city.

Chapter 2 frames the problem within an architectural-historical perspective, tracing an evolution of the housing typologies that –starting from modernity– reacted to the housing crisis proposing cohabitation and reduction of the private unit as a technical solution. It concludes with the critical positions of thinkers and urbanists such as Hilberseimer and Teige, who envisioned housing models for a temporary and egalitarian city.

Chapter 3 examines co-living as the last iteration of the housing formats explored in the previous chapter. This emerging housing model –a hybrid form between commercial hospitality and rental apartments– suggests a drastic shrinking of the housing unit to meet the demand of the solo dwellers of the city. Therefore, it is worth imagining its potential as a blueprint to apply to the existing urban fabric. An economic analysis gives evidence of how co-living in its present realizations is far from offering an affordable solution to the housing crisis.

Chapter 4 explores the Italian context with a close investigation of the evolution of the real estate of institutional landlords. This case study is analyzed for its ordinariness within the specificities and peculiarities that each particular condition poses. Revisiting the mainstream urban history of the last century through the lenses of the middle-classes and the ordinary city helps to highlight the actual gap between a shrinking demand and an oversized housing stock.

Chapter 5 provides scenarios of intensification, adopting the principles of co-living described in chapter 3 as an investigation methodology. Different stages of intensification show different living standards and degrees of collectivization of residential space. The spatial and economic results of this experiment are then confronted with the data at the core of the Italian housing crisis.

A critical remark introduces each chapter: ‘The status quo of rent’; ‘Automatic pilot’; ‘Hybrid format’; ‘The inherited domestic landscape’; ‘Graphic anatomy.’ This perspective assigns to each chapter a degree of independence. The hypothesis-thesis-demonstration order is here unbuilt, assigning to Chapter 1 the role of critical framework and mirror to read the following chapters, while the specific experimental phase is laid out in Part 2. Finally, this research raises several open-ended questions. Since the Italian case is a fragment within a global housing crisis, the final remarks are specifically related to the issues that emerged by the observation of space. The application of this methodology to broader contexts can reveal different outcomes or affinities with the present research.

Chapter 1

Why do we rent?

“Thy tenants, may not rack and stretch out the rents of their houses and lands, nor yet take unreasonable fines and incomes after the manner of covetous worldlings, but so let them out to others that the inhabitants thereof may both be able to pay the rents, and also honestly to live to nourish their families and to relieve the poor.”

Archbishop Thomas Cranmer, *Book of Common Prayer*. 1549

The status quo of rent

A recent investigation from the Economist³ identifies as ‘healthy’ rental systems of the whole developed West, only three economies: Switzerland, Germany, and Singapore. The first for its constant rebalancing of the supply with a high yearly pace in housing construction, the second for its protection of the rental system that led to an almost fifty-fifty share between renters and owners, and the last one for the almost total control of the housing stock and disposable land by the state.

Nevertheless, most of the western world is living in a perpetual housing crisis, at its verge in dense cities, where the unaffordable value of land and property corresponds to unprecedented rates of homelessness⁴.

Since industrialization, private rent has been the medium to urbanize the working masses. Today, in a predominantly urban world, the phenomenon continues in a complex palimpsest of rental forms for transients, commuters, and tourists. In Western democracies, private rent as a housing tenure shifts between ten to twenty percent of the total, coupled with similar amounts of reduced rent schemes as social housing and public housing⁵.

³ "The West's biggest economic policy mistake." 2020. Economist, January 16

⁴ In New York City the number of homeless people raised of 46% between 2007 and 2018. Source: <https://endhomelessness.org/homelessness-in-america/homelessness-statistics/state-of-homelessness-report/new%20york/>. Accessed January 12, 2020.

⁵ The EU-28 housing tenures are distributed as follows: 69,3% homeowners (26,5% with mortgage), 22% of market price tenants, and 8,7% reduced price or free tenants. Source:

In a path-dependent global housing system, characterized by continually increasing housing prices and a deregulated public policy, mortgage finance seems to have replaced much of the social functions of private rent⁶.

The global financial infrastructure, with its interest rates penetrated the housing markets through cheap mortgages for first time buyers –the perpetual tenants of the pre-war era. The very same system provoked the implosion of the US credit system in 2008 with a global domino effect. Even after the Global Financial Crisis, Western states continued to rely on private credit to expand homeownership instead of a consistent housing policy targeting all the incomes. As a result, private rent represents a fragile housing tenure for the poorest and, at the same time, the only ‘accessible’ solution.

Surprisingly, in a post-crisis digital world, the younger generations started to be addressed as ‘generation rent’ in the media and by some scholarship (McKee 2012).

This label alludes to a return of rent as the principal ideological and economic tenure of the future, actually emphasizing the reduction of buyers among the younger generations. As there is no evidence of a significant global trend of growth in private rental, it is worth noting that the quest for more flexibility and mobility is structural in a labor market increasingly characterized by outsourcing and digitalization.

The impact on cities of this socio-economic framework has multiple implications in terms of housing solutions. The marginalization of private rent and its substantial deregulation has as effect or an increment of cohabitation models or a reduction of the disposable private individual space.

In the city, the rhetoric of the market passes through the imperative of *sharing*. The re-discover of nineteenth-century housing forms is currently at the core of the architectural debate, bridging social reform communitarian projects with a possible new pattern for collective temporary housing. Significant exhibitions on housing of the last years comprise titles as *Wohnungsfrage* (2015) or *Together!* (2017) (Bajovic et al. 2015; Kries et al. 2017), making self-evident the long run of the housing crisis and its legacy from its nineteenth-century problematization —namely, Engels’ housing question (Engels [1872] 1970).

<https://appsso.eurostat.ec.europa.eu/nui/submitViewTableAction.do>. Accessed January 13, 2020.

⁶ In Italy between 2006 and 2019 the interest rates on mortgage loans for housing purchases decreased by 5,54% to 1,80%. Source: <https://www.ilsole24ore.com/art/mutui-effetto-draghi-tassi-risparmi-300-euro-all-anno-ACemOdT>. Accessed January 20, 2020.

1.1 Engels vs Proudhon

The 'housing question' refers to the set of inequalities and dwelling shortages occurring under the pressure of the market economy. When Friedrich Engels' *Zur Wohnungsfrage* appeared for the first time on the Prussian periodic *Der Volksstaat*⁷ in 1872, he stated that the 'housing question' had nothing to do with class struggle, as it involved the society at large from the working class to the bourgeoisie (Engels [1872] 1970, 76).

For the co-author of the *Communist Manifesto*, without a revolution of the mode of production, no form of action could find a satisfactory solution⁸ to the 'housing question' (Engels [1872] 1970, 96). As noted by Linklater, democratic or autocratic regimes can equally be 'unfair' on housing policy, and the collective or private property of land is not a limitation to a capitalist or socialist economic agenda. (Linklater 2013, 336).

Engels was describing the private rental market in an industrialized capitalist economy –a tenant society–, still divided between productive farmlands and rapidly urbanizing industrial cities⁹. Apart from its historical value, the housing question remains valid in its principles even in the context of dominant financial capitalism concentrated in an urbanized network of global cities (Brenner 2014; Shaw 2015).

Zur Wohnungsfrage is built as a confutation to three hypothetical solutions to the 'housing question': the utopian socialist, the bourgeois socialist, and the bourgeoisie. As the last two are quickly dismissed by Engels, the first one, embodied by Pierre-Joseph Proudhon¹⁰, is the one that engages the author the most to confute, as its principles still find agreement in various contemporary political discourses¹¹.

⁷ Engels, Friedrich. 1872. *Zur Wohnungsfrage*. in "Der Volksstaat" Nr. 51-53, 103, 104. Leipzig

⁸ "As long as the capitalist mode of production continues to exist it is folly to hope for an isolated settlement of the housing question affecting the lot of the workers. The solution lies in the abolition of the capitalist mode of production and the appropriation of all the means of subsistence and the instruments of labour by the working class itself" (Engels [1872] 1970,

⁹ The population of London grows from 1 million in 1800 to 7.6 million in 1900. Source: Feldman, David, and Gareth Stedman Jones, eds. 1989. *Metropolis*, London: Histories and Representations since 1800. London: Routledge

¹⁰ Engels will respond indirectly to Proudhon (dead in 1865) through the reaction to the positions exposed by the German doctor and Proudhonist Arthur Mülberger in several anonymous articles appeared on the *Volksstaat*

¹¹ Policies as Thatcher's Right to Buy (Housing Act 1980) or mortgage finance and the 2007 sub-prime crisis in the United States are just two examples.

For Engels rent is simply an *"ordinary commodity transaction between two citizens"* (Engels [1872] 1970, 20), while for Proudhon, tenancy should be abolished in favor of a *"free and independent association of homeowners"* (Engels [1872] 1970, 17) where each individual is entitled to own the percentage of a property corresponding to the quota of annual rent paid. Engels describes a possible application of Proudhon's proposal in a sarcastic passage of his argument:

"On the day of the world-delivering decree, when the redemption of rent dwellings is proclaimed, Peter is working in an engineering works in Berlin. A year later he is owner of, if you like, the fifteenth part of his dwelling consisting of a little room on the fifth floor of a house somewhere in the neighborhood of Hamburger Tor. He then loses his work and soon finds himself in a similar dwelling on the third floor of a house in the Pothof in Hanover with a wonderful view on to the courtyard. [...] Further removals such as nowadays so often occur to workers saddle him further with seven-three-hundred-and-sixtieths of a no less desirable residence in St. Gallen, twenty-three one-hundred-and-eightieths of another one in Leeds, and three hundred and forty-seven fifty-six-thousand-two-hundred-and-twenty-thirds, to reckon it out exactly in order that "eternal justice" may have nothing to complain about, of a third dwelling in Seraing." (Engels [1872] 1970, 28)

The ideological divide between Engels and Proudhon can be summarized as the one between a materialistic position and one based on natural rights. In the former, wealth equality could be achieved only by a perfect match between demand and supply —impossible for Engels. The latter aims to enable the whole population to access homeownership, solving the housing question through the abolition of any landlord-tenant potential exploitation (Engels [1872] 1970, 17).

The political tension between these two positions led to different outcomes during the twentieth century in Europe, under the form of policies favoring the former or the latter ideology. A pro-Engels approach would naturally defend a housing policy in favor of public housing provisions and rent control, while a pro-Proudhon policy would stimulate forms of credit to provide mass access to homeownership. Since homeownership expanded significantly in Western countries since post-war reconstruction, and most relevantly the State itself became a landlord with shares ranging between three and ten percent of the total housing stock¹², we could argue that the

¹² In Europe the average of social housing is 10,8 percent, with higher shares in countries as the Netherlands with 30,3 percent and minimums as Luxembourg with 4,6 percent. Source: Eurostat 2016

Phroudonian position prevailed, as the effects on the private rented market are still the ones of the kind expressed by Engels.

The housing question debate significantly influenced also the research on housing in a more or less explicit way. According to Colin Ward, the endless debate on the housing question, with its ad hoc institutions, conferences, and research centers, tends to reiterate the same ideological positions almost independently from the context (Ward 1985, 109). Ward describes this phenomenon using a categorization drafted by Ray Pahl:

"The participants in these discussions, he noted, could be divided between,

1. Those who believe in the 'technological fix.' They are the Whitehall and local authority executives who see themselves as the permanent providers of services and facilities, with a heavy emphasis on professional and managerial skills.
2. The political radicals who believe that the professionals are engaged in a conspiracy against the public for their own aggrandizement. They further believe that nothing can be solved without changing the whole system.
3. The populist, anarchist apoliticals who also believe the conspiracy of the professionals, but who declare that people can and should do something now.
4. Those who share the mistrust of the professionals, but see answers in the arts, crafts and community work, declaring that small is beautiful.
5. The pragmatic realists who know in their practical hearts that in the end piecemeal amelioration will be called in to do the job.
6. The one-off fixers whose approach is: bring in the consultants, sort out priorities, put a figure and a time limit to the job and then throw in the task force".

(Ward 1985, 109–10)

Even if described in a caricatural fashion, this kind of 'discussion table' was arguing around a crossroad point in Western democracies shortly before the Berlin wall fall in 1989. On the one hand, the State protecting homeownership as a social stabilizer by means of various and expanded sources of credit; on the other hand, the welfare state providing social housing in the form of standardized mass housing¹³ and pop-modern individual housing (Tosi 1994), reaching its critical and terminal phase¹⁴ at the beginning of the 1980s.

¹³ See Urban, Florian. 2013. *Tower and Slab: Histories of Global Mass Housing*. Hoboken: Taylor and Francis.

¹⁴ In Italy the massive state housing provision, embodied by the Ina-Casa plan, lasted

As the global political framework will lead democracies to choose to confer growing confidence in the market and in the expansion of homeownership, the discussions arisen from the 1960s to the 1980s on possible counter-models will open to alternative solutions to the housing question. Ward, Habraken, and Tosi –among the others– from different points of view, agreed that a possible solution to the current crisis of the modernist approach should be found in the empowerment of communities. In their opinion, only through local action and organized bottom-up participatory actions of the residents, the housing question could be solved (Habraken 1972, Tosi 1994, Ward 1974).

mostly for the 14 years comprehended between 1949 and 1963. See: Di Biagi 2001.

1.2 Once upon a time, a society of rent(i)ers

The development of the present housing crisis is provoked mainly by the widening fork between salaries and rents that occurred since the 1980s. To provide an example, in the United States in 2017, a worker gaining the minimum salary could rent a two-bedroom house in only twelve of the three-thousand-one-hundred-forty-two counties of the country¹⁵.

Analyzing the trends of salaries and rents in Italy in the last fifty years, we can observe how the stagnating horizontal line of wages does not match the climbing curve of rent prices¹⁶. In the rest of Europe, we assist to similar trends, highlighting how post-war reconstruction coincided with the political aim to build a stable 'property-owning democracy,' marginalizing private rent as a less convenient tenure (Copley 2014). Both socialist and liberal ideologies agreed widely on the value of housing as the main asset to accumulate wealth and social stability among citizens (Madden and Marcuse 2016).

However, the fast-growing figures reached by homeownership are in part due to the facilitated access to credit granted by the state and financial institutions. In fact, according to Eurostat's survey of 2016, *"more than one quarter (26.6 %) of the EU-28 population lived in an owner-occupied home for which there was an outstanding loan or mortgage, while more than two fifths (42.6 %) of the population lived in an owner-occupied home without a loan or mortgage"* (Eurostat 2016).

The 'property-owning democracy' is a relatively young concept. It is only during the post-war reconstruction –in the 1950s– that for the first time in history, the home-owning population surpasses the tenants¹⁷. In the United Kingdom, in 1914, the number of private renters were set at ninety percent of the total population, nine percent of homeowners, and a marginal one percent of social housing tenants. After sixty years, the figures switch with fifty-three percent of the British population of homeowners, fourteen percent of cash renters, and thirty-three percent of council housing tenants (Ward 1985). This data from 1974, at the end of the *Trente Glorieuses*, shows how the distribution of housing tenures is dependent upon market dynamics, but most decisively upon political decisions, both in terms of housing policy both in terms of the direct provision by the state (Madden and Marcuse 2016, 51).

¹⁵ <https://reports.nlihc.org/oor>. Accessed January 20, 2020.

¹⁶ Banca d'Italia. 'Household income and wealth in 2010 (Supplements to the Statistical Bulletin)'. Banca d'Italia. Accessed July 31, 2018. http://www.bancaditalia.it/statistiche/indcamp/bilfait/boll_stat.

¹⁷ Italian national census of 1951 shows for the first time an equal redistribution of population between tenants and homeowners. From that point onwards the latter group will outnumber the second reaching the present condition. Source: ISTAT

The relevant data of the present condition is not only represented by the seven out of ten European citizens living in a privately owned home but also from the drastic reduction of the social housing sector occurred starting from the 1980s. Policies as Margaret Thatcher's 'Right to Buy' fueled the market with thousands of council housing units. Only in London in 2014 it was registered that thirty-six percent of former council housing units were currently rented on the private rental market (Copley 2014). The Italian state followed suit at the beginning of the 2000s¹⁸, allowing a massive sell-out of housing units formerly owned by public-owned institutions, narrowing further the public housing sector to a marginal 4% of the total housing stock (Sidief 2015; Pittini et al. 2017).

This widespread tendency towards privatization and *assetization* of the house reflects the growing role of housing as a mean to accumulate wealth. Accordingly, the concept of the 'property-owning democracy' and the constant growth of land values serve as enablers of this system, which originates from the historical shift from a feudalist to an industrial economy –namely, with the enclosures started in England in XVI century.

¹⁸ From 2000 to 2007, the previdential Italian state owned INPDAP dismissed more than 43000 housing units fueling the private market. Source: Sidief. 2015.

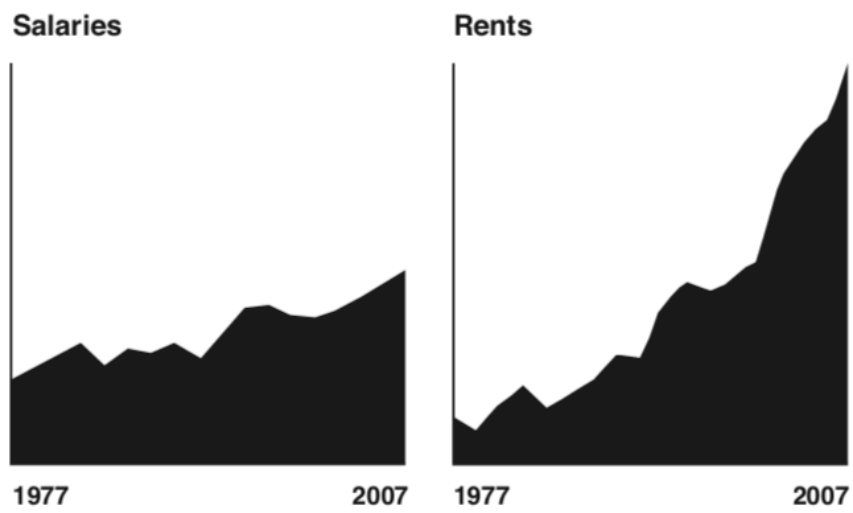
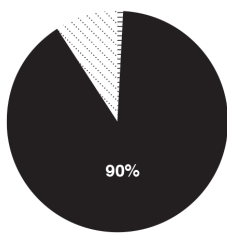
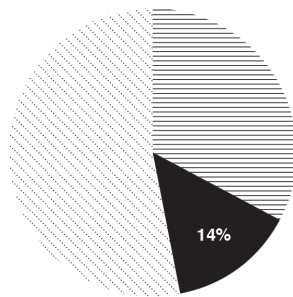


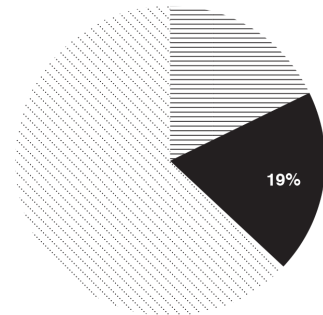
Figure 1 Salaries and rents in Italy 1977-2007. Source: ISTAT.



1914
 Tenants.....90%
 Homeowners.....9%
 Reduced rent.....1%



1974
 Tenants.....14%
 Homeowners.....53%
 Reduced rent.....33%



2017
 Tenants.....19%
 Homeowners.....63%
 Reduced rent.....17%

Figure 2 Housing tenures in the UK in 1914, 1974, and 2017. Source: Housing Europe, Ward 1985

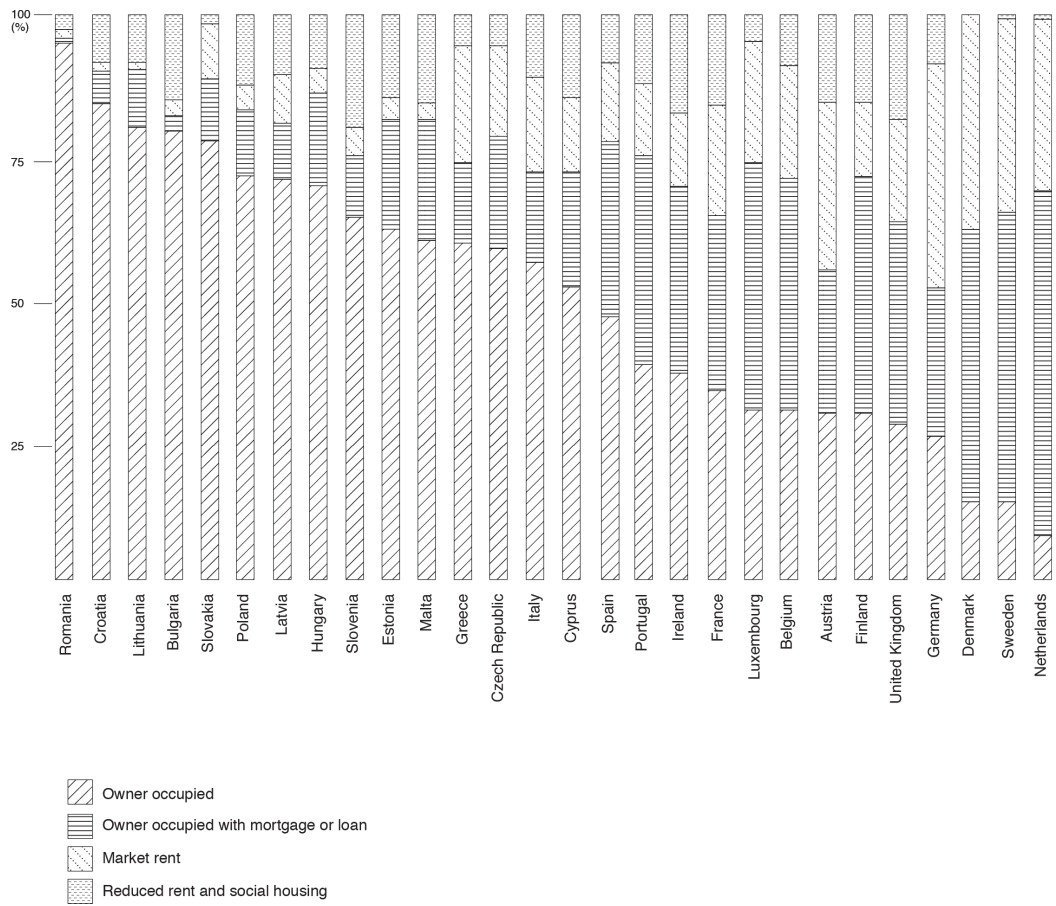


Figure 3 Distribution of European population by tenure status, 2016. Source: Housing Europe

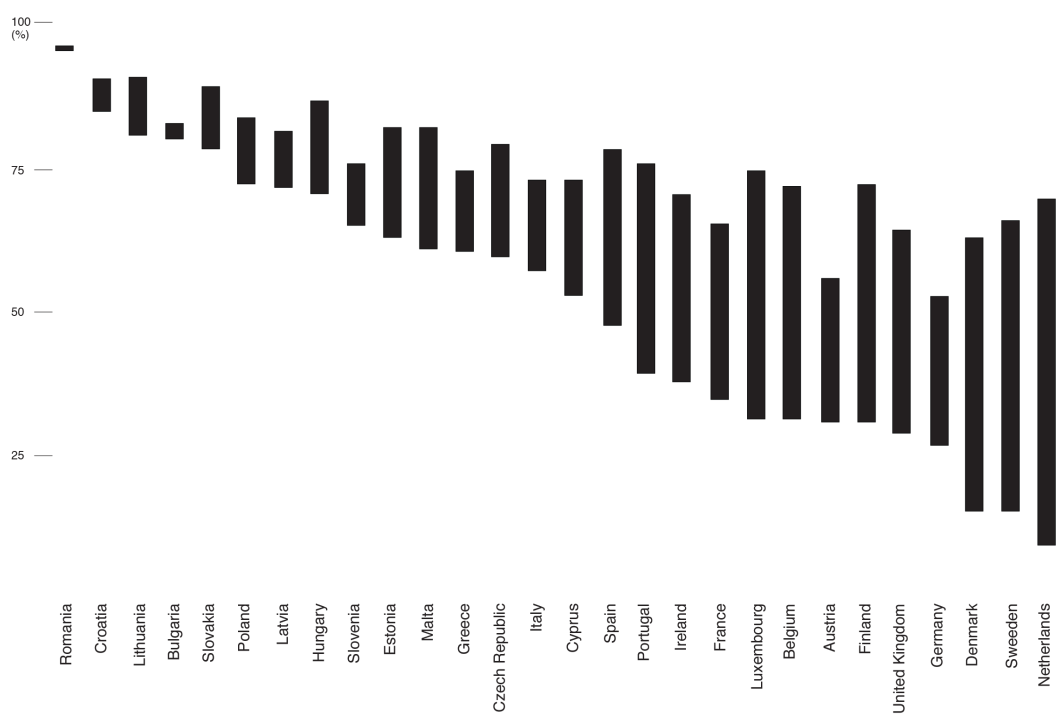


Figure 4 Owner occupied European housing with mortgage or loan, 2016. Source: Housing Europe

Where everything starts: land

According to Linklater, around 1530 in England, we assist for the first time to an act of privatization of land (Linklater 2013, 16). By order of King Henry VIII, plots of farmland get subdivided into private sub-plots, allowing the farmer-tenants to become entrepreneurs and to use their land as capital instead of a granting controlled by others. The shift from a feudal system to a capitalist one, based on individual ownership and exploitation of land, gives birth to a new economy projected towards a market economy, but most importantly an ethos of individual ownership influencing the whole society from the political level to everyday life (Linklater 2013, 38).

In figures, the accelerated expansion of homeownership in post-war Europe represents the last evolutive stage of the redistribution of land property initiated during the Sixteenth century:

“In 1450, about 60 percent of the twelve million acres of farmland in England had been held by the crown, by the church, and by some thirty dukes, earls, and barons. By 1700, the nobility, church, and crown together owned less than 30 percent of the cultivated land. Almost three quarters of what had grown to be fourteen million acres of farmland now belonged to the heads of more than two hundred thousand families of gentry, yeomen, and tenant farmers with land work more than forty shillings a year in rent. Out of a population that had increased to almost five million in 1700, about two million had an interest in landed property.” (Linklater 2013, 36)

Land reform based on the productivity of agriculture, and its significative contribution to the national economy, will be at the core of the global political agenda since the Cold War¹⁹. Regarding urban rent, we assist to several facts that affect urban economies occurring during the Industrial Revolution, with the establishment of rentier capitalism²⁰, no longer exclusively in the hands of the aristocracy and the church, but in the ones of the urban bourgeoisie (Piketty 2014).

¹⁹ Several measures were adopted both by socialist and liberal economies during the nineteenth century. Among those the most significative seems to be the Green Revolution. The Green Revolution refers to the liberal alternative to socialist land reforms occurring during the Cold War. (Linklater 2013)

²⁰ Concept introduced for the first time by Marx in Capital. Referring to the class of capitalists benefitting by capital without any productive outcome. Urban rent of land and housing are historically the main asset categories to extract ‘unproductive’ profits. (Marx, Karl. [1867] 1976).

For some scholars, privatization of land initiates what Marx defines ‘primitive accumulation,’ which is to say the possibility for capital to expand infinitely by extracting value from the surpluses of production and wealth (Marx [1867] 1976). The potential of land appreciation and the possibility for high yields on urban development will soon give birth to a new profitable market: real estate.

The urban practice of building for the market –and no longer exclusively after the requests of the church or the state– will be established a century after enclosure in England. Real estate started to challenge other asset markets significantly at the half of the nineteenth century with the significant urbanization of the cities as Paris, Barcelona, Berlin, New York, and London:

“In France in 1848 only 5 percent of inherited wealth was held in stocks, while 58 percent was invested in land and houses; by 1900 the figures were 31 percent and 45 percent respectively. Land and real estate remained the most secure investment, but, in the 1870s, land values began falling and buildings became increasingly profitable. Rents tripled from 1850 to 1913, while city housing construction experienced the largest boom in history. Investment in land and buildings fell 37 percent in 1908, but, after the crisis of World War I, rose 43 percent by 1934.” (Zeldin 1973, 59)

Patrice Derrington argued that the economic reason behind any real estate operation could be summarized in two ways. On the one hand, the development of a building for perpetual rent, where the return on the invested capital²¹ is measured in terms of annual shares of rents paid by the occupants. On the other hand, the return is expected on an upfront sale of the building to a third party after completion, and this is where the speculative approach of urban development arises (Derrington 2018, 96).

Even if it may seem an obvious alternative scheme, the built outcome of the first or second category of development may impact the final quality of the building decisively. In the first case, durability is vital to the success of the operation, while in the second case, the ‘market impression’ overcomes any future maintenance consideration (Derrington 2019).

Already Engels understood the importance of considering housing as a perishable good and its maintenance as a fundamental component of rental prices (Engels [1872] 1970). From this perspective, it becomes clear how the promotion of homeownership operated by western democracies depends on a constant land appreciation to counterbalance housing perishing and

²¹ Technically the net operating income (NOI)

generate surplus value. Any housing acquisition on the private market is burdened by future maintenance and the risks of a devaluation of the house.

This consideration explains further the massive sell-offs of public housing in post-war Europe. The transfer of hundreds of thousands of units from the state to private owners was also the way to discharge and displace the maintenance costs of a perishable good as housing.

Following Derrington's argument, this aspect seems to be compensated by the dynamism of real estate, as the progressive "*assetization of real estate*" (Derrington 2019, 40) focuses more on trade aspects of housing rather than the practical issues related to use and fruition of housing (Derrington 2019, 41)

This is what Madden and Marcuse defined as *hyper-commodification*²² of housing (Madden and Marcuse 2016, 24). This process, namely the detachment of the original purpose of housing as living space in favor of its economic value and potential for profit, is fueled by three concurrent side actors. First, the *deregulation* operated by the state – "*the counterpart to enclosure*" (Madden and Marcuse 2016, 28)– allowing the housing system to be orchestrated mainly by the private actors of real estate, absorbing consistent portions of formerly public-owned housing stock and land. Secondly, the *financialization* of housing operated through credit instruments, private equity funds, and indexes that create a sub-market profiting from the nominal existence of properties—lastly, *globalization*. In a context of increasingly unequal wealth redistribution, the most expensive real estate markets become an international playground for few investors locking money into housing as an asset (Madden and Marcuse 2016). Engels already highlighted how the private rental market is, by definition unequal, and impossibly self-sufficient to provide an even redistribution without political action (Engels [1872] 1970). Madden and Marcuse follow suit, affirming that also in present days, the state represents the ultimate orchestrator and ruler of the market through policy and regulations, making the 'housing question' a political one rather than an economic one (Madden and Marcuse 2016, 47).

The consequences of a *hyper-commodified* housing market can be finally summarized in a persistent contradiction: the growing fork between salaries and rents is not matched nor by a labor market capable of filling the gap, nor a social tendency from the 'bottom' to collectivize to reduce the impact of rent on the pro-capita expenditure. On the contrary, as we will see in the two following paragraphs, major Western cities are inhabited by a growing

²² "*The pursue of profit in housing is coming into conflict with its use for living. Commodification is the name for the general process by which the economic value of a thing comes to dominate its other uses*" (Marx [1867] 1976, 17)

number of individual households, asking for private and exclusive living space.

Singularization and the invention of the self

Together with significant economic and political changes, privatization of land also has consequences on the establishment of modern private life. Tosi argues that it is during the timespan between the middle-ages and the nineteenth Century that the notions of *intimacy* and *comfort* develop, shaping the modern concept of home (Tosi 1994, 18).

In Western civilizations, this *modernization*²³ process corresponded to an evolutive trajectory, starting first with the establishment of individuality and freedom, followed by mass production of the ‘industrial home’ to meet the broadest request of private living space (Linklater 2013, 376). From a historical perspective, this societal fact is strictly intertwined with the development of the labor markets.

The history of rental housing is strictly linked with the one of labor, since “*even in early commercial-capitalist society, housing was still predominantly shaped by the organization of work*” (Marcuse 1989, 212). Once the workplace becomes separated by the residence, urban rental housing starts to develop in order to house the working classes. This is the point in history –the one of ‘primitive accumulation’– where Marx sees the origin of the deprived social conditions of urban slums, as following the privatization of land the peasants are “*hurled as free and ‘unattached’ proletarians on the labour-market*” (Marx 1976 [1867], 875). As enclosure laid the foundations for the social and psychological construction of the *modern* self, it also had direct consequences on the transformation of the ideology and form of the house.

Sebastiano Serlio, in the Sixth Book of his main oeuvre²⁴, reported for the first time the floorplan of the working-class urban dwelling. From the observation of French and Italian cities, Serlio built an incremental compendium of all the houses from the ones for the peasants to the ones for the princes. The work of Serlio was among the first incorporating in the architectural

²³ “Anzitutto le condizioni sono quelle della modernità. Le due possibilità comportano la tematizzazione dei modi di abitare: il venir meno delle regole implicite che guidavano l’architettura vernacolare delle società preindustriali, la nascita di una produzione autoconsapevole delle forme abitative, divenute oggetto di elaborazioni disciplinari, di progetti, di politiche. Inoltre, presuppongono un corpo di valori, quelli costruiti attorno alla domesticità, che rappresentano nell’esperienza abitativa principi moderni come l’autonomia della sfera privata, o come l’autonomia personale – di cui la “libertà di abitare” è espressione. Infine, ancora come manifestazioni di principi portati dalla modernizzazione – la democrazia, una specifica nozione di cittadinanza, l’intervento dello stato nella gestione della società– queste idee implicano delle politiche che, affidando allo stato una responsabilità anche in campo abitativo, costituiscono il progetto di estensione dei benefici di un buon abitare all’insieme della popolazione” (Tosi 1994, 7)

²⁴ Serlio, Sebastiano. 1584. *I Sette Libri Dell’architettura*. Venezia.

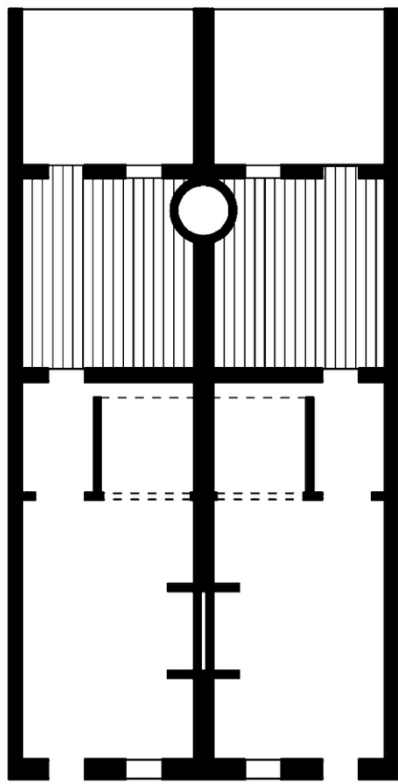


Figure 3 Sebastiano Serlio, La casa de più poveri homini, 1584

discipline also ‘popular’ housing, since the increasing privatization of land widened the supply of individual properties to rent or buy (Aureli 2013). In this case, the “*casa de’ più poveri homini*”²⁵ (Serlio 1584) is composed of a single room on a narrow Gothic lot, lit on the front by a single window on the urban street and with a small courtyard on the back.

As noted by Aureli, this is a “*paradoxical marriage between asceticism and property. On the one hand subjects are encouraged to endure reduced living standards, and on the other they are pushed to become micro-entrepreneurs of their own minimal economy.*” (Aureli 2013, 215).

From this moment onwards, micro dwellings have populated architectural research history (see Chapter 2) in two directions: firstly, the modern scientific research for the *existenzminimum*, focusing on the maximum optimization of the family house (Internationale Kongresse für Neues Bauen und Städtisches 1930); secondly, the optimization of the housing unit as a single room, as exemplified in Hannes Meyer’s 1926 *Co-op Zimmer* (Aureli 2015; Borra 2013).

In this second approach, the focus on the room instead of the functional living unit means that collective (and urban) space has virtually no limits. By making the living space “*never self-sufficient*” (Aureli 2013, 298), the equivalence between room and house implicates a collectivized *exterior*.

If Tosi focuses on the fragmentation of the *modern* house through specialization (Tosi 1994), Roland Barthes traces a progressive history of the legitimation of the room as an autonomous entity, describing how “*the room becomes detached from the total space. The room and the house are no longer interchangeable*” (Barthes 2013 [1977], 52). This occurs in a three-stage process. At the origin, the room coincides with the dwelling in the symbolic form and reproduction of Adam’s hut (Rykwert 1979). Secondly, the room acquires autonomy as it represents the private space of the conjugal bedroom. Finally, by also losing its association with the couple, the room becomes the space for the self (Barthes 2013 [1977]).

The question of micro-dwellings is not only a quantitative one. It also implies the qualitative attribute of being the extreme reduction of the bourgeoisie house, or –as in Serlio’s case– a single room for privacy not capable of providing all the necessities of a self-sufficient ecosystem.

At the housing unit scale, the rise of privacy manifests itself spatially in the domestic with the separation between the public and the private sphere. The idea that any single room has a specific function breaks the pre-industrial global dwelling space into a new ‘molecular’ subdivision of the domestic (Tosi 1994, 19). Furthermore, the democratization of the once exclusively

²⁵ “*Le case de’ più poveri homini sono lontane dalle piazze et appresso alle mura*” Ibid.

bourgeoise tendency to accumulate goods in the house as a space for self-representation (Benjamin [1935] 2008), becomes under the modern ideology of *comfort* the attitude to populate the house with ad-hoc domestic objects of consumption (Linklater 2013, 350). Starting from the 1930s, the technological advancements in housing appliances made accessible on the market most of the devices for a self-sufficient life within the domestic walls (Giedion [1948] 2013). As a matter of fact, in the United States from 1919 to 1929, the number of refrigerators had grown from 315000 units to 1.7 million, the one of radios from 500000 to 7 million, and the automobile industry sold more than twenty-three million vehicles (Schumpeter 1939, 363).

In *Going Solo* Eric Klinenberg demonstrates how the effects of modernization enabled the urban praxis of voluntary isolation, observing how “*the collective project of living alone grew out of the culture of modern cities, not the monastic or transcendental traditions, as we often assume*” (Klinenberg 2012, 21). This contrasts with other theoretical positions like the one of Pier Vittorio Aureli or Roland Barthes, that recognize a continuity of some forms of metropolitan living with the spatial and societal organization of monastic communities (Aureli 2013, Barthes 2013 [1977]).

In figures, currently, more than half of the population of cities as New York or Paris is composed of individual households²⁶. According to Klinenberg, the reasons are multiple: the emancipation of women starting from the 1950s, allowing access to education and performing divorce; the communications revolution was making information available in real-time for larger shares of the population, in addition to the invention of home entertainment; the massive urbanization of the earth, making cities the attractor and service provider for single dwellers through ad hoc businesses; the phenomenon of longevity, making the elderly ‘solo’ community a growing share of urban population (Klinenberg 2012, 13).

²⁶ Ogden, P. E., & Schnoebelen, F. 2005. The rise of the small household: demographic change and household structure in Paris. *Population, Space and Place*, 11(4), 251–268.

1.3 Contemporary *rentscape*: models and formats

As seen in the previous sections, since the 1950s in Europe, the real estate market rose hand by hand with state intervention on a massive scale²⁷. This resulted politically in the protection of homeownership and public housing as both social stabilizers for the political subject of the nuclear family.

Nevertheless, the countercultures of the 1960s attempted to break the dominant housing model proposing alternatives for wider communities and socially organized groups. The works of Tosi, Habraken, and Ward –just to quote a few– are linked by the shared trust in self-help and self-empowerment of communities (Habraken [1972] 2011; Tosi 1994; Ward 1974; 1985). As a result, the cultural hummus underlying Team X²⁸ produced architectural concepts as incremental housing or participative architecture until the 1980s. Without deepening in the practical success of the single projects, these cultural and architectural visions accompanied the development of different financial models in the production and organization of housing.

Even if there is no fixed rule connecting the economy of housing and the form of housing, urban history provided several examples where more than in other cases, the project of a financial model resulted as the main driver of the overall architectural outcome.

Analyzing the ‘under-layer’ of stakeholders involved in housing production and the different associative forms of users, we can build a taxonomy showcasing the different processes behind rental or property housing.

The private rental market –and temporary housing in general– is affected by a multitude of alternative economic models and associative forms that differ widely, stressing mostly the variable of time under the ineludible perpetual land appreciation.

Even if with more extensive differences between the formats than in the nineteenth century, the propositions of Engels and Proudhon seem to be perpetrated endlessly also in the contemporary capitalist globalized economy. On the one hand, the temporariness of rent to allow individual mobility of workers; on the other hand, the attempt to capitalize rent in a property utilizing financial intermediaries. Independently from the number of actors involved in the process, the main issue regulating the economy of housing is

²⁷ The INA casa program built more than 1 million units in its 14 years of activity. See: Di Biagi 2001

²⁸ Team 10, Max Risselada, Dirk van den Heuvel, and Nederlands Architectuurinstituut, eds. 2005. *Team 10: 1953-81, in Search of a Utopia of the Present*. Rotterdam: NAI.

represented by the final profit of the owner of the land and the dwelling on top of it. For this reason, the no-profit owner and landlord rose as a pivotal figure to ensure the future of social housing in an increasingly deregulated context.

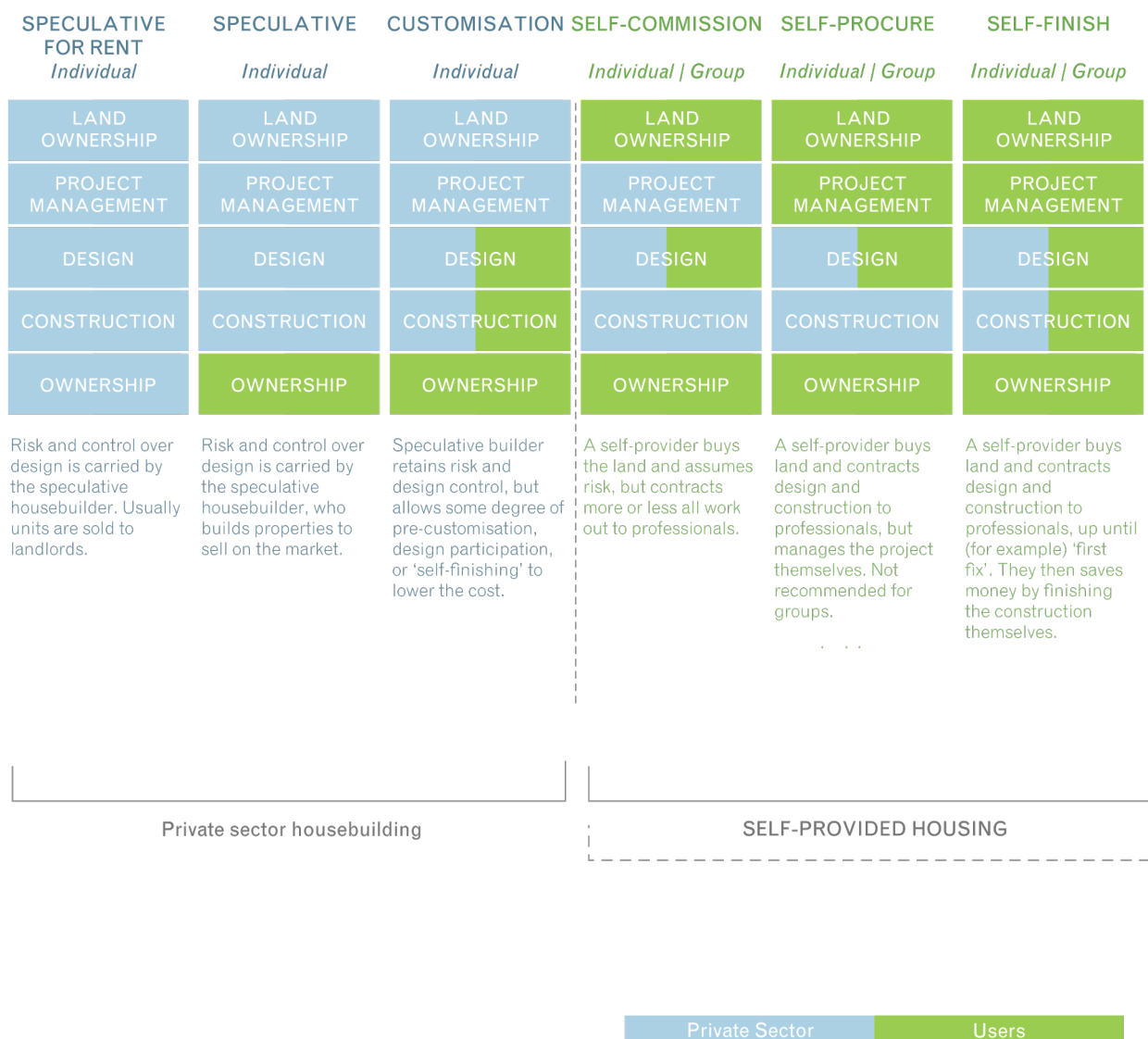


Figure 4 Housing Economic models. Source: Parvin, Alstair, David Saxby, Cristina Cerulli, and Tatjana Schneider. 2011. "A Right to Build. The next Mass-Housebuilding Industry." Sheffield: University of Sheffield School of Architecture.

SELF-BUILD <i>Individual Group</i>	CLT + SELF-PROVIDE <i>Individual Group</i>	ENABLED SELF-PROVIDE <i>Individual Group</i>	COMMUNITY LAND TRUST <i>Community</i>	SELF-BUILD FOR RENT <i>Group</i>	SOCIAL RENTED HOUSING <i>Individual</i>
LAND OWNERSHIP	LAND OWNERSHIP	LAND OWNERSHIP	LAND OWNERSHIP	LAND OWNERSHIP	LAND OWNERSHIP
PROJECT MANAGEMENT	PROJECT MANAGEMENT	PROJECT MANAGEMENT	PROJECT MANAGEMENT	PROJECT MANAGEMENT	PROJECT MANAGEMENT
DESIGN	DESIGN	DESIGN	DESIGN	DESIGN	DESIGN
CONSTRUCTION	CONSTRUCTION	CONSTRUCTION	CONSTRUCTION	CONSTRUCTION	CONSTRUCTION
OWNERSHIP	OWNERSHIP	OWNERSHIP	OWNERSHIP	OWNERSHIP	OWNERSHIP
Self-provider does everything, perhaps contracting an architect or specialist subcontractors where necessary. Affordable in cost terms, but costly on time.	Land is provided for self-providers through a Community Land Trust arrangement. This could be as individual plots, but is more likely to be a co-operative model such as mutual home ownership.	Land is provided (and possibly prepared) through a local authority or housing association. They support self-providers to develop housing.	A Community Land Trust acquires and procures houses on behalf of the community, these are sold or rented to the users at affordable rates.	A non-profit Housing Association procures housing in the usual way, but involves future tenants in the design or construction process (often as a form of skills training).	A non-profit Housing Association procures housing and rents it at affordable rates.
				Public / Non-profit housebuilding	
Self-organised housing					
Community Land Trusts			Public / Non-profit Sector		

Economic models

The modern residential model develops within the context of the market economy and the increasing professionalization and specialization of the *producers* of housing (Tosi 1994, 14). The main divide in the supply of the industrial home lies in the top-down or bottom-up nature of the production process. The percentage of self-provided homes, in the form of individual initiative or building cooperatives, can vary significantly across Europe. If sixty-three percent of the production of housing in Italy is self-provided – mainly by builders’ co-ops, the rate in the UK is as low as twelve percent, highlighting a market dominated by professional actors and real estate companies (NaSBA 2008).

According to a study of the University of Sheffield, the four structuring economic elements of any housing project can be summarized as follows: a) land ownership, b) project management, c) design, d) construction and e) ownership. In turn, the control of these elements can be in the hands of four different actors: 1) the private sector, 2) final users, 3) a Community Land Trust (CLT), 4) the Public and non-profit sector (Parvin et al. 2011, 50-1).

As an outcome, the different economic purposes behind housing production, spanning from the speculative for rent to the public-owned social rented housing, can be in control of a single actor, or the different stages of the process can be in charge of different and multiple actors. For example, a non-profit association willing to build a rental complex can own both the land and the building, while the design and construction process can be outsourced to professionals from the private sector in collaboration with its future users (Figure 4).

The three macro-categories of housebuilding initiators can be therefore drafted as follows. The first one is represented by the private sector housebuilding, controlled by the financial dynamics of developers and profit maximization. The second one is composed of the complex environment of user-groups and individuals building self-provided housing and self-organized housing. In this case, even if relying on the services of professionals for the design and construction stage, it is the housing model that allows significant cooperation among the actors, and the possibility to share the property of land (CLT). The last category is the public and no-profit housebuilding (Parvin et al. 2011).

The proportion of the three different categories of housebuilding, even for the case of renovations on an existing building, varies greatly depending upon the cultural and traditional settling principles of land from region to region²⁹.

²⁹ As an example think of the strong presence of housing cooperatives in Poland,

Observing the differences between Italy and the UK again, in the first case more than fifty-two percent of the population lives in a flat, while in the British case, the share is set at fourteen percent, with more than sixty percent of the population living in a semi-detached house (Eurostat 2016). While intuitively, one would think of a significant self-provision of housing in a less dense context as the British one, the contrary is true, as even in the denser Italian urban fabric, very few housing projects are provided by large scale companies instead of families.

Independently by the provider, the distribution and typological layout of housing on a territory are much dependent on history and culture. Nevertheless, the growing pressure of the market, and the professionalization of real estate as an economic science occurring from the nineteenth century, allowed some entrepreneurs to assign architects with housing designs aiming to an almost diagrammatical application of the economy of housing. In particular, starting in a season characterized by a widespread majority of renters, the ideas of Proudhon of rent capitalization soon became a design brief for workers housing proposals by architects.

One of the first applications of Proudhonian ideas on the capitalization of rent found application in the worker's housing neighborhood in Mulhouse promoted by the textile manufacturing Dollfus (Garner 1992, 46). The *cité ouvrière* was started in 1853 and was composed of 'quadraplexes' for four families, a rectangular plan house divided into four by a central spine wall.

The Mulhouse housing type served as a model and matter of inquiry for several international observers. In particular, a report from the US Bureau of Labor of 1895 reports accurately the economic structure of the neighborhood built by the *Société Mulhousienne des Cités Ouvrières*:

"The cost of each house was 2,331.50 francs (\$449.98), which, added to the price of the land, 160 francs (\$30.88), amounted to 2,491.50 francs (\$480.86). The annual rent is 187.50 francs (\$36.19). The tenants may become proprietors in fifteen years by paying 6 francs (\$1.16) additional per month" (Carroll 1895, 382)

A donation of 300.000 francs will also finance the *société* by Napoleon III that will be employed for general public improvements around

controlling the 16,2% of the total percentage of the housing stock. (Pittini 2017, 89)

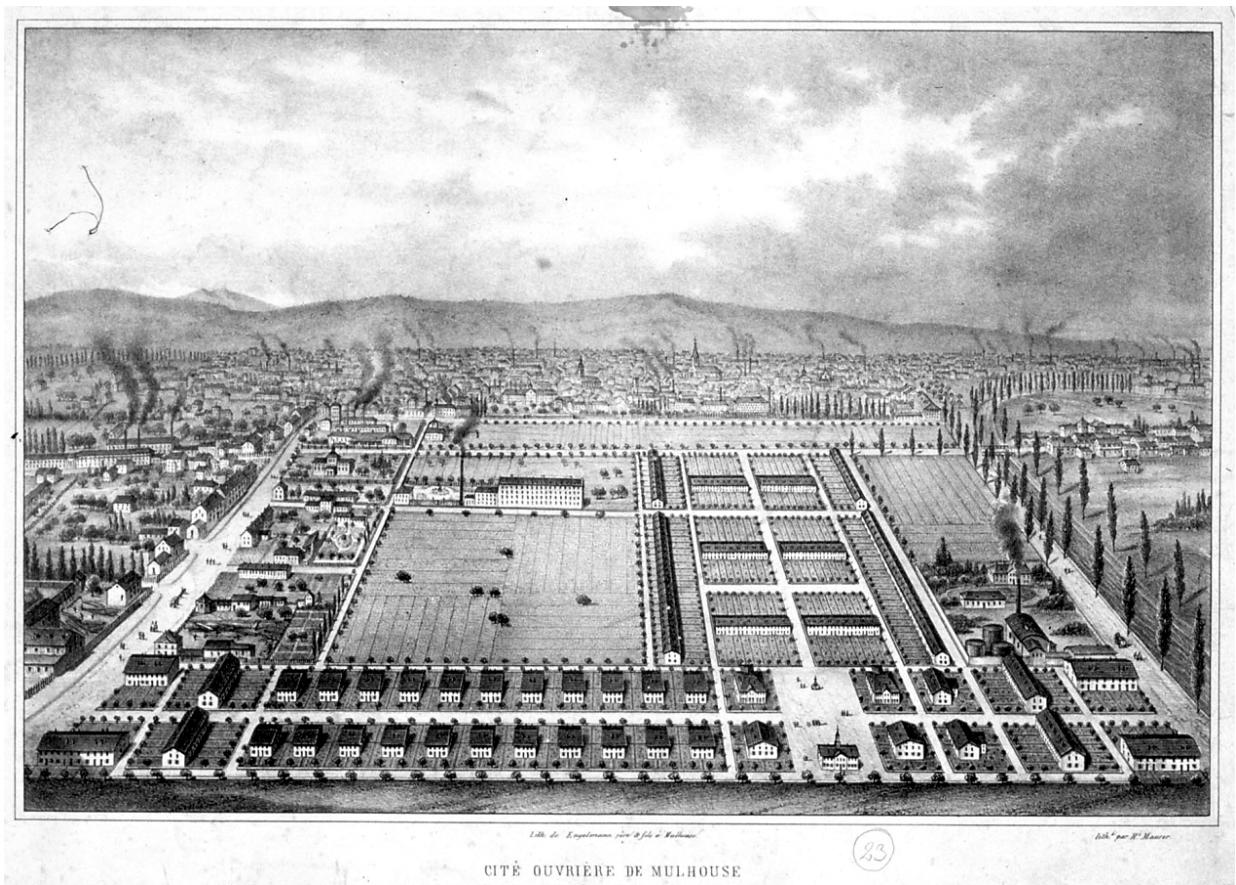


Figure 5 Cité ouvrière de Mulhouse. Archives Départementales du Haut-Rhin

the complex (Garner 1992, 46). Few lines after the original project description provided in the Labour Bureau report, the author describes the financial state of the project two decades after its inauguration:

“Up to June 30, 1877, there had been erected 948 houses. Eleven years later there were 1,124 houses. The capital stock of the society was fixed at 355,000 francs (\$68,515) and divided among seventy-one share-holders. A maximum dividend of 4 percent has been regularly distributed. [...] up to that year the 1,124 houses which had been built were valued at 3,485,275 francs (\$672,658.08). At that time 4,584,020 francs (\$884,715.86) had been paid by purchasers, and 424,949 francs (\$82,015.16) were still due” (Carroll 1895, 383)

The inspector of the Bureau will report from the *société* books that between 1877 and 1888 some of the houses had a price increase of thirty-two percent (Carroll 1895, 383).

The critique of Engels of this project will gravitate around the two facts that emerged by the later report of the Labour Bureau. First, that workers’ housing could be a profitable investment for capitalists as well as traditional speculative urban developments; second, that given the conditions imposed by the market, demand and offer tend to match even when a housing scheme is initially aimed to be a below the market solution (Engels [1872] 1970, 56).

After a century and a half, similar models continue to be built with similar premises. The no-profit organization Naked House was founded in London in 2013 to provide lower incomes with affordable capitalizing rent solutions³⁰.

In the words of the company, the final goal of the project is even more ambitious:

“We wanted to be a part of solving our own housing crisis by contributing to our homes. We quickly realised we had a model that could help thousands of people like us. This is by generation rent for generation rent.”³¹

In order to cut costs, Naked House provides its inhabitants-shareholders with a home barely furnished on council land reclaimed by another use on the zoning plan, therefore, available at a negotiable lower lease. The houses are then released on the market at a final price sixty-five to seventy percent below market price, and residents pay a monthly rent of which a part can be capitalized as part of the final purchase –as the *Mulhousienne* method.

³⁰ <https://nakedhouse.org/about>. Accessed January 16, 2020.

³¹ *Ibid.*

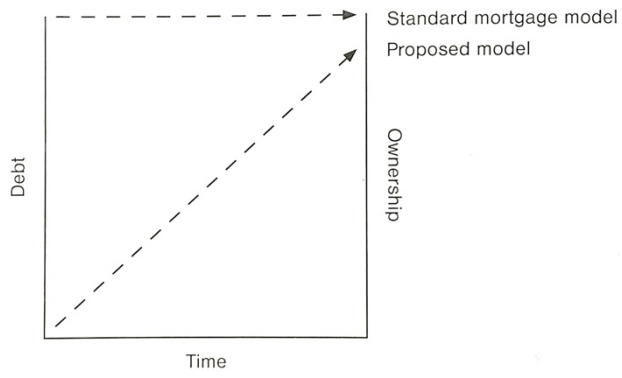


Figure 6 Naked House concept diagram and model of the Naked House scheme in Enfield. Architect OMMX. 2017



Figure 7 Interior of the Naked House scheme in Enfield. Architect OMMX. 2017

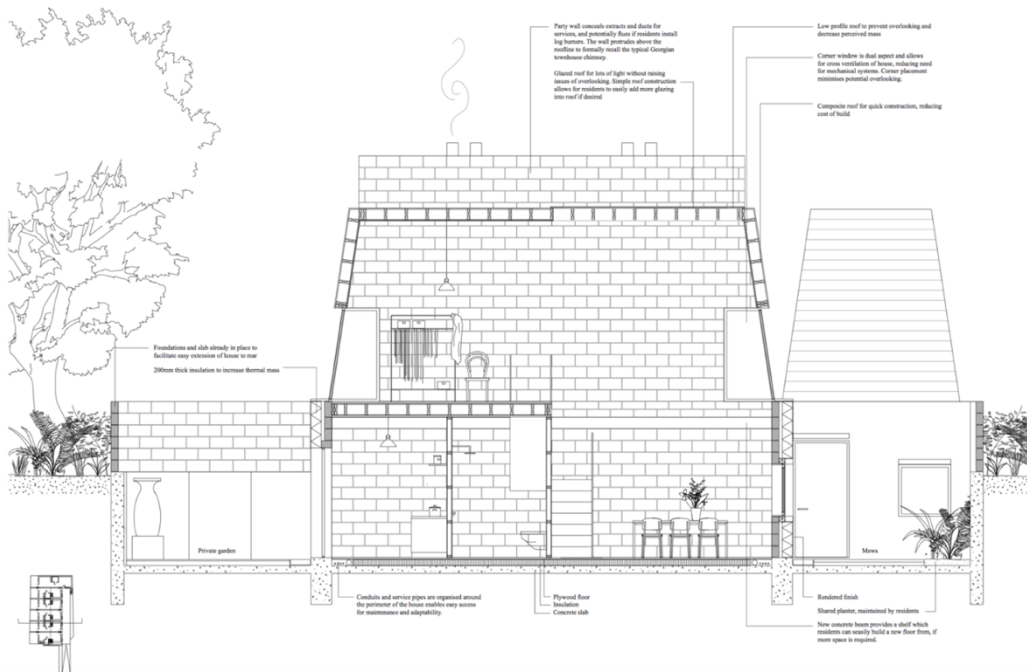


Figure 8 Cross-section of the Naked House scheme in Enfield. Architect OMMX. 2017

The long-term strategy of the non-for-profit developer is that regardless of market changes, the price of the house should stay seventy percent below the market rate for all the subsequent purchases.

The first released Naked House project is composed of twenty-two units in Enfield designed by OMMX. The housing units consist of two-story row houses with only half of the second floor built in order to let the occupants implement the surface.

The site was formerly used as a parking lot and is part of the plots of land released by the program of London's Mayor Sadiq Kahn in order to run affordable housing solutions³².

The target of this kind of project is explicated by the developers as follows:

"Naked House is for generation rent –those who don't qualify for social housing but are unable to afford a home on the open market. You will be eligible to buy a Naked House if your household income is £90,000 or less. You will also need to be either a first-time buyer or a previous homeowner who cannot afford to buy now."³³

The description of this inhabitant sociology refers to a social stratum far from the actual lower income classes. An interregnum between the assisted by the welfare state and who can afford a house purchase, that represents the core of cash renters in the tenure breakdown of any given society³⁴. Nevertheless, the market conditions of both the Mulhouse and the London project share a similar original optimism in land and resource optimization, trading off workers' mobility with the future promise for capitalization of the otherwise 'wasted' rent.

The destiny of the Mulhouse project showed that in standard market dynamics the advantages for inhabitants in this kind of project are possible only at the early stages following construction. Once land value rises due to the presence of that very housing project –while the salaries of the tenants remain almost constant during the years– it is likely that the convenience of this economic mechanism stops after the first iteration of the rent-to-buy cycle.

³² <https://www.theguardian.com/society/2017/apr/24/mayor-subsidise-naked-homes-london-housing-crisis-sadiq-khan-new-builds>. Accessed January 13, 2020.

³³ <https://nakedhouse.org/faq>. Accessed January 13, 2020.

³⁴ In Europe, cash renters from the below 60% income population account for the 31.5% of the total, while for the above 60% incomes the total of cash renters is set at 17.9% (Pittini 2019, 11)

Formats

As seen in the former paragraph, the economy of housing and its financial functioning can play a fundamental role in the formal outcome of a housing project. If the issues related to ownership and management represent the ‘hardware’ of the system, the cultural and economic presence of the inhabitant determines the ‘software’ that defines different housing layouts of co-habitation or seclusion within and outside the city.

The categorization of housing has a long-lasting tradition since antiquity.

The proposed taxonomy in the following paragraph is organized through the concept of ‘format.’ The format is defined from the Cambridge’s dictionary as “*a pattern, a plan, or arrangement,*” allowing for a less codified and broader inclusion of the typical architectural notion of typology as “*an intellectual construct with a specific purpose*” (Leupen, Mooij, and Uytengaak 2011, 38).

The format, differently from the typology and the model, implies the mutual relationship between the social content and the infrastructure of housing. Some authors also attempted to describe the relationship between space and humans as proxemics, attributing to a specific space a consequent behavior (Barthes [1977] 2013, 111).

Here the interest is on the ways architecture or primary housing forms are developed to follow specific social structures, and especially the collective or secluded living forms.

In the case of collective and communal living, the format has direct implications on how relations and the structure of a social group are organized.

The development of the industrial home in modern societies loosened the necessary relationships between the inhabitants of a particular community, leading to co-habitation forms between “strangers,” reshaping the significance of the “collective.”

For the German philosopher Marcus Steinweg, “*a collective is a community whose members are linked by nothing else but the absence of an objective or absolute bond*” (Steinweg 2009, 46), marking the predominance of the *co-existence* over the *co-habitation* in the modern collective living sphere.

In this framework, the *Wohnformen* diagram by Breit and Gürtler (figure 9) shows the different ‘formats’ of temporary living according to the above-mentioned social tendency to polarize the private and the collective dimension (Breit and Gürtler 2018). Here the diagram was edited to meet additional formats that the authors omitted in their version. The different formats are displaced in four quadrants obtained from the crossing of two axes of values—the vertical, indicating the two different conditions of sharing and isolation; the horizontal, focusing on the voluntary or specialized nature

of temporary housing formats. In synthesis, the former indicates the way collective –or solitary– life unfolds, and the latter shows the intentionality of that particular format.

If the ‘standard flat’ stands neutrally at the origin of the axes, describing the four fringe formats, we can understand the extreme conditions. The exceptional condition of isolation is represented by the ‘prison,’ while the ‘van life’ represents the opposite. On the upper side of the diagram, the one comprising the shared formats, we find on the left side ‘elderly housing’ as a particular condition with a high degree of shared activities and services. On the opposite side, the ‘hostel,’ together with the different forms of hospitality and serviced housing, represents the particular condition of accepting to share almost every part of the house. In the upper side of the diagram, the presence of a shared bedroom defines the formats with a higher degree of sharing. In chapter 2.4, this particular aspect will be deepened with a focus on the debate in the 1920s in the Soviet Union. As most of the bourgeoisie domestic activities were considered to be collectivized, shared sleeping and the total annihilation of privacy was at the core of an argument that will see the latter position to prevail.

As seen in Chapter 1.2, the quest for private space in the city, at a reasonable distance from the working place, is a structural requirement of the contemporary urban middle-class. The ‘prototypical’ *solo* city-dweller described by Klinenberg may find its place in the ‘upper right’ quadrant formats of the diagram (Klinenberg 2012, 10). This may be strongly related to new spaces of the global economy and the structure of labor markets. The rhetoric of sharing economy (Sundararajan 2017) and real estate products targeted to the urban solo middle-classer often addresses the *digital nomad*. Proposing the idea that also the proximity to the workplace is a bypassed concept in the digital era. Nevertheless, it becomes a legitimate question to ask how much the current society is moving away from its path-dependent ownership structures of the post-war era in favor of perpetual temporary housing tenure. For which no evidence is provided by statistical data at the moment.

According to Nick Srnicek, platform economy and sharing economy *do* revolution the actual modes of production mainly for companies accumulating wealth, providing services, and storing data with a relatively small workforce (Srnicek and De Sutter 2016, 36). In this context, who is affected is mainly the precarious worker involved in the platform economy. For Srnicek “*the traditional industrial working class is increasingly replaced by knowledge workers or the ‘cognitariat’*” (Srnicek and De Sutter 2016, 37), meaning that even if a growing number of the urban population may live in a more shared environment, the actual exploitation by companies of this unprotected workforce does not generate a different housing demand from the previous one of the industrial era.

Finally, the resulting *rentscape* of the right side of the diagram represents a constellation of housing formats mainly addressed to the urban middle-classes, since the voluntary willingness to share is dependent upon the economic capacity of the inhabitants and their labor conditions.

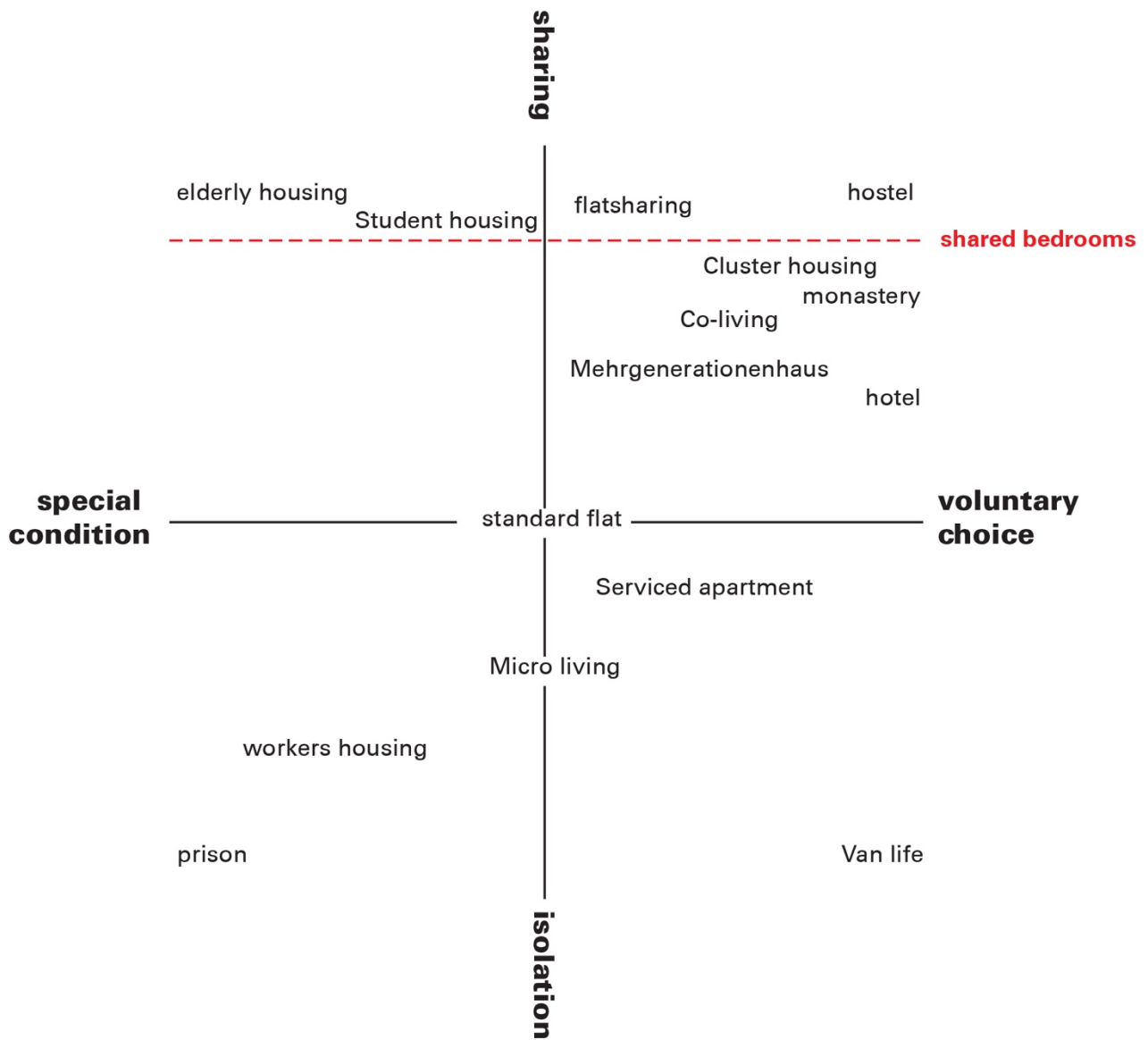


Figure 9 Housing formats. Drawing by the author elaborated on the basis of a similar diagram in: Breit, Stefan, and Detlef Gürtler. 2018. "Microliving. Urbanes Wohnen Im 21. Jahrhundert." Rüslikon: Gottlieb Duttweiler Institute.

Chapter 2

What do we rent?

Automatic pilot³⁵

At the time Engels was writing *Zur Wohnungsfrage*, Europe was experiencing major political and social transformations. A polarization between progressive thought on the paper and conservative urban development cast in built form followed the turmoil of 1848. According to Benevolo, the tremendous urban transformations of European capital cities as Paris and London were orchestrated by conservative statesmen as Napoleon III and Disraeli having as ultimate goal social stability and the preservation of the status quo (Benevolo 1963). At the same time, significant concerns for the deprived conditions of the working class –as testified by the influential work of Engels on the English condition³⁶– led to the realization of purpose-built workers' housing both in urban and suburban contexts.

The realization of proposals such as the Cité Napoleon of 1849 in Paris and the Familistère in Guise in 1860 –prompted by the ideals of social equality– were isolated experiences immersed in the broader context of urban speculation targeting the middle-classes (Benevolo 1963).

Even if these projects were tangible achievements of the social reform, the large-scale growth and improvement of living conditions were operated far from the masses of industrial workers, as noted by Richard Sennet:

“In fact, the greatest growth of population occurred in cities with few large-scale industries; it occurred in the capitals. The sheer enlargement of population was, to be sure, unprecedented. Older patterns of handling this population and sustaining it economically were magnified until they become unrecognizable; in

³⁵ This title is borrowed from Rem Koolhaas' notorious description of the work of Hugh Ferriss as interpreter of the future of Manhattan in his charcoal drawings of the building envelops of skyscrapers according to the building code. Koolhaas, Rem. 1978. *Delirious New York: A Retroactive Manifesto for Manhattan*. New York: The Monacelli Press.

³⁶ See Engels, Friedrich, and Florence Kelley Wischnewetzky. (1845) 1984. *The condition of the working-class in England*. Moscow; London: Progress Publishers; Lawrence & Wishart.

this way changes in number gradually produced changes in form” (Sennett 1977, 130)

This meant that the main theaters of urban development in Europe were London and Paris³⁷. London was growing fast through urban sprawl, while Paris densified into the limits of the former walls limit (Sennett 1977, 134).

As urban historians have widely explored the mentioned experiences, the focus of this chapter is on the specific residential architecture developed to organize the dynamics of urban rent.

Observing the cases of Paris, New York, and Berlin, around the year 1860, we assist for the first time to the development of apartment buildings for the middle-classes. In all the three mentioned cases, this happened through a coincidence of interests of the political class with a receptive market ran by developers³⁸ and architects.

The consequential built forms were the *maison à loyer*, the *apartment building*, and the *mietskaseme*. From this moment onwards, the real estate market consolidates in the closest form to the one we know today.

The diffusion of daily and weekly press served as a vehicle to inform an unprecedented number of people on the developments in cities and living forms. It is the moment when the boundaries between the private and public sphere are traced and delineated (Wittman 2007; Habermas and Burger [1962] 2008).

As the *Radeau de la Méduse* was probably the first artwork³⁹ realized *for the market* –that is in the absence of an explicit commission– having in mind the potential expectations and trends of the *target consumer*. The very concept of *commissioning* was reframed in all the neighboring disciplines. Also architecture was affected by this cultural shift.

³⁷ Sennett notes how the population of Paris grows respectively as follows: 1801 - 547,756; 1861 - 1,174,346; 1896 - 2,536,834. And London: 1801 - 864, 845; 1861 - 2,803,989; 1891 - 4,232,118 (Ibid.)

³⁸ According to Derrington, the modern conception of the developer -replacing the former *patronage* of pre-industrial societies- rises in the seventeenth century London, after the Great Fire of 1666 (Derrington 2019).

³⁹ Jean-Louis André Théodore Géricault (1791-1824) painted the *Redeau* (originally known as *Scène de Naufrage*) between 1818 and 1819. The artwork was exhibited for the first time at 1819 Paris Salon with a mix of scandal and enthusiasm in the public's reception. The work was later acquired from the Louvre after Géricault death at the age of 32.

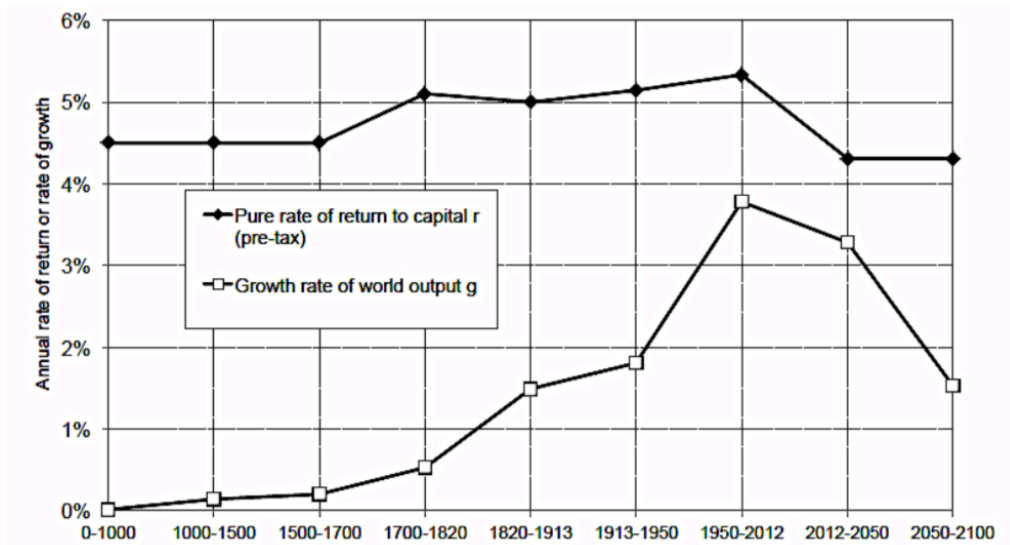


Figure 10, Théodore Géricault, *Le Radeau de la Méduse*, 1819. Musée du Louvre

Figure 11 Rate of Return versus growth rate at the world level, from Antiquity until 2100. Source: Piketty 2014, 354

The architectural profession –especially in the production of housing for the many– became a technical work that had to meet the needs of an impersonal entity: the market.

It is important to note that it is from this moment that the contemporary understanding of flat living in collective housing buildings becomes socially acceptable, even if rental housing already existed before the mid-nineteenth century.

Therefore, all the layers of the urban middle-classes, from the bourgeoisie to the lower incomes, met the convenience of living in an apartment, generating a broad and differentiated market.

In general, to make this happen, we assist in the transfer –and optimization– of the values of the bourgeoisie to the middle-classes in the floor plan layouts of the apartment building. This intensification process was operated by architects pushing the covered floor area of building plots at extreme values, still preserving the interior private-public room distinctions. The matters of privacy and publicity within the domestic remain the central issue until present days in the development of collective housing, especially in the temporary housing form of rental flats.

2.1 Rental housing origins: an urban typology

Le lieu commun de l'architecture

With the second Empire of Napoleon III, the massive scale of residential developments of *maisons à loyer* laid the ground to host the urban middle-classes, even if the bourgeoisie apartment building already existed in Paris in the early nineteenth century⁴⁰,

Differently from the cases of Berlin or New York, where the public opinion initially perceived apartment living as dangerously immoral (Cromley 1999; Rousset 2017), in Paris –even before Haussmann's renovation plan– the architecture of apartment buildings was accepted by the general public. Apartment plans were published on large in-folio pattern books "*designed to publicize individual architects, and to provide models for the many builders and contractors who bypassed trained architects*" (Moore 1999, p. 25).

According to Giedion's main oeuvre⁴¹, Haussmann's plan was not aimed to build punctual urban projects in the first place; instead prioritized the general layout of urban circulation space. The construction of boulevards with their typical wide section was aimed to prevent mobs, while the consequent realizations of buildings facing the new streets were left mainly to private enterprise (Giedion 1941, 638). This is understandable also from the opening lines of the book on private architecture by the French architect César Daly⁴²:

"Ce grand effort de l'administration a fait naître un effort pareil de la part des spéculateurs et des architectes. Les capitalistes et les artistes ont voulu satisfaire aux exigences croissantes de confort, de luxe et de goût dans les habitations, que provoquait naturellement dans la population l'augmentation de la

⁴⁰ The bourgeoisie apartment was described accurately by contemporary authors as Honoré de Balzac in his *Père Goriot* (1834) or later by Émile Zola in *Pot-Bouille* (1882). Both classic novels of French realism.

⁴¹ Giedion, S. (1941) 2008. *Space, Time and Architecture: The Growth of a New Tradition*. 5th ed., rev. Enl. The Charles Eliot Norton Lectures 1938–1939. Cambridge, Mass. London: Harvard University Press.

⁴² Daly's *L'architecture privée* was dedicated to Baron Haussmann, including a reply letter from Haussmann consecrating the close collaboration between the private and the public in the realization of the undergoing urban development (Daly 1864).

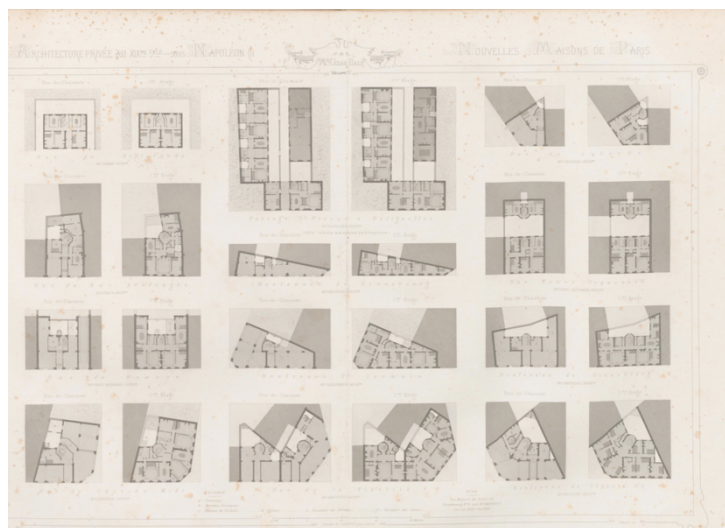
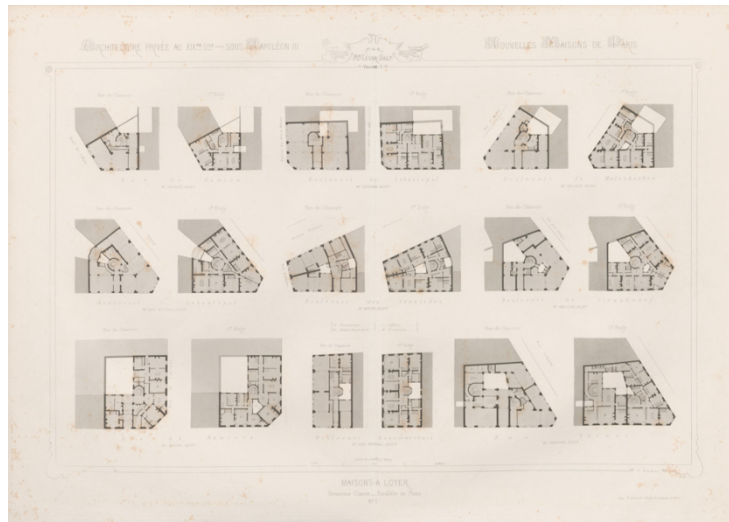
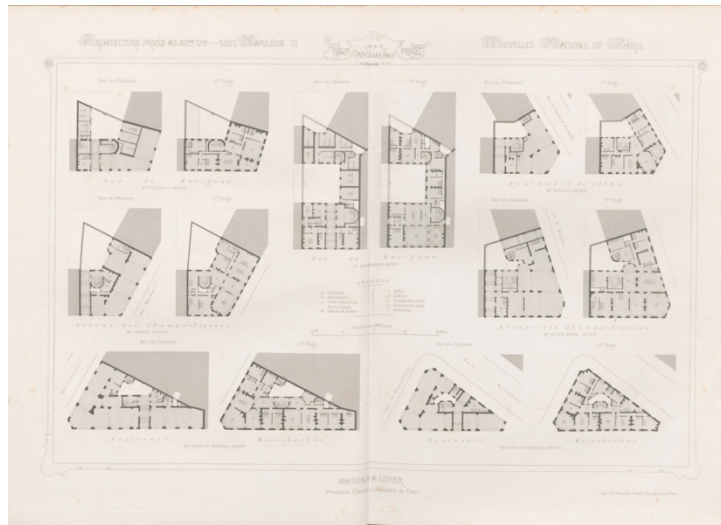


Figure 12 Pages showing immeubles de rapport of first, second and third class. Source: Daly, Cesar. 1864. *L'architecture Privée Au XIXme Siècle Sous Napoléon III*. Paris: Morel.

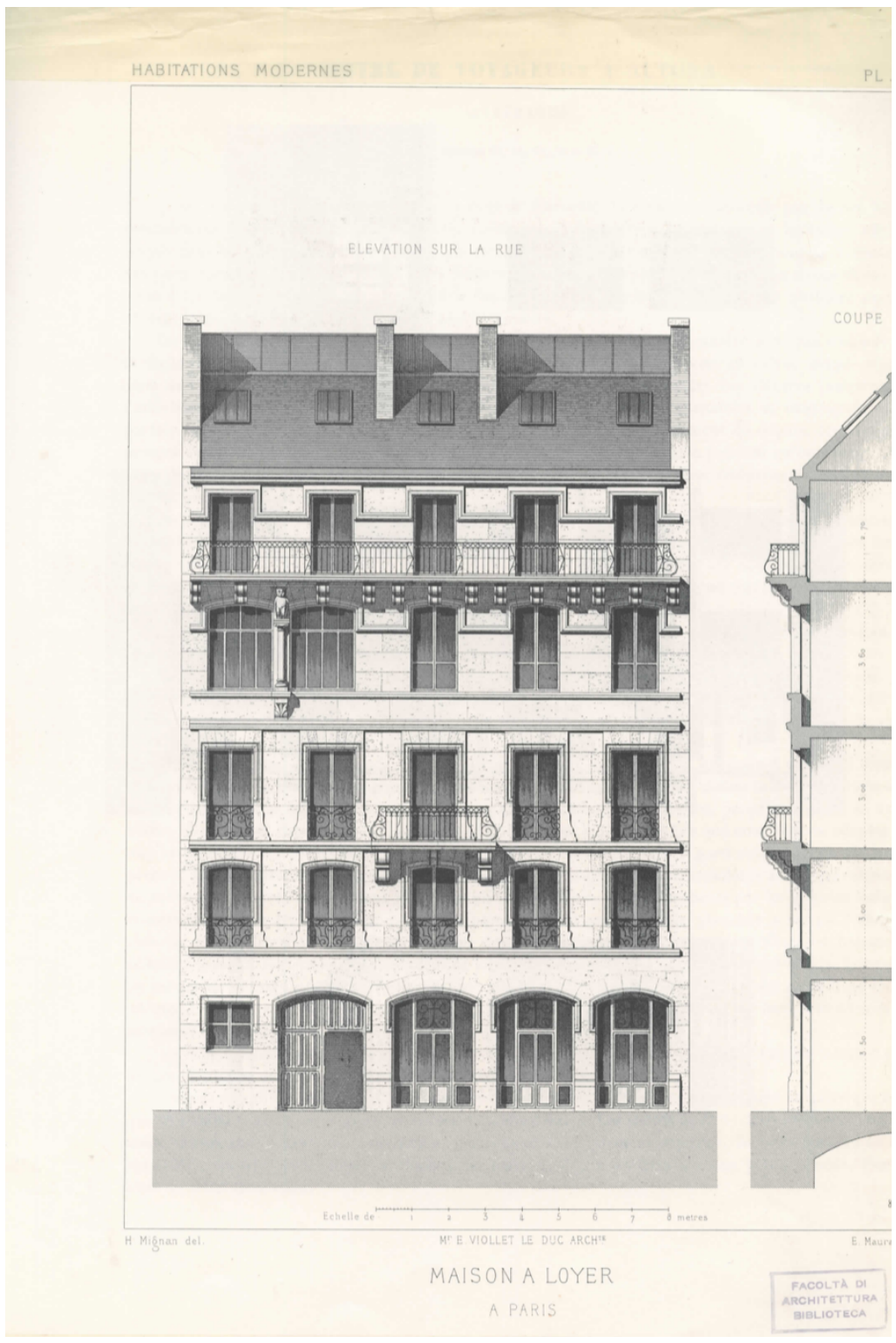


Figure 13 Façade of a Maison à loyer. Source: Viollet-le-Duc, Eugène. 1875. *Habitations Modernes*. Paris: Morel.

richesse générale, née du rapide développement de l'industrie et des transactions commerciales du pays" (Daly 1864, 3)

Haussmann's project allowed the *capitalist* and the *artist* to work on buildings in coordination with the government's agenda. Accordingly, the *maisons* described by Daly in his book reflected in their layout the conservative values of the former and new urban middle-classes:

"[...] l'arrangement de chaque appartement de façon à ménager la liberté et l'isolement facultatif des divers membres de la famille, à faciliter la surveillance et l'exercice du service domestique et à rendre le plus direct possible l'accès des pièces destinées à recevoir le monde ; enfin, la séparation la plus complète possible des appartements contigus, de telle sorte que les habitudes bruyantes d'un locataire ne viennent pas troubler le repos et la tranquillité de ses voisins" (Daly 1864, 5)

The "*commitment to privacy as the core of family ideology*" (Cromley 1999, 21) narrowed the design of apartment buildings to a technical issue of optimization of the plan. This point was also stressed by Daly in his advice to architects to treat the *maison à loyer* without any excess of inventiveness or personalization, as the "*lieu commun de l'architecture*" (Daly 1864, 5). The façade with its decorative apparatus –even if strongly regulated by the rules on street alignment⁴³– becomes the place of expression for the architectural profession in a predictable typological context (Lortie 2015, 27). Several authors suggested that the Parisian rental apartment, the *maison à loyer*, had the capability to absorb different kinds of tenancies, acting as a vertical multilayered building in terms of social occupancy (Lortie 2015, 27). Giedion describing a *maison à loyer* from 1860 on Rue Sebastopol observes how the first three floors were reserved for the middle and upper classes and the top floors crowded by the working classes, while the ground floor and the mezzanine hosted productive and commercial functions. This layout reflected the vertical organization of almost any *maison à loyer* (Giedion 1941, 661).

The result is "*an ecology of quartiers as an ecology of classes: this was the wall Haussmann erected between the citizens of the city as well as around the city itself*" (Sennett 1977, 135). The idea of vertical plurality, multiple times represented in cartoon cross-sections published on period journals and publications as *Le*

⁴³ It is only in the early Twentieth century, with projects as Auguste Perret apartment building in Rue Franklin (1902), that the street alignment of residential buildings starts to be questioned by design

Diable à Paris (1869)⁴⁴, was discredited by Richard Sennet. In his opinion, Haussmann's plan inaugurates economic segregation between the different neighborhoods of the city, rather than allowing inclusiveness.

In his *Architecture privée*, Daly included a floor plan taxonomy of three different types of *maisons à loyer* according to their value. From these comparative drawings, it is possible to understand how this kind of buildings were not the adaptation of a prototype –which will be the case for both Berlin and New York– even if they shared common features. Except for the presence of a street-aligned façade and an inner courtyard –or light shaft in the most extreme cases–, the shapes and arrangements of the courtyard could vary significantly, according to an often irregular *ilôt*. Plus, the stair-shaft positioning varied with no fixed rule, often occupying the space of the inner courtyard, becoming primarily a space to guarantee hygiene rather than a space for sociability. As an example, in the four blocks completed in 1879 crossed by the rues Eugène Sue and Simart, it was observed that the courtyards varied between a maximum of 30 and 140 square meters for a constant height of 7-floor-buildings (Christ and Gantenbein 2015, 35).

Courtyards and morphological irregularities were not perceived as design defects and are also confirmed from Daly's suggestions for architects. For Daly, the project proceeded from the interior to the exterior prioritizing privacy issues, advising architects to pay crucial attention to the partitioning of space rather than stylistic and design issues:

“tracez, dans l'appartement d'une maison à loyer, la limite qui doit séparer le salon, théâtre des communications avec le dehors, des chambres intimes où vit la famille. Mais, cet ordre d'idées générales satisfait, évitez tout ce qui a une signification trop précise.” (Daly 1864, 5)

Usually, the Parisian *maison à loyer* had two separate staircases -one for public use, one for the servitude- around which the internal distribution of rooms was articulated, starting from the antechamber placed at the entrance.

This hybrid space between a circulation space and a room acted as “une sorte de terrain neutre entre les maîtres et les serviteurs” (Daly 1864, 19). Observing the *maison à loyer* project that Viollet-le-Duc presented in his *Habitations modernes*⁴⁵, it is possible to find all the elements suggested by Daly.

⁴⁴ See: Hetzel, Pierre-Jules, ed. 1869. *Le Diable à Paris*. Paris: Hetzel.

⁴⁵ Viollet-le-Duc, Eugène. 1875. *Habitations Modernes*. Paris: Morel.

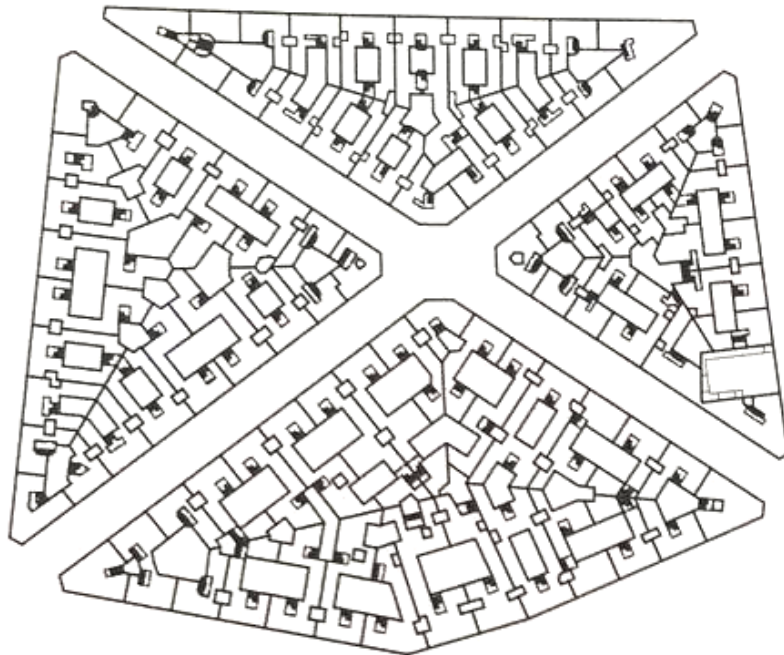


Figure 14 Plan of the blocks of the Eugène Sue and Simart streets. Source: Christ, Emanuel, ed. 2015. *Typology: Delhi, Paris, São Paulo, Athens*. Typology. Zürich: Park Books.

The antechamber as a pivot between the public and private part of the house (the *theatre towards the outside* in Daly's words), the double staircase, the master bedroom comprised between the living room and the dining room, and the service rooms and the other bedrooms in the rear of the house.

The fact that also a reference architect and theorist of the time embraced the typical elements of the Parisian rental housing as standards reflects the extent and pervasiveness of Hausmann's plan also in the interior design domain.

New York. Parisian Buildings and the dumbbell

"The New York ideal of a flat... was inflexibly seven rooms and a bath." (Howells 1890, 52)

In New York, the development of new residential typologies follows the fast-growing demographics of the city. In 1790 the population counted 33,000 people, and in 1850 it increased for around half a million, growing to two and one-half million in the following sixty years⁴⁶.

If in the upper class could afford to live in palatial hotels or secluded mansions, the middle-class was struggling to find an affordable living place, as the average annual salary of a skilled worker was about \$2000 and the price of a home in 1886 could shift between \$10,000 and \$80,000 (Cromley 1999, 14). As buying a house was unaffordable for the majority of the urban population, the common practice among singles and families was to share the rent with others in subdivided apartments (Cromley 1999, 15). These subdivided apartments seemed still a decent alternative to the working-class tenement building that existed since the early years of the century.

Many authors focused on the projects and realizations of collective housing typologies in New York in the 50 years spanning between 1870 and 1920, insisting on the development and adaption of social and technical innovations occurring in apartment buildings (or *French Flats*), *residential hotels*, and *palace hotels* (Puigjaner 2017; Koolhaas 1978; Aureli and Giudici 2016; Aureli, Tattara, and Dogma 2019; Cromley 1999; Sandoval-Strausz 2007). This period is regarded as the apical expression of the consequences of real estate speculation as an engine for technical innovation.

In parallel to the typical architects' brain puzzle of the *efficient* development of the residential floor plan, New York became the testing

⁴⁶ Kennedy, Joseph. 1860. *Preliminary Report on the Eight Census*. P. 243

ground of experiments of centralization and collectivization of domestic services in middle-class rental buildings.⁴⁷

According to Elizabeth Cromley, the first apartment building proposal was formulated by the British-American architect Calvert Vaux in 1857, in a presentation delivered to the American Institute of Architects (AIA) in New York (Cromley 1999, 29). Even if working-class tenements existed since the 1820s⁴⁸, this was intended to be the first apartment building conceived for the middle-classes. Vaux called his prototype Parisian Buildings, shaping two adjacent plots 15 meters wide and 75 meters long with a 4-story building, with public functions on the ground floors, private rooms on the upper floors, and *servant quarters* (Cromley 1999, 29).

Such a prototype seemed to be an upgrade of the existing working-class tenement layout -the 'dumbbell' type. This typology consisted of a narrow and deep building maximizing rentable space on the typical 25 by 100 feet plot, with a longitudinal indentation to allow light and air to penetrate all the rooms. The reasons shaping this typology are mainly financial, as the annual yield on a long-and-narrow shaped tenement could reach twenty-five percent of the invested capital, while a courtyard building would yield a mere five percent⁴⁹.

⁴⁷ Even if developed in a capitalist system, New York and its residential landscape will perform as a thriving source of references for socialist authors of the 1920s as Karel Teige. See: Teige 2002; Aureli and Tattara 2019.

⁴⁸ Elizabeth Cromley reports that an undisclosed source states that the first built example of a tenement is datable in 1824. (Cromley 1999, 52).

⁴⁹ White, Alfred Tredway. 1891. *Improved dwellings for the working classes, 1879*. New York

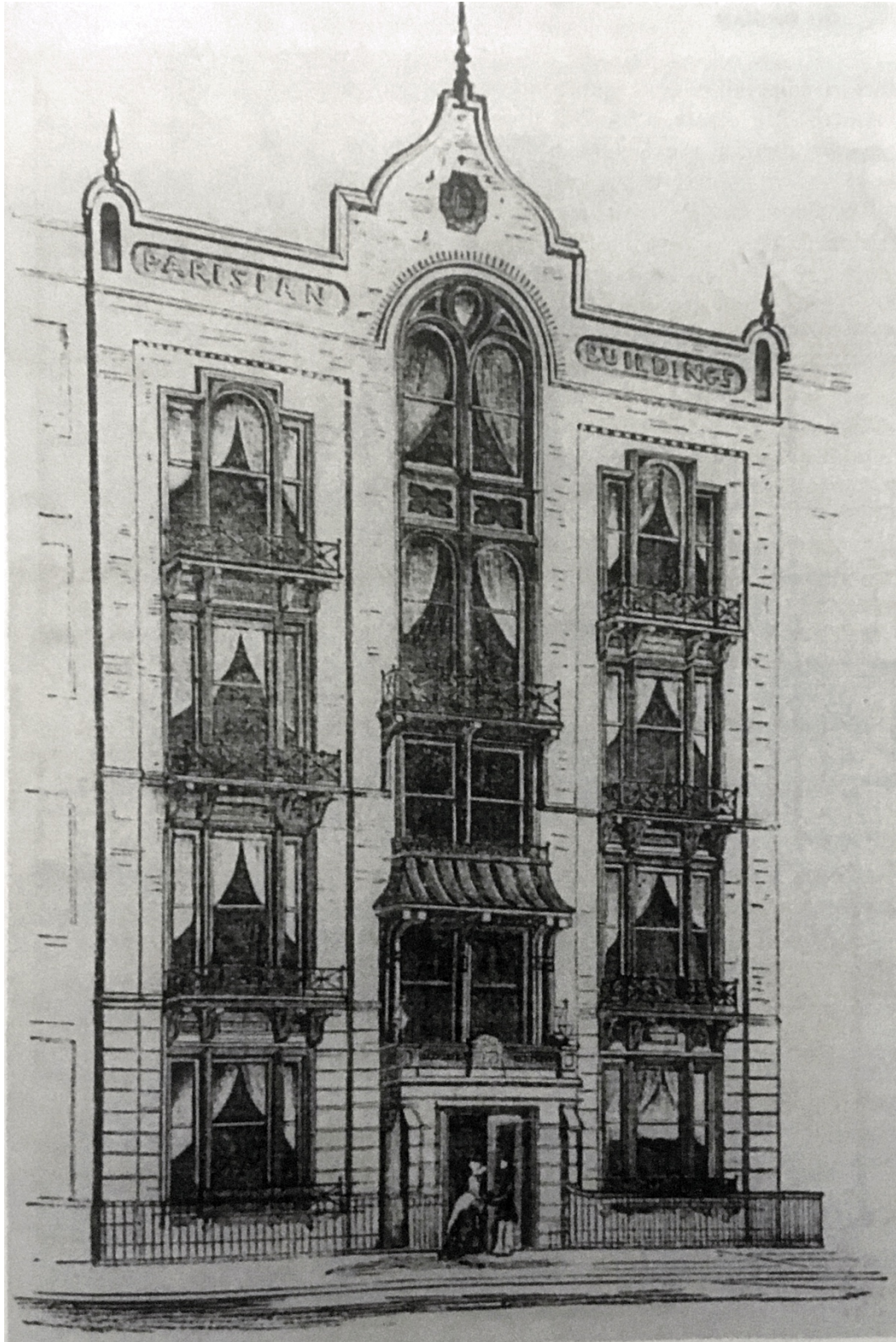


Figure 15 Calvert Vaux, Parisian Buildings, 1857. Source: *Harper's Weekly* 1 [December 19, 1857]: 809.

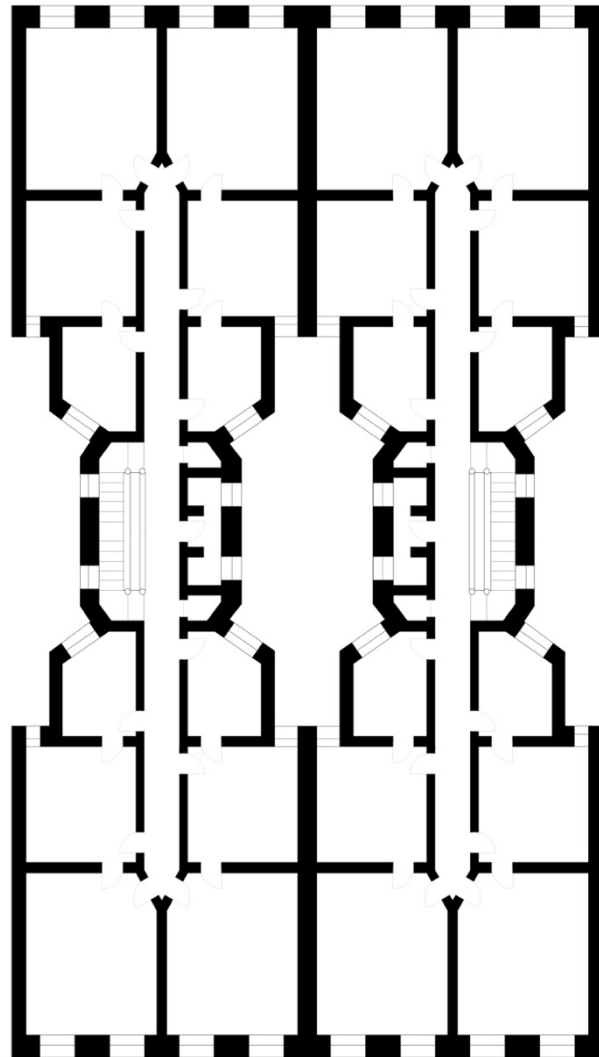


Figure 16 Typical *dumbbell* tenement of New York. Drawing of the author

If we look at Thomas Piketty's diagram comparing the returns on capital (r) and the global growth level (g) (Figure 11), taking into account the margin of error on this kind of data, as we can observe how in the period between 1820 and 1913 r is assessed around five percent (Piketty 2014, 354). According to Cromley, also more socially oriented projects as the ones promoted by the Improved Dwellings Association paid a seven percent return to its investors (Cromley 1999, 218). This meant that real estate became a profitable business compared to other industries, also on investments aimed at social purposes. Even if agriculture and industrial production will continue to be structural to the growth of the general economy, the real estate market will grow in parallel as a profitable alternative to stock wealth and increase yields.

After the 1870s, both the working-class tenements and the middle-class apartment buildings were designed on a floor-plan disposition with the maximum ground area coverage. Once the real estate market set the standard, design alternatives narrowed to the disposition of light wells and small courtyards through the built mass.

The first completed middle-class apartment building was the Stuyvesant Apartments⁵⁰ by Richard Morris Hunt, built in 1869-70 (Cromley 1999, 65). Occupying four adjacent lots, it coupled two by two typical narrow plans.

The internal disposition of the rooms of the Stuyvesant will be imitated with few exceptions by all the subsequent apartment building projects. The main parlor and bedroom were placed on the street façade, while the kitchen and service rooms were facing the inner courtyard –sometimes reduced to a light-well. The resultant was a seven-room apartment that will ironically be commented from Howells as an unwavering condition of the apartment building in New York (Howells 1890, 52).

Differently from the Parisian *maison à loyer*, the buffer space of the house between private and public areas was performed by the corridor rather than the antechamber.

⁵⁰ Rent prices varied between \$1000 to \$1800 per year for the suites, \$920 for a studio flat Stokes. 1926 *Iconography of Manhattan Island*, vol. 5, p. 1933

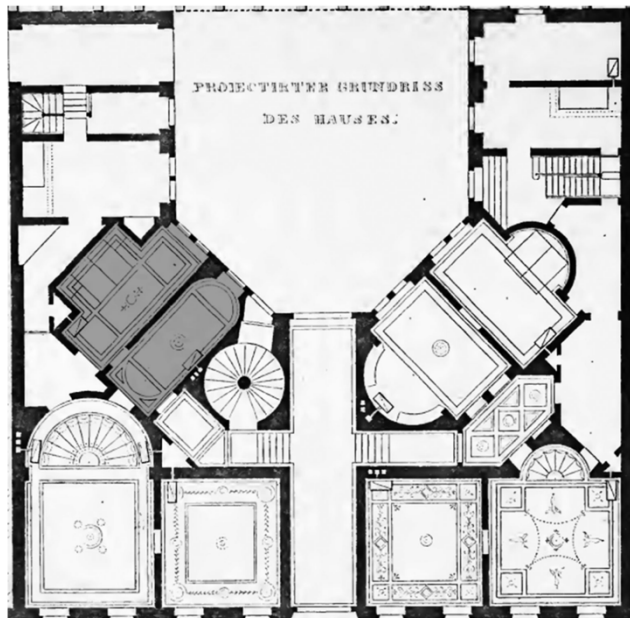
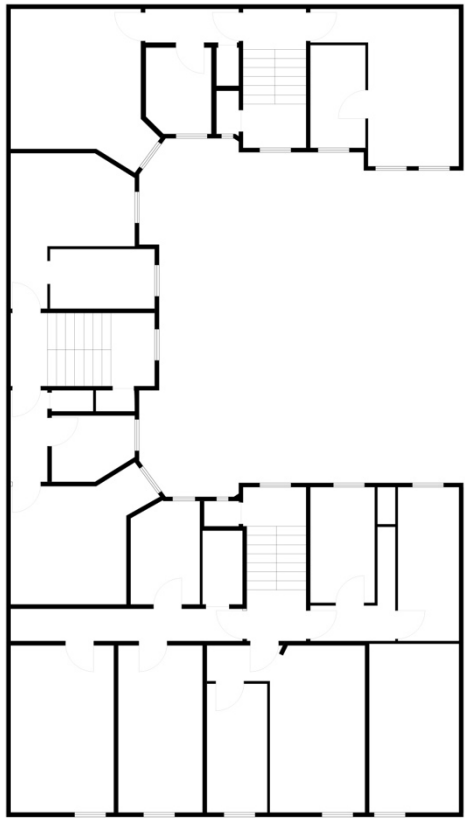


Figure 17 Karl Friedrich Schinkel, Feilner Haus, 1829. Top: *Mietskaserne* plan according to Assman's manual of 1852. Drawing by the author

Berlin and the Mietskaserne

In 1862 the Prussian government instructed James Hobrecht to realize a new plan for the city. The Plan, as in Haussmannian Paris, aimed to adapt the city to the ongoing economic and industrial shifts.

However, the Plan documents contained an appendix designed by Gustav Assmann with a floor-plan manual for the realization of the *Wohnungebauten*⁵¹ [*Housing buildings*]. The various plans drafted by Assmann insisted on existing courtyard typologies with few adjustments to fit the new urban code.

Assmann aimed to introduce an efficient housing typology without a specific targeting of the tenants, but mainly to build a coherent urban fabric. On the other hand, analyzing the plans, the areas of the apartments, and the room subdivision suggests that the final occupant was intended to be the middle-class. Assmann realized this by transferring several typical features of the apartments for the *Bürgerlich* (bourgeoisie) into these new flats for the *Mittelstand* (middle-class) (Rousset 2017, 1223).

Assmann's *Wohnungebauten* will quickly acquire the notorious name of *Mietskaserne*⁵², from the moment that the more impoverished layers of society will inhabit these buildings once subdivided in smaller flats. The *Mietskaserne* was conceived as a courtyard building with the public part of the house on the street and the bedrooms and service rooms organized along a rear wing. By the combination of two or four Assmann plans the result is a courtyard block. The block had to respect the morphological rules of the city building code, consisting of a minimum size for the courtyard of 5.6 meters by 5.6 meters, and a maximum height of the building of 22 meters (Bullock and Read 1985, 91).

As happened in the case of New York, the *Mietskaserne* was validated as the adequate housing typology for the middle-classes in a specialists' speech in a respectable institution. Wilhelm Petrus Tuckermann, an architectural historian, delivered his lecture at the Society of Berlin History in 1880⁵³, assigning to Assmann's plans a direct lineage with a bourgeoisie residential project by Schinkel: the Feilner Haus built in 1829 in Berlin (Rousset 2017, 1204). In his speech, Tuckermann posed significant emphasis on the role of the corner passthrough room, the *Berliner Zimmer*, as a traditional feature of

⁵¹ The title of the drawing sheets published by Assmann was "*Grundrisse zu städtischen Wohnungebauten*" (Floorplans for urban apartment buildings).

⁵² Literally "tenement barracks"

⁵³ The speech was later published in the journal of the society under the title *The Berlin's Flat Floor Plan and its Development in the Last two Centuries: a Word to Home Owners and Tenants*.



Figure 18 Hans Baluschek, *Sommerabend*, 1928. Berlinische Galerie

German national culture and a distinctive cultural legacy. In Schinkel's project, two corner passing-by-rooms were assimilable to the one drafted by Assmann. The *Berliner Zimmer* had the characteristic to be the less lightened room of the house, with its opening placed on a diagonal edge of the courtyard.

In the words of Tuckermann, this room acquired a similar value of the Parisian *antichambre* praised from Daly (Daly 1864), not only as a separator between the public and private dimension of the house but also as the core of the German family life.

The particular form and positioning of the *Berliner Zimmer*, once attributed initially to Schinkel, served Tuckermann's argument to distance the *Mietskaserne* to any reference with the Haussmannian period apartment buildings. This was because Prussian conservative culture was seeing Paris as the premier European marketplace for speculation and, therefore, a model to reject (Rousset 2017).

The speech of Tuckermann echoes one of 23 years before from Calbert Vaux to present his proposal of the Parisian Buildings to the AIA. The fact that middle-class collective housing needed a 'presentation' speech to be accepted by the public is significant of the former skepticism by the society of the time. Furthermore, this parallel expert's presentation reflects two completely different approaches to the modernization of the living conditions in the industrial age. Vaux was outsourcing the approval of collective housing, referring to a foreign typology as the Parisian Buildings – even if wholly adapted to the narrow blocks of Manhattan. On the other hand, Tuckermann relied on the recognition of the architect of the Alte Museum and of the Neue Wache as a hardly disputable inheritance. The two approaches tend to the opposite sides of internationalism and patriotism, highlighting how experts disputed the residential and the domestic in technical terms. Ultimately, this was the formalization of a precise political ideology.

2.2 Forms of collective housing

“Preoccupied by the external art of the façade, one forgot the actual problem, which is not one of form, but one of organization” (Hilberseimer 2013 [1927],137)

Not a family affair

Even if the apartment building was consolidating as the primary housing typology for the middle-classes in major Western cities, the issues of privacy and commonality were explored in a growing number of projects.

As seen in the previous section, the economy of tenements and apartment buildings was profitable –in first place for developers and speculators– while a conspicuous share of the urban population in cities as Paris and London was struggling to pay its monthly rent.

The combination of progressist and socialist ideas with technical advancements in the construction industry led to the production of numerous and different housing schemes for collective living.

These purpose-built projects of collective housing, implying a higher degree of coexistence between their inhabitants than in the traditional flats, assumed in some cases the form of communal living as intended by Niklas Maak:

“The first examples of communal living -understood as any form of housing association in which individuals who are not part of one family live together- emerged as early as the nineteenth century when the ‘whole house’ gradually dissolved and the home for the nuclear family became the prevailing form of habitation.” (Maak 2015, 140)

Once the nuclear family became the basic unit of the domestic realm, as a reaction, the domestic economy became a popular subject on journals and treatises theorizing various forms of reduction of women’s domestic unpaid labor⁵⁴. The idea of co-operative or centralized domestic work, regularly paid as a job, prompted several collective housing projects in Europe and the United States. These new housing models were informed by optimization

⁵⁴ See: Peirce, Fay. 1884. *Co-operative housekeeping; how not to do it and how to do it*. Boston: J.R. Osgood and Company. And: Braun, Lily. 1901. *Frauenarbeit und Hauswirtschaft*. Berlin: Expedition der Buchhandlung Vorwärts.

and centralization, introducing on the lower floors of the building centralized kitchens (*Einküchehäuser* in the German-speaking world) and shared facilities (e.g., Laundries).

The first laws on divorce in Europe were promulgated in Prussia, France, and England with surprising synchronicity with the development of the first projects of collective housing that were reconsidering the values and the institution of family and women.

If multifamily living was common in cities like New York at the beginning of the nineteenth century, in the second half of the century, the city blocks started to be populated with various forms of collective housing with centralized domestic services, allowing individuals and family to live in separated flats.

As noted by Schoenauer, the development of purpose-built collective housing projects was following “*the application of two particular forces -centralization and mechanization- that fostered industrial development was thought to offer the greatest promise of utopian domestic life, first by easing and thereafter by reducing the burden of housekeeping.*” (Schoenauer 1989, 47)

At the early stages of its development, these two ‘forces’ originated specific typologies for specific social groups (bachelors, factory workers, working women). Once urban societies increasingly accepted the potential of collective living, architects and developers designed a variety of housing typologies to fit a broader spectrum of the society.

The apical expressions of experimentation in collective living and communal living will take place in the interwar period between the 1920s and the 1930s, also as a consequence of the Russian Revolution.

However, within the field of architecture and its historiography, the recollection of typologies of collective housing cyclically returned at the core of the discourse since the late nineteenth century.

The CIAM congresses of the 1920s and 1930s⁵⁵ were mainly focused on housing from an urban planning point of view, often unfolding in experimental neighborhoods as the Weissenhof in Stuttgart of 1927.

Countless publications were produced in order to collect the floor plans or unit plans of a selection of projects considered state of the art of the periods’ production.

⁵⁵ Two of the most iconic events gravitating around the issue of collective housing are represented by the Werkbund exhibition in Stuttgart in 1927, and the *Existenzminimum* CIAM congress held in Frankfurt.



Figure 19 George Cruikshank. *The Bottle*, 1847. Source: Perrot, Michelle, and Arthur Goldhammer. 1990. *A history of private life. IV*. Cambridge: Harvard University Press

Figure 20 "The Ville-d'Avray Affair", *Le Petit Parisienne*, September 17, 1890

Many authors –mainly architects– made an effort to reconstruct their *lineages* of collective housing projects up to the present day. Even if each project is dependent upon a specific context, a widespread internationalist attitude among architects laid the ground for the praxis of showing collective housing as the product of an ‘evolutionary chain,’ endlessly improvable and passible of redefinition.

The focus of this chapter is the recognition of these lineages of centralized and collectivized housing projects.

If the previous section showed how architects used different arguments to promote apartment living as the modern way to live for the middle-classes, the present one investigates projects organized around the individual and the collective simultaneously.

The chronology of the selected lineages spans between the mid-nineteenth century and the 1930s. This ending period is set because it coincides with the first Soviet experiments of collectivization on housing (section 2.4). After this moment, the large-scale European post-war reconstruction plans will focus again on the nuclear family as its target user, slowing the pace in the research of communal living models. Both the mass provision of public housing, both market solutions will follow this path. In parallel, a hybridization of the different typologies developed starting from the mid-nineteenth century will resurface the architectural discourse since the present days (see chapter 3).

Lineages

In the following paragraph, collective housing is analyzed from an evolutionary perspective, as the different stages of this chronological categorization reflect the social and economic impulses structuring domestic space.

In order to trace the evolutionary stages of collective housing through history, Dick Vestbro developed a thematic timeline divided into two main categories. Collective housing here is intended as collective housing as "*housing for non-selected categories of people who eat or cook together in communal rooms connected to the private apartments through indoor communication*" (Vestbro 2008, 1). On one side of the diagram, he collected the projects aimed to 'rational life'; on the other side, the ones fostering an 'ideal home.' The former category refers to the projects where the domestic work is performed by employed staff, while in the latter domestic labor is self-organized and collectivized (Vestbro 2008, 6). There are also cases as the Soviet experiments from the 1920s that pertain to both categories, as domestic work was both professionalized and self-organized by the inhabitants.

From Vestbro's diagram, we assume how the projects of 'ideal life' are usually anti-urban and self-sufficient microcosms since they are located in remote locations, often with the primary goal of seclusion from mainstream society. The 'rational life' ones attain to an urban and often within-the-market dimension. Therefore, the two originating moments of modern collective housing are both the American hotel and the socialist utopian proposals of Charles Fourier and Robert Owen on the other. In Europe, Vestbro identifies the first central-kitchen typology with Otto Fick's *Kollektivhus* in Copenhagen (1903), followed by the *Einküchenhaus* in German-speaking countries (Vestbro 2008, 1).

Accepting the degree of simplification of such a diagram is essential to note how this taxonomy is aimed to look mainly at central-kitchen and serviced housing, tracing the roots of the well-established praxis of collaborative housing in Sweden and Scandinavian countries⁵⁶.

⁵⁶ Co-housing was invented in the 1950s in Denmark. See: McCamant, Durrett, and Hertzman 1994.

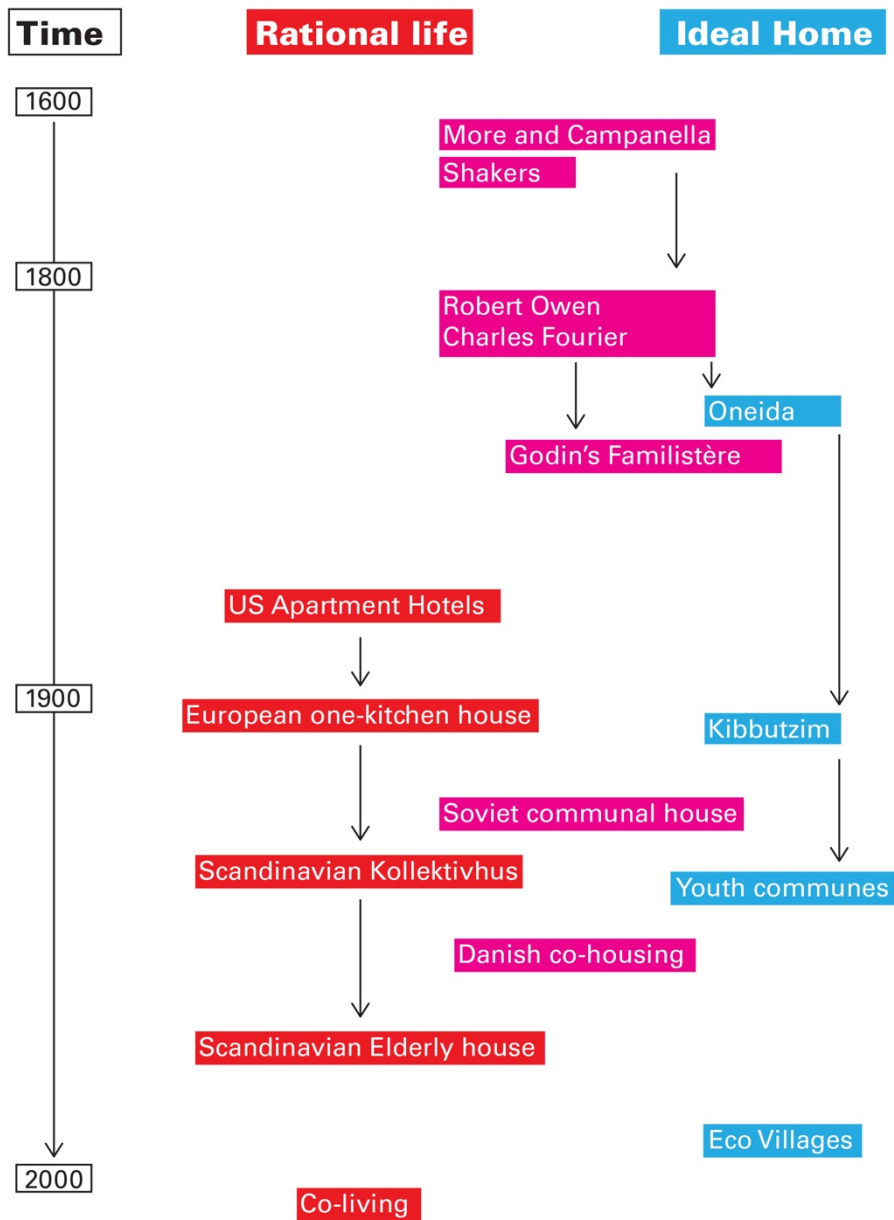


Figure 21 Vestbro's diagram of collective housing evolution. Source: Vestbro, Dick. 2008. "From Central Kitchen to Community Co-Operation - Development of Collective Housing in Sweden." Stockholm: Royal Institute of Technology.

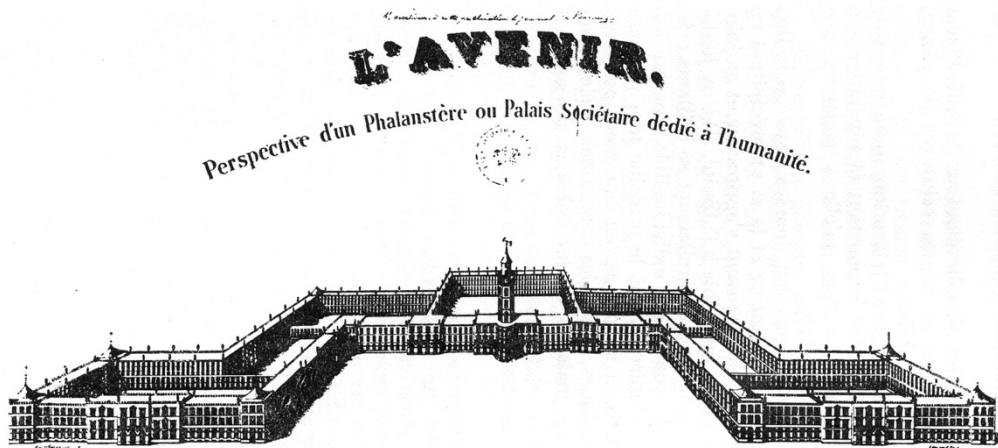


Figure 22 Charles Fourier, *Phalanstère*, 1842. Source: L'Avenir.

A more extensive evolutionary timeline was provided in occasion of the exhibition *Together!* held at Vitra Museum in 2017 (Kries et al. 2017). Confirming most of the projects mentioned by Vestbro, the timeline is organized in ten categories as follows:

1. Utopian settlements
2. 19th century reform projects
3. Cooperative movement
4. Central-kitchen home / Serviced home
5. Garden City Movement
6. Modernist housing experiment
7. Postwar modernism / Megastructures
8. Participatory design
9. Scandinavian co-housing
10. Countercultural movements

In this more complex articulation, the authors paid the effort to include also books and cultural movements that influenced new experiments in collective housing architecture. Combining this timeline with the analogous –even from different critical standing points– evolutionary reconstructions of Leonardo Benevolo and Schoenauer (Benevolo 1963; Schoenauer 1989), it emerges how some projects are recurring as milestones of the different ‘evolutionary’ stages.

From the comparison of these different timelines it is possible to recognize four macro-stages marked by seminal projects as the Familistère in Guise of Godin (1859), The Ansonia in New York (1899), the Narkomfin

Year	Project	Cat	Location	People	Source
1800	• New Lanark	2.	-	Robert Owen	G
1820	• Phalanstère	1.	-	Charles Fourier	B/C/G
1825-27	• New Harmony	1.	USA	Robert Owen	G
1838	Workers housing	2.	Bois Du Lac	/	B
1845	SIDLC Housing	2.	New York	/	E
1845-47	SICLC Hostels	2.	London	Henry Roberts	F
1854-56	Brumleby	2.	Copenhagen	M.G. Bindsbøll & Vilhelm Klein	G
1859-84	Familistère	2.	Guise	Jean-Batipste André Godin	C/G
1878	Bachelor Chambers	4.	London	Alfred Waterhouse	
1884	Toynbee Hall	2.	London	Samuel & Henrietta Barnett	G
1889	Hull House	2.	London	Jane Addams & Ellen Gates Starr	G/H
1899-04	The Ansonia	4.	New York	William E. D. Stokes, Graves & Duboy	E/F/G
1901	Lexington Terrace Apartments	4.	Chicago	Frank Lloyd Wright	A
1903	Kollektivhus	4.	Copenhagen	Otto Fick	D
1907	Hemgården	4.	Copenhagen	/	D
1910	Kibbutz Degania Alef	1.	Israel	The Hadera Commune	G
1908	•Einküchenhaus	4.	Berlin	Muthesius & Gessner	D
1908	Kuno-Fischer-Strasse	4.	Berlin	Curt Jähler	G
1916	Amerikanerhaus	4.	Zurich	Oskar Schwank	D/H
1917	Surf Apartment Hotel	4.	Boston	/	A
1922	•Immeuble Villas	4.	Paris	Le Corbusier	A
1925-28	Mosgubzhilsoyuz. Dom-Kommuna	6.	Moscow	/	B
1926	•Boardinghaus	4.	-	Ludwig Hilberseimer	A
1926	Ledigenheim	4.	Munich	Theodor Fischer	F
1927	Het Nieuwe Huis	4.	Amsterdam	/	G
1928-30	• Dom-Kommuna	6.	USSR	Barshch & Vladimirov	B/H
1928-30	Narkomfin	6.	Moscow	Milinis & Ginzburg	B/D/H
1929	WuWa Hotel Apartment	4.	Breslau	Hans Sharoun	B/H
1930	• Magnitogorsk	6.	Russia	Ivan Leonidov	H
1930	• Boardinghaus	4.	Berlin	Walter Gropius	B/H
1930-31	Boardinghaus des Westens	4.	Hamburg	/	G
1934	Isokon	4.	London	Wells Coates	G
1935	Kollektivhus	4.	Stockholm	Sven Markelius	D/G

Table 1 Chronology of the projects and realizations of collective housing according to the categories of Ruby (2017).

Legend:

• = non realized project

A= Hilberseimer, Ludwig. 2012. *Metropolisarchitecture*. New York: GSAPP Books.

B= Teige, Karel. 2002. *The Minimum Dwelling*. Cambridge, Mass.: MIT Press.

C= Benevolo, Leonardo. 1963. *Le origini dell'urbanistica moderna*. Roma; Bari: Laterza.

D= Franck, Karen A., and Sherry Ahrentzen, eds. 1989. *New Households, New Housing*. New York: Van Nostrand Reinhold.

E= Cromley, Elizabeth C. 1999. *Alone Together: A History of New York's Early Apartments*. London: Cornell University Press.

F= Aureli, Pier Vittorio, and Maria Shéhérazade Giudici. 2016. *Like a Rolling Stone. Revisiting the Architecture of the Boarding House*. Milano: Black Square.

G= Kries, Mateo, Mathias Müller, Daniel Niggli, Andreas Ruby, and Ilka Ruby. 2017. *Together!: The New Architecture of the Collective*. Berlin: Ruby Press.

H= Aureli, Pier Vittorio, Martino Tattara, and Dogma. 2019. *Loveless: The Minimum Dwelling and Its Discontents*.

Building by Ginzburg and Milinis (1928-30), and the Kollektivhus in Stockholm by Sven Markelius (1935) (Table 1).

The Familistère in Guise –as the incarnation of the Phalanstère of Fourier from 1820– is described extensively by Benevolo as the first project of this kind, differing from all the other workers' villages for the focus of Godin on the centralization and orchestration of domestic life (Benevolo 1963, 93). However, the original proposal of Fourier will be embraced by Godin with a significant difference. Even if the Familistère's cooperative provided several services as medical care and kindergartens, the idea of communal life was rejected in place of individual units for families granting privacy (Benevolo 1963, 96).

Besides this difference both projects show the attempt to generate an anti-urban project, as the city proved to be the place of conflict in Fourier's opinion –which ironically was the same preoccupation of Napoleon III when he commissioned to Haussmann to rethink the Parisian streetscape to avoid revolts:

“L’edifice qu’habite une Phalange n’a aucune ressemblance avec nos constructions, tant de ville que de campagne; et pour fonder une grande Harmonie à 1600 personnes, on ne pourrait faire usage d’aucun de nos bâtiments, pas même d’un grand palais comme Versailles, ni d’un grand monastère comme l’Escorial.

[...] Une Phalange qui peut contenir jusqu’à 1600 et 1800 personnes, dont plusieurs familles très-opulentes, est vraiment une petite ville”

(Fourier 1841, 4:455–64)

In the same period, urban proposals spread primarily in London, with the formation of charities as the SICLC⁵⁷, which commissioned Henry Roberts with three worker hostels in the period comprised between 1845 and 1847 aimed to host London's lower-income workers (Aureli and Giudici 2016). This kind of hostels were dormitory-like buildings with a large refectory on the ground floor. As mentioned before, this kind of typology will be implemented for the wealthier classes in the forms of Bachelor Chambers or working women hostels in the following years (Aureli and Giudici 2016).

⁵⁷ The Society for improving the Condition of the Labouring Classes was founded in 1844 by Prince Albert of England. See: Aureli and Giudici 2016.

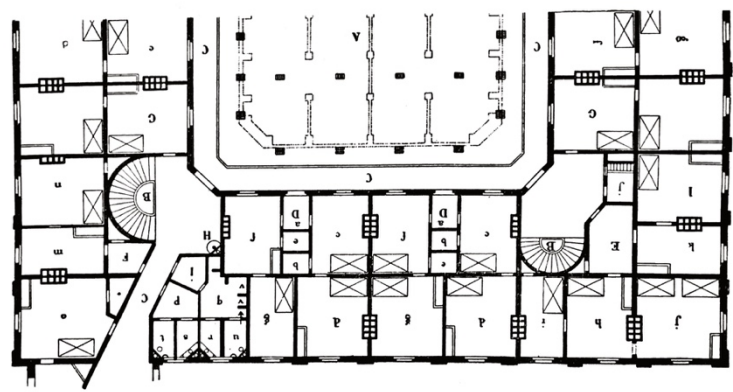
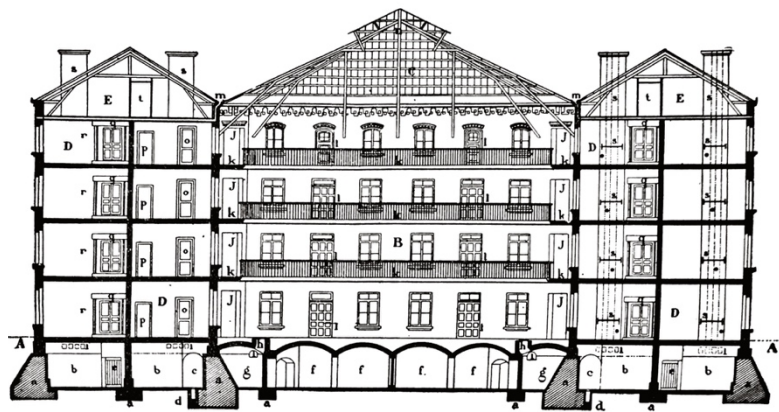


Figure 23 Top: Half plan of the Familistère de Guise. Source: Collection Familistère de Guise.



Figure 24 Picture of the inner court of the Familistère shot in 1909 during the fête de l'enfance. Source: Collection Familistère de Guise.

The commercialization of the central-kitchen and serviced housing model characterized the second phase following the social reform period.

At the turn of the century in the United States, the different typologies of hotels were experimented by one century then⁵⁸, influencing later hybrid forms of collective housing with hotel-like services (Cromley 1999).

At what moment does the hotel hybridize with the apartment building giving place to the American apartment hotel?

Several authors recognize the Ansonia apartment hotel (1899) as the first apartment hotel of its kind (Cromley 1999, 195; Kries et al. 2017, 51). Its inhabitants were allowed to rent units with yearly contracts benefitting by hotel services like housekeeping and meal preparation, in combination with traditional private apartment units (Cromley 1999, 195). This model traveled through Europe with the realizations of the *Amerikanerhaus* in Zürich (1916), the *Kollektivhus* by Otto Fink in Copenhagen, and the various *Einküchenhauser* realized in the same period in German-speaking countries (Aureli, Tattara, and Dogma 2019).

The third period of this chronology sees a significant upscaling of the projects, which pass from the stage of practical solutions or adaptations to urban specific conditions to urban models. Adolf Rading's proposal for a communal house in 1924, composed by a central spine of collective services and six wings for lodging measuring 180 by 60 meters, shows the emergence of a scale similar to the one introduced first by Fourier in this kind of proposals. The 1920s are also the years of maximum experimentation by Soviet architects on communal and collective housing⁵⁹.

After the failure of most of the large-scale Soviet proposals, the central-kitchen home will survive mainly in Scandinavian countries with the *Kollektivhus* (Schoenauer 1989). One of the most quoted examples is the one built by Swedish architect Sven Markelius in Stockholm, that will be kept into activity since the first post-war years.

⁵⁸ See Chapter 2.3

⁵⁹ See Chapter 2.4



LÄGENHET 3

Arkitekt **BIRGER EKSHAGEN**

Årsinkomst: 4.000:—

Årslyra: 900:—

Grundavg. 1.069:—

En av kollektivhusets huvuduppgifter består i att underlätta familjebildning bland ungt folk med små inkomster, men vad hjälper det Bisse Ekshagen. Hans ungdoms älskade gifte sig till sist med en jägmästare i Wilhelmstina, och sen dess har han inte kommit sig för med någon ny förälskelse. Han är — rätt till event. ändringar i programmet förbehålles — fast besluten att gå som barnlös ungarlång genom livet och han har ställt in sig på denna roll med all den prudentliga planmässighet, som utmärker honom. Alltsedan teknis-åren sätter han värde på ett litet flegmatiskt sällskapsliv med bridgeleken och grogg-glaslet som emblem, och sina talanger som rolighetsminister kan han någon gång släppa lös vid en festlighet i kollektivhusrestaurangen, där särskilt hans sjömansvisor äro livligt uppskattade. Men nöjena få aldrig inkräkta på hans arbetstid och arbetsro. I hans bostad komma hans olika karaktärsdrag till uttryck: ordningsinnet såväl som den flegmatiska bekvämligheten. I alkoven innanför balkongen har han samlat sina yrkesgrejor. I lägenhetens andra, större del tillbringar Bisse Ekshagen sina kvällar, ensam eller i goda vänners lag. Gärna sitter han i sin bekväma fåtölj och njuter utsikten över Mälaren, och när han är

8

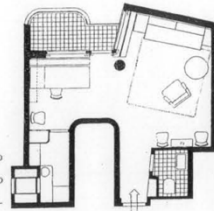
UTSTALLARE A.-B. JEFTA

Arsenalsgatan 3.

Totalkostnad 1.481:90 kr.

Möbler:

liggsoffa med två lösa polar	265:— kr., klädd med 3,50 m tyg å 8:50 kr.	294:70
fåtölj	185:— kr., klädd med 3,30 m tyg å 7:50 kr.	209:80
stolar, björk med sjögrässits, 4 st. å 16:50 kr.	66:—	
rittbord med vändbar skiva ..	68:—	
runt bord, furu	55:—	
klaffbord, furu	75:—	
hurts med 4 lådor	85:—	
hurts med 6 backar, furu (till ritbordet)	110:—	
bedkyllor, 85 cm långa, 3 st. å 8:— kr.	24:—	
tidningshylla, furu	40:—	
	<hr/>	1.027:50



Textilier:

gardiner	12,60 m tyg å 4:25 kr., montering (skena) och sömlön 54:42 kr.	107:90
matta	2,5x2,5 m	200:—
	<hr/>	307:90

Armatur:

taklampa	33:50
triplependel	68:—
golvsstake, aluminiumkärm ..	45:—
	<hr/>
	146:50

färdig med kvällstidningarna och den senaste Wodehouse-romanen, kryper han till kojs i sin egenhändigt konstruerade vändsoffa, en modern variant av den gamla hederliga inventionssoffan, ehuru försedd med svällande resårer både på sitt- och liggsidan. Bisse Ekshagen hoppas få ett patent på denna soffa, och vi kunna endast önska honom framgång i dessa hans planer. Det är så typiskt för honom att han utvecklar sin största energi just i uppgifter, som avse bästa möjliga vila och bekvämlighet.

9

Figure 25 Pages from the promotional booklet of the Kollektivhus by Sven Markelius (1935). Source: Kollektivhus.nu

LÄGENHET

8



Måleriarbetaren HELGE HOLMBERG

Årsinkomst: 3.000:—

Årshyra: 500:—

Grundavg. 612:—

Måleriarbetaren Helge Holmberg har bett oss understryka, att han ingalunda, såsom det vid något tillfälle uppgivits, fått sin folkhögskoleutbildning vid Brunnsvik. Däremot var det i Sigtunastiftelsens folkhögskola, som hr Holmberg genomgick en vinterkurs åren 1928—29. Alltifrån sina uppväxtår på faderns lilla hemman i Stöde socken i Medelpad känner han en stark sambörighet med svensk bondekultur, även om han sedermera genom sin yrkesutövning kommit att ställa sig solidarisk med arbetarklassen och dela dess strävan efter fördjupad individuell kultur på radikal grundval. Redan i Sigtuna stiftade hr Holmberg bekantskap med arkitekt Carl Malmsten, som då ledde en slöjddkurs i staden, och när han nyligen hyrde en liten lägenhet i kollektivhuset, hade han glädjen att få påräkna arkitekt Malmstens hjälp vid inredningen av denna moderna

18

UTSTALLARE
CARL MALMSTEN

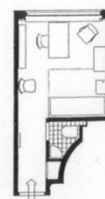
Normalmstorg 12.

Totalkostnad 844:30 kr.

Möbler:

(furu)

säng 160:— kr., klädd med 2,10 m tyg å 17:— kr.	195:70
länstol "Hängsitt" 45:— kr., klädd med 1,20 m tyg å 9:— kr.	55:30
stolar, 2 st. å 22:— kr., klädda med 1 m tyg å 3:50 kr.	47:50
skrivbord med 1 lurts (5 lådor)	120:—
fällbord	45:—
skänk "Stolpe" 100:— kr., med hylla 20:— kr.	120:—
bokhyllor, 2 st. å 40:— kr.	80:—
	664:—



Textilier:

gardiner 3 m tyg å 3:50 kr., draggardiner 3 m tyg å 0:50 kr., monterig (skena med glidkolor) 8:— kr.	20:30
matta	80:—
	100:30

Armatur:

takskärm	5:—
golvlampan	40:—
bordslampa	35:—
	80:—

ungkarlskula. Hr Holmberg begär varken komfort eller lyx. Han duschar varje dag, morgonpig och nyter, i ett diminutiv toalett-rum, efter att ha stigit upp ur sin enkla och kyska bädd, vilken även tjänstgör som soffa (hr Holmberg är studieledare i en sociologisk bildningscirkel och samlar en gång i månaden dess mest energiska deltagare till ett anspråklöst samkväm i sin bostad). Så snart hr Holmberg slutat sitt arbete för dagen, borstar han av sig och ömsar kläder i entrén, varefter han hastigt inmundigar sin middag vid bardsken i kollektivhusets restaurang — och när målliden är överstökad, ägnar han en timme åt sin hobby, violinspelet, varefter han under resten av kvällen bedriver studier i samhällsvetenskap. Det präktigt folkliga i hans kynne kommer till uttryck i valet av möbeltyper och material: det är bastanta men ändå svenskt gratiösa pjäser i furu med klädsel av hemslöjdstyger. En av kollektivhusets hyresgäster har påpekat, hur harmoniskt herr Holmbergs traditionalistiska hembrevnad kunnat infogas i ett så typiskt modernt bostads-komplex.

19

Figure 26 Pages from the promotional booklet of the Kollektivhus by Sven Markelius (1935). Source: Kollektivhus.nu

Apart from their specific differences, the development of central-kitchen housing was intensively experimented for a relatively short amount of time for various reasons, mainly from 1900 to 1930 (about 30 years). As noted by Schoenauer, the two drivers of collective housing are represented by ‘centralization’ and ‘mechanization’ (Schoenauer 1989, 47). If centralization will continue to be a valid solution to optimize resources even in later movements as the Danish co-housing one and similar collaborative housing forms, the research on mechanization will progressively advantage the single-family household. The technological advancements of two world wars landed in the domestic realm in the form of household appliances, making it more convenient and quicker for houses to perform domestic labor actions.

Vacuum cleaners, fridges, laundry machines, became increasingly affordable for families, making some early-century technologies as the centralized vacuum cleaner system or the laundry room useless for middle-class tenants.

The expansion of private property starting from the 1950s will be accompanied by the increasing reduction in the price of housing appliances, creating a mutual market feed between the individual family housing market and mass consumption. Therefore, the legitimacy of collective living –at least from an economic point of view– was undermined both in terms of space required and in the modification of the necessary means for self-sufficiency.

Kitchen

“Build the cabinets to fit the woman.

Build the shelves to fit the supplies.

Build the kitchen to fit the family”

(Soule, Gardner. 1953. “New Kitchen Built to Fit Your Wife.” *Popular Science*.)

The kitchen probably represents the domestic room where the social, the economic, and the political overlap into a single space. The acts of cooking and meal sharing have been understood from various authors as the practices reflecting social and economic transformations of society at large⁶⁰.

Roland Barthes described the Idiorhythms of Mount Athos as a prototype for modern society focusing on the relationship between individual and communal moments of life. A prevalently individualistic lifestyle corresponded to few acts of communality, including meal sharing during festivities (Barthes [1977] 2013). Following Barthes *Comment vivre ensemble*, in a post-crisis scenario, the contemporary architectural discourse was permeated by anecdotal histories on alternative kitchen experiences fostering new communal living forms (Aureli 2013). Starting from the American Hotels of 1920s New York, Anna Puigjaner built the argument for an international and cross-cultural existence of *kitchen-less* societies, where the act of cooking is centralized and professionalized or is collectively ran by an organized social group (Puigjaner 2017, 69). The *Kitchen-less City*, advocating the disappearance of unpaid domestic labor in favor of shared facilities scattered in the city, emerges as an urban condition combining optimization issues with social rituals (Puigjaner 2014).

Apart from the rhetoric of an original title, the *kitchen-less city* described by Puigjaner highlights the evolution in the woman's condition and its mutual relationship with the kitchens' space. A process also described from Giedion referring to the “*servantless household*” (Giedion [1948] 2013, 620), where the separated mono-functional area of the kitchen is condemned as alienating once occupied by the unpaid housewife.

⁶⁰ Nick Montfort pushes this assumption even beyond defining the kitchen as the domestic space where the image of the future is built: “*The project of advancing the kitchen into the future is one that brings together art/design approaches, technology, consumer-focused concerns, and the broader social world. [...] The kitchen is therefore involved in social issues of class, gender, and urban life as well as serving as a technology showcase*” (Montfort 2017, 8–9)

Analyzing two experimental kitchens that will influence the global manufacturing industry, we can observe how until the 1960s the target user of the kitchen was the woman/housewife performing unpaid domestic labor. Both the European and American scientific researches⁶¹ on housing implied the woman/housewife as the most active component of the family-centered domestic sphere.

The work of Margarete Schütte-Lihotzky for the Frankfurt Kitchen⁶² (1926) introduced the dimensional and layout standards for the kitchen since the present days (Hocchaüsl 2015). Most importantly, the Frankfurter Küche extended also to social housing the idea of the kitchen as a separate room functionally devoted only to food preparation.

The scientific research of Schütte-Lihotzky focus was on labor optimization for the woman, promoting a form of progressivism through the application of Taylorist-inspired principles (Hochhäusl 2015). This ideology was coherent with the structuring value of Western social democracies to address the nuclear family as the privileged political subject. Post-war experiments will follow this pattern, including American-led proposals for the new mass consumption society.

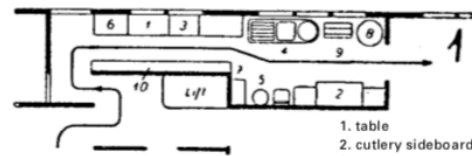
In a still prevalently rural America, the Cornell Kitchen of 1953 designed by the multidisciplinary team led by Glenn Beyer will set the standard for the American kitchen as we know it today (Penner 2018). The team of the Center for Housing and Environmental Studies at Cornell University conducted 5-year research starting in 1950⁶³. The final result consisted of a modular prefab component kitchen based on ergonomic furniture and the most advanced technical equipment for the time. In the words of Penner, *"it was equal parts labor-saving kitchen, gadget-filled technokitchen, prefab packaged kitchen, and family-centered living kitchen"* (Penner 2018, 81).

The Cornell Kitchen was advertised in a promotional film in 1955, where the narrating voice clarifies the ideology underlying the design (Uzoff 1955). Described as a *"modern tool for housewives,"* providing at the same time an ergonomic environment and convenience, it differentiated from its predecessor –the Frankfurter Küche– by the idea that the kitchen could also perform as a family room. In a growing society of homeowners and first-time buyers, the kitchen starts to assume the role of a common room instead of the functional performance assigned by the modernists.

⁶¹ With the exception of the early Soviet experiments of the 1920s

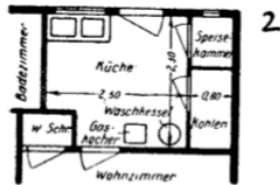
⁶² The prototype later adopted in Ernst May social housing schemes in Frankfurt consisted in a 3,4x1,9m separate room with modular and foldable components built in order to save time and space. (Hocchaüsl 2014)

⁶³ Even if the prototype kitchen will serve as the basis for numerous patents sold to manufacturing giants, the research started from rural origins. The first behavioral investigations were conducted on rural families as the study was co-financed by the Ministry of Agriculture. (Penner 2018)

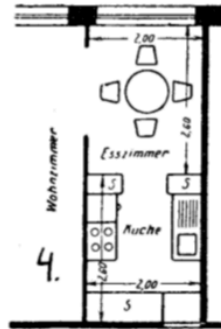
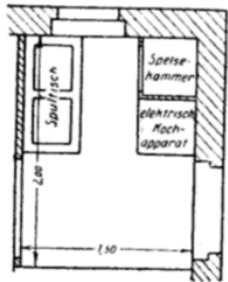


1. table
2. cutlery sideboard
3. stove
4. sink
5. water tank (cold)
6. icebox
7. hot water
8. washing machine
9. laundry press
10. food preparation counter

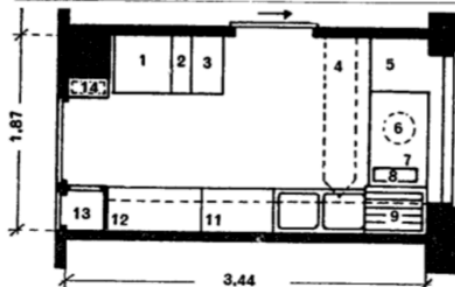
The modern kitchen



1. Proposal by B. Fuchs: kitchen combined with laundry room.
2. German standard kitchen (6.25 m²).
3. Standard English kitchen.
4. American kitchen, combined with eating nook.



- Depending on type of kitchen, one can determine various types of minimum apartments.
- a) Apartment with live-in kitchen.
 - b) " " " working kitchen
 - c) " " " kitchen combined with dining (transitional type).
 - d) " " " nook for cooking (transitional type).
 - e) " " " without a kitchen.



Grete Schütte-Lihotzky Frankfurt kitchen (1.87 × 4.44 m)

1. stove
2. drawer for flour and salt
3. gas stove
4. folding ironing board
5. food closet
6. rotating stool
7. work counter
8. garbage slot
- 9., 10., 11. sink and counter
12. closets for pots and pans
13. broom closet
14. heater

window made part of the kitchen cabinetry, accessible from both the kitchen and the dining room. In cases where the kitchen is not located adjacent to the dining room, a serving table on wheels may be used.)

In our situation, kitchen stoves are fueled by gas, coal, or both. The dual gas-coal models have the advantage of being able to use gas for quick cooking, while food requiring longer preparation times uses coal, which is cheaper. Gas appliances have certain advantages. They burn

Figure 27 Comparison between minimum kitchens. Source: Teige 2002 [1932]



Figure 28 Movie stills from *Cornell University presents the Cornell Kitchen*. (Uzoff 1955)



Tall, short or medium-sized, she's bound to save energy in this kitchen.

New Kitchen Built to Fit Your Wife

By Gardner Soule

BUILD the cabinets to fit the woman.
 Build the shelves to fit the supplies.
 Build the kitchen to fit the family.
 Starting with these three principles, Cornell University has re-engineered the most-used room in the house.

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SERVE CENTER stores china, glasses, silver and linen where they are close to the dining area, located at right above.

RANGE CENTER has four electric burners and their controls set into a counter top. Wiring for the range is built into the cabinet.

The result is a kitchen equipped with:

- Cabinet counter tops that are adjustable—even after installation—to fit a woman of any height, or arm length.
- Shelves or other provision for storing all food and equipment.

Figure 30 Logo of the Housing Research Center, Cornell University. 1950

Figure 29 Page of *Popular Science*. Soule, Gardner. 1953. "New Kitchen Built to Fit Your Wife." *Popular Science*

Giedion understood this phenomenon as "*the abandonment of the isolated kitchen and the isolated dining room*" (Giedion [1948] 2013, 623), showing evidence of projects between the 1930s and the 1940s proposing fluidity of space between the kitchen and the living room.

The quest for flexibility in the kitchen is also understandable from an economic point of view. Since the times of the Cornell Kitchen, the kitchen represented an essential investment for households, and the higher request for labor-saving machinery corresponded to expensive housing appliances. In few decades, the problem was solved by a highly competitive market, as demonstrated by the falling price of the refrigerator in the US between 1978 and 2008, passing from an average of 2000\$ to \$450 with corresponding reductions in energy savings⁶⁴ (Figure 31).

If the kitchen is less a matter of financial investment relating to the general cost of housing, the question for a *kitchen-less* city (Puigjaner 2014) rises as a political one first than a technical one.

The ongoing technological turn promotes at the same time, a twofold quest for secluded and shared meal consumption. On the one hand, delivery companies became pervasive in urban areas allowing a wide range of a different kind of food consumption in minimum (and potentially kitchen-less) spaces; on the other hand, the rhetoric of sharing economy and its aim for optimization produces spaces for meal sharing as 'social tables' or 'collective kitchens' promoted as socially just (see Chapter 3).

⁶⁴ See: <https://www.energy.gov/articles/proof-pudding-how-refrigerator-standards-have-saved-consumers-billions>. Accessed January 20, 2020

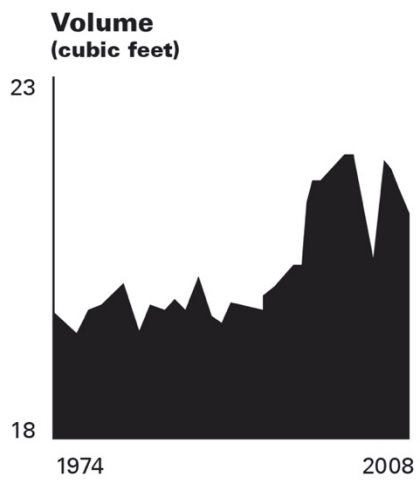
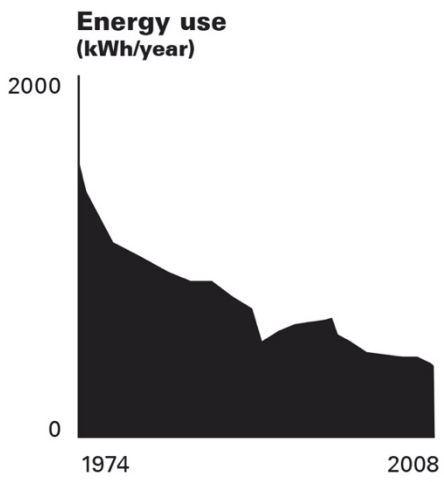
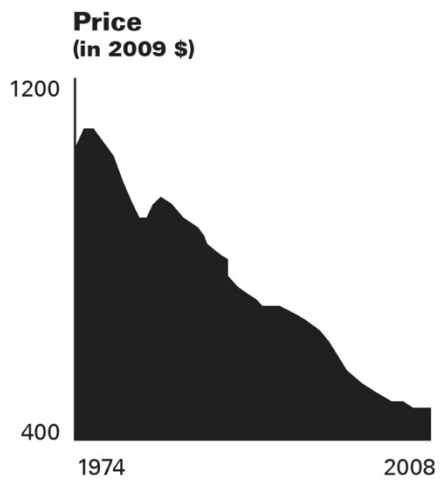


Figure 31 Refrigerator price, energy consumption, and volume trends 1974-2008. Source: US Department of Energy

2.3 Hotel

“A better place for one to study human nature it would be difficult to suggest”

(The New York Times, November 21, 1865)

Incubators of modern life

Since its conception, the hotel has proven to be a platform for experimentation for different purposes. Starting from the late eighteenth century, the ‘microcosm’ of new hotels served to test the critical challenges of modernity and modern democracies (Sandoval-Strausz 2007, 3). Architects and thinkers looked at the hotel as the building typology capable of anticipating possible futures for housing in the contemporary city. In many cases, the technological innovations tested in the hotel –as the private bathroom or other mechanical equipment– soon penetrated in the private domestic realm. Furthermore, the social microcosm of the hotel was looked with favor from progressive thinkers, as the place capable of emancipating the woman from unpaid domestic labor⁶⁵.

In a second moment, the hotel in all its variations was labeled under the domain of *hospitality* as a highly regulated object at the fringes of the architectural discourse. However, the hotel as an architectural object played a crucial role in the definition of the ‘modern home’ starting from the nineteenth century.

In 1875, Viollet-le-Duc dedicated one section of his *l’habitation moderne* to the *Hotel des Voyageurs* in Altona (Hamburg), giving a detailed account of the numerous technologically advanced facilities integrated into the building (Viollet-le-Duc 1875, 2). According to Viollet-le-Duc, this building represents, as the others he discusses in his book, an *ordinary* urban housing typology that each city should have. His objective is to showcase architectures with the potential to house the many, not the exceptions for the privileged classes, recognizing the hotel as a necessary urban –and democratic?⁶⁶– typology in the changing *fin de siècle* Europe (Viollet-le-Duc 1875).

⁶⁵ The literature on feminist movements against domestic labor is vast since the nineteenth century. Also Koolhaas observes the same issue referring to the Waldorf Astoria in Manhattan: “women guests are freed to pursue careers by the Hotel’s takeover of all the annoyances and responsibilities of housekeeping, which leads to an accelerated liberation that baffles the males, suddenly surrounded by ‘hyper-emancipated creatures’ ” (Koolhaas 1978, 150).

⁶⁶ In his work on the American history of the hotel, Sandoval-Strausz insists constantly on the strong bond between a democratic hosting political regime and the hotel as a place for

Starting from this moment, in more and more housing collections, the hotel will begin to appear as a reference for maximum optimization. As in the *Existenzminimum* catalog in its last section, where the plans of several American hotels are shown as highly efficient housing units for single dwellers or couples (Internationale Kongresse für Neues Bauen und Städtisches 1930).

After the World War II, the emergence of global-scale hotel chains and the extreme commercialization of the model, catalyzed the attention of architects on the *pop* aura of the hotel, especially concerning its symbolical and programmatic issues. Rem Koolhaas' description of the Waldorf-Astoria (Koolhaas 1978, 144), or Robert Venturi and Denise Scott Brown *Learning from Las Vegas* (Venturi, Scott Brown, and Izenour [1972] 2000), represent two classic examples of this tendency. Even if with different approaches, the urban investigation in two hotel-cities as New York and Las Vegas reveals the shifted condition of this architectural object: from a 'palace for the public' (Sandoval-Strausz 2007) to a standardized symbol of exclusive and hyper-commercial living.

From an architectural point of view, what is more relevant in the study of the hotel is its persistent questioning of the relationship between privacy and publicness within the domestic. If the apartment building aimed to solve the coexistence issues of a growing European middle-class, the hotel would reflect the extreme limits of the very same moral and social issues.

The ratio between the room floor areas and the extra spaces is at the core of the rules of the hospitality industry, intertwining economic performance issues to minimum spatial requirements. On this basis, the hotel as a typology fluctuates between the neglect of any public space and its hyper-abundance and representativeness.

both its symbolic representativeness and public function (Sandoval-Strausz 2007)



Figure 32 Hotel Majestic and Dakota Apartments from Central Park in New York in 1894. Source: Groth 1994



Figure 33 San Francisco Palace Hotel in 1867. Source: Groth 1994

Inception

According to Sandoval-Strausz, the first hotel ever conceived was the Union Public Hotel promoted by Samuel Blodget,⁶⁷ designed in 1793 in Washington DC (Sandoval-Strausz 2007, 21). Even if the hotel was never completed because of financial reasons, more designs followed in the early republican United States. The City Hotel in New York, of 1794, is reported to be the first functioning hotel ever built (Sandoval-Strausz 2007, 24), composed of 137 rooms and several collective spaces as dining and meeting rooms. The first hotel was not merely an *expansion* of the existing taverns and inns, rather an *invention* in terms of layout, management, and scale, as noted by Williamson in 1930:

"But it is not merely its hugeness that makes the modern hotel such a striking contrast to the old inns. The real difference lies in the grandeur, the comfort, and the service that one gets in the modern hotel. [...] Roughly speaking, it took inns twelve thousand years to grow from one to thirty rooms in size, and then, in the next hundred and thirty years - or since about the year 1800- they have shown a great burst of speed in development and have attained a present maximum of three thousand rooms" (Williamson [1930] 1975, 3)

European touristic destinations and royal capitals will shortly follow the American trend, establishing around the mid-nineteenth century various palatial hotels (Bollerey 2012, 6). Since that time, the hotel as accommodation was economically accessible only to the upper classes. At the same time, the lower incomes could use only the public floors of these buildings populated by cafés and meeting halls. Only in the second half of the nineteenth century, the possibility of permanent or semi-permanent residence into hotels prompted more affordable solutions on the market⁶⁸.

The fact that this building typology was conceived in the early years of the independent United States reveals the strict bond between the hotel and the institution of democracy. The first hotels were commonly defined as 'public houses', highlighting the capacity of these buildings to incorporate the domestic dimension with a set of public spaces (Sandoval-Strausz 2007, 232). The hotel as a building aimed to represent the new democracy in each major American city, together with the city hall, courthouse, and other public

⁶⁷ The project was drafted by the Irish architect James Hoban (1762-1832), the architect of the White House.

⁶⁸ Williamson describes the American plan and the European plan as the two common meal service plans included into the hotel system. These allowed permanent residents to benefit from a daily meal service included in their rent (Williamson 1930).

facilities. Sandoval-Strausz identifies in this early stage not only an experimental phase for the physical development of the hotel but the inception of a particular "*social technology*" capable of hosting a "*community of strangers*" (Sandoval-Strausz 2007, 43).

In American society, hotel-living gained such popularity that the main cities as New York or San Francisco, at the end of the century, could count a discrete percentage of their population living in hotels:

"In 1990, hotel residents numbered between one million and two million people. More people lived in hotels than in all of America's public housing." (Groth 1999, 1)

This fact was strictly related to the social and economic transformations shaping the new labor market. The increase of white-collar jobs in cities required a flexible and optimized dwelling system guaranteed by long-stay hotels. During the 1920s, after 70 years of development and settlement of the apartment-hotel model, the *kitchenless-city* (Puigjaner 2014) was set as an alternative to the property-owning democracy⁶⁹, promoting professional domestic labor instead of unpaid housekeeping, generic individual rooms instead of the master bedroom, and common dining rooms instead of the separated hyper-functional Frankfurter Küche.

During the 1850s in New York, hotel-living diffusion went by fierce moral critiques, as the model was considered to undermine the dominant conservative ethos of the time. In general, the "*commitment to privacy as the core of family ideology come through all the criticisms of nineteenth-century dwelling practices*", making the "*publicity of hotel life [...] a threat to family integrity*" (Cromley 1999, 21) as noted by Elizabeth Cromley referring to early New York's apartment hotels and boardinghouses.

The combination of moral and economic issues will lead hotels to be subsequently a marginal percentage of the total housing stock within the city. As noted by Avermaete and Massey, the hotel lost its potential for permanent residency increasingly in favor of transient and traveler accommodation during the last century:

"Twentieth-century mass tourism changed the status of the hotel from a venue for public display into a highly standardized and rationalized machine offering efficient accommodation for (often) large numbers of "travelers (Avermaete and Massey 2012, 1)

From an architectural point of view, the relevance of the hotel resides in the technical innovations it introduced, which will progressively be

⁶⁹ See Chapter 1, p. 10.

adopted also in regular apartment buildings. If the distinction between an apartment hotel and an apartment building was less evident in New York due to the presence of service personnel and centralized services, in Europe the technical evolution led by first-class hotels was groundbreaking:

"In 1847, the Geneva Hotel des Bergues had the first flush lavatories; in 1866, the Samedan Hotel Bernina had bathrooms. In the 1860s, gas lighting was introduced, and, in 1879 in St Moritz, at the Hotel Engadiner Kulm, electric illumination was introduced" (Bollerey 2012, 11)

The hotel will serve as an incubator of domestic technology for over two centuries relying on the maximum optimization of space and predictability of use of its areas.



Figure 34 Cartoon showing the difference between domestic labor performed by women at home and a professional waiter in a hotel dining hall. Source: The Harper's Weekly, 1857



Figure 35 Peninsula hotels control room of the HSH group. Source: <https://www.hshgroup.com/en/about/research-and-technology>

The generic and the collective

“The movie begins at the revolving door -symbol of the unlimited surprises of coincidence; then subplots are instigated in the darker recesses of the lower floors, to be consummated -via an elevator episode- in the upper regions of the building” (Koolhaas 1978, 150)

The issue of space optimization of the hotel has always been at the core of the architectural discourse on housing and domestic space. In particular, the basic norms of hospitality design have been developed by technicians around the relationship involving a hugely optimized floor area of the living unit (room) and the other spaces of the hotel. For example, in contemporary hotel design, the room area on each floor varies between fifty-nine percent and sixty-five percent of the gross floor area as an optimal solution (Ronstedt and Frey 2014, 93). Independently from the price level of the hotel, these norms are equally implemented and contribute to assigning to the hotel room a generic and serial character.

For modern architects, the scientific study of hotel architecture served as a pretext to investigate its floorplans and its potential for the typological studies related to efficient housing. The unit floorplans of the “Special Section” of the catalog of *Die Wohnung für das Existenzminimum* reveal the appeal for modern architects of both hotels and cruise ships as complex inhabitable ‘living-machines’⁷⁰ (Internationale Kongresse für Neues Bauen und Städtisches 1930). In a scientific-led approach, the analysis of the minimum hotel plan served mostly to set the limits of a broader range of possible layouts. At the same time, only a few of the CIAM architects engaged themselves in proposals with hotel-like living units⁷¹.

Furthermore, the isolated analysis of the hotel room is hardly understandable without considering the circulation and collective space of the entire building.

Since early proposals in the United States, each palace hotel comprehended a set of public, collective, and commercial spaces on their bottom floors. As noted by Koolhaas in his description of the Waldorf-Astoria in New York, the first three floors each one covering the equivalent area of a block of Manhattan with a public and commercial program of unprecedented

⁷⁰ The “Special Section” is composed by six hotel plans and two ship cabin plans

⁷¹ See Chapter 2.5

scale –“*Roman baths without water*” (Koolhaas 1978, 148). The upper floors of the building contained both transient and long-stay rooms, defining the typical vertical layering from the public space of the city to the private domain of the generic room.

As noted by Sandoval-Strausz, the social and recreative functions were paired by a strong presence of commercial activities in early hotels. Some buildings had hundreds of display rooms, where traveling vendors could set their temporary shop before leaving for another city (Sandoval-Strausz 2007).

Observing the plans of the Pennsylvania Hotel in New York by McKim Mead & White (1918), it is possible to note the degree of polarization between the reduction of private space and the quantity of collective space contained in the hotel building.

The typical floor of the Pennsylvania contains around one-hundred rooms spanning between 15 and 24 square meters with some ancillary services on the upper floors. To balance this massive amount of rooms, the ground floor performs as an actual urban portion condensed in an interior space containing a drug store, three cafes, a barbershop, a florist, two airline agencies, the Automobile Club of New York. As today these activities are mostly replaced by other businesses, the legacy of the original model reveals the capability of the hotel to be connected and separated at the same time from the surrounding urban context.

If the *generic room* and the *collective space* define the main elements of the hotel building, the evolution of the typology led to some cases where the collective space is neglected.

The SRO (Single-Room-Occupancy) is a hotel typology introduced in the United States in the early twentieth century following the simple concept of maximizing the number of single rooms on a floor with the minimum amount of circulation and essential services. As a result, the SRO became an affordable solution, also as permanent accommodation for the lowest incomes and the homeless (Aureli and Giudici 2016). The complete lack of collective spaces and service personnel contributed to the stigmatization of the SRO as a place of deprivation since few examples still exist in the contemporary United States.

The same concept of the SRO was applied in Japan with the capsule-hotel, with a slightly more optimistic approach. As part of the Metabolist proposals of the 1970s, the first capsule hotel was designed in Osaka by Kisho Kurokawa in 1977 (Albrecht et al. 2002).

Differently from the SRO, the capsule hotel embraced the idea that in a hyper-functional dense city as the Japanese one, the space for sleeping could be accordingly reduced to a quasi-coffin cubicle equipped with a bed, storage space, and often a television.

As noted by Ginzburg for the Soviet proposals of collective dormitories, as the El Lissytzky one, the total privation of collective space combined with an extremization of the proximity of the individual living unit leads to a paradoxical collectivization phenomenon. The quest for private personal space is replaced by an orchestrated coexistence made possible only by a predictable behavior of the inhabitant.

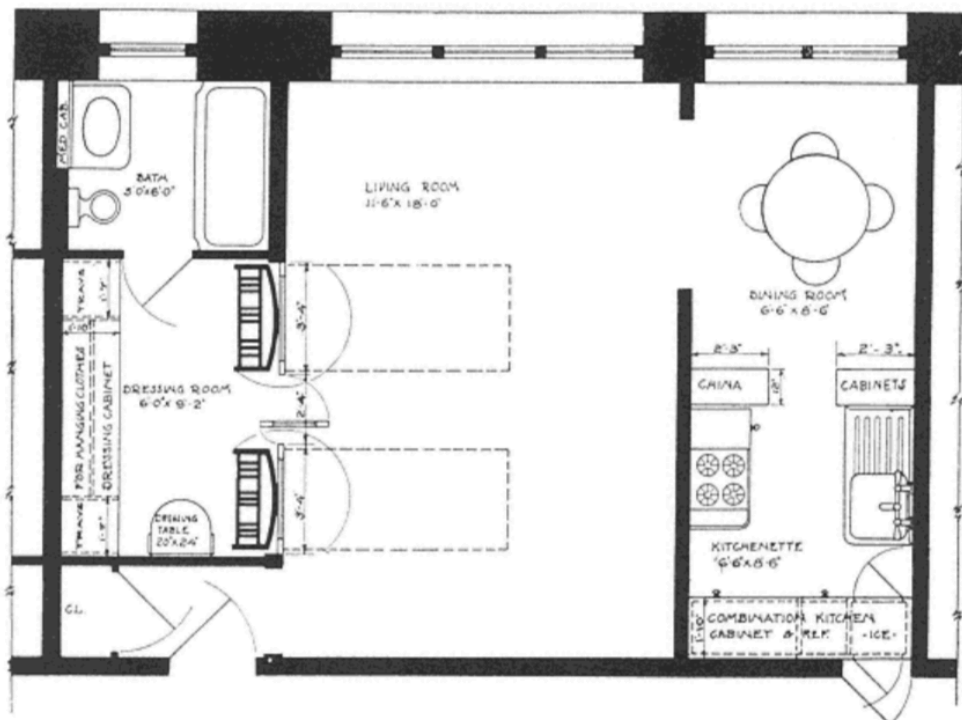
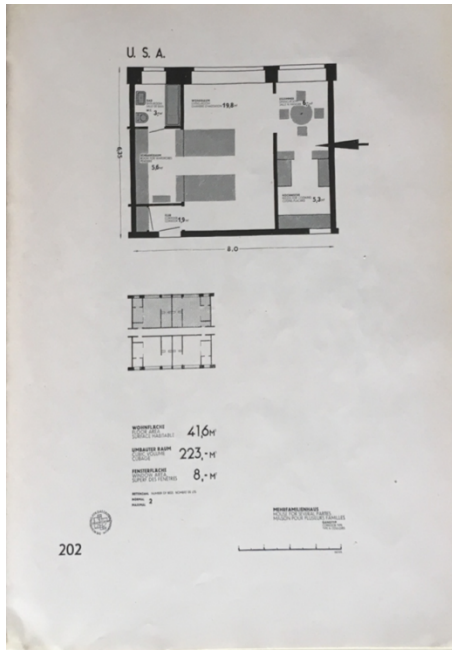


Figure 36 Typical efficiency apartment published in 1924. Source: Groth 1994. On top the same plan published in the catalogue of the 1929 CIAM

Room floor plan



Typical unit.

Avg. area = 24m²

Total number of rooms = 2,200 (opening)

circulation

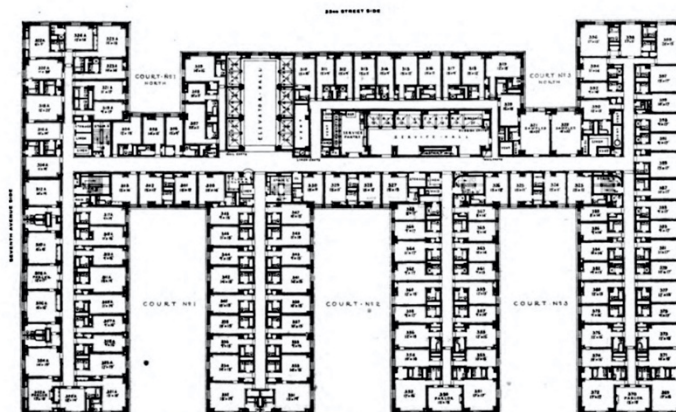
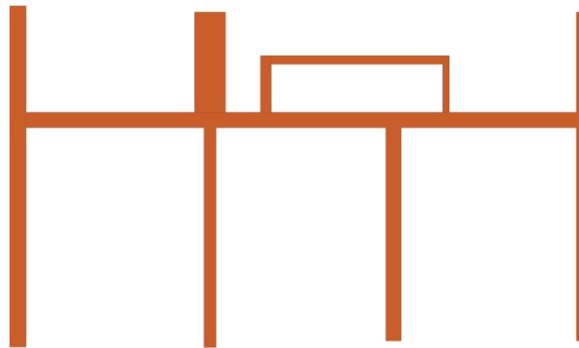
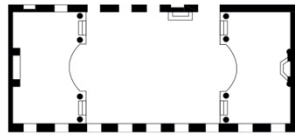


Figure 37 Room typical floor plan and graphic analysis of the Hotel Pennsylvania. New York. Architects McKim, Mead & White. 1919

Ground floor plan



Major dining room
 Area = 738m²
 Total ground floor area = 4,600m²

program



- public program
- personnel and service areas
- lounges

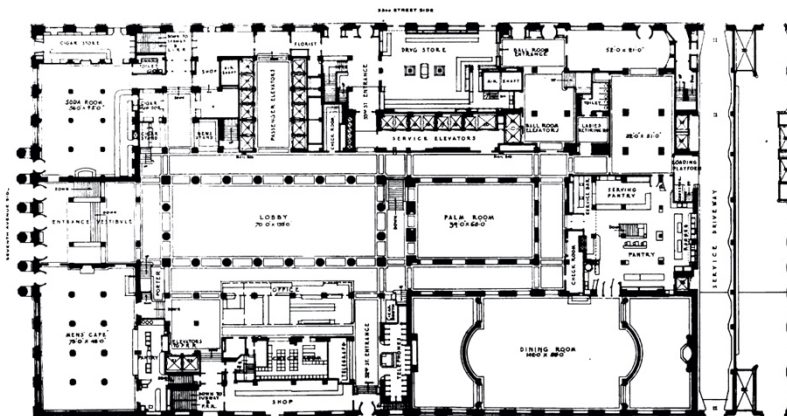


Figure 38 Ground floor plan and graphic analysis of the Hotel Pennsylvania. New York. Architects McKim, Mead & White. 1919



Figure 39 Jeff Gompertz. *Capsule Hotel*. 2009. Source: http://fakeshop.com/the_future/capsule_historical.html

The temporary city: Le Corbusier, Hilberseimer, Teige

The efforts of Le Corbusier, Hilberseimer, and Teige –even with different conceptual and political perspectives- build a common ground for a theory on modern urbanism based on a temporary living city.

What bounds together these three positions is the research focused on the hotel as the housing model capable of absorbing the living habits fitting the 'new' modern society. As the basic unit for the modern city, it was intended to ensure the scientifically optimized life in an egalitarian world.

Le Corbusier's early proposals for the "*Maison en serie*" (Le Corbusier 1923, 187) comprehended a series of projects spanning from the *Maison* (1914) *Domino* to the *Maison Citroen* (1919) all pivoting on the *taylorization* of the house.

The project for the Immeubles-Villas (1922) summarizes this approach on one of the first collective housing schemes of Le Corbusier. A 5-story stack of duplex villas is combined with an idea of centralization and hotel management described by Le Corbusier as follows:

"Une organisation hôtelière gère les services communs de l'immeuble et apporte la solution à la crise des domestiques (crise qui est à ses débuts et est un fait social inéluctable). La technicité moderne appliquée à une entreprise aussi importante remplace la fatigue humaine par la machine et l'organisation." (Le Corbusier 1923, 205)

For Le Corbusier, each villa could be owned in a Proudhonian way, as the residents "*ne paie pas de location*" (Le Corbusier 1923, 207) but contributed as shareholders to a capital released in twenty years, similarly to the Mulhousienne method described in chapter 1.

Hilberseimer commented on the project in his *Großstadtarchitektur* highlighting how the model of the hotel could serve as a possible way to bridge the modern idea of hedonism and optimization in a single building:

"Le Corbusier attempts to give the tenement some of the advantages of the hotel and at least a few of the merits of the villa. Each apartment is to have the advantages of a communal dwelling: common domestic servants. Common



Figure 40 Le Corbusier. *Immeubles Villas*. Axonometric view. 1922. Source: Fondation Le Corbusier, Paris

social rooms, and a central kitchen, all of which provide the same freedom as a good hotel" (Hilberseimer 2012, 164)

Le Corbusier will later use his Immeubles-Villas to show how the cells of the Certosa a Ema visited during both his *Voyages d' orient*⁷² were reinterpreted in his project—emphasizing the design qualities over a real political agenda. Nevertheless, the fact that Le Corbusier's project used the hotel format as an organizational framework to combine the villa with the apartment building proves the interest of modern architects in moving the hotel from commercial hospitality to a design tool.

For Hilberseimer, the hotel as-a-design-tool served to imagine a model city casting equality in its layout and organization. The project for his High-rise City of 1924 follows a grid of equal blocks dividing the commercial and vehicular city between the ground floors and a pedestrian residential city on the upper floors (Hilberseimer 2012, 123). Following the model of the American Hotel, for Hilberseimer the residential fabric of the High-rise City would be composed by temporary housing:

"Individual apartments are to be made more comfortable through technological means and are to be fully equipped in such a way that tables and chairs are the only movable furniture an occupant requires. When moving to a new apartment, one no longer has to pack the moving van, but only one's suitcase. The model of the dwelling is no longer the detached house, which is inadequate as mass housing, but the hotel, which is adapted to provide all conveniences and the utmost comfort" (Hilberseimer 2012, 128)

Extending then the principle to the city in general:

"Once it has freed itself from the false model of the individual house, it will become increasingly akin to a hotel outfitted with all modern conveniences, which embodies the most comfortable and freest way of living in today's world." (Hilberseimer 2012, 145)

The project for a Boardinghaus (1926) confirms the firm belief of Hilberseimer that temporary housing was the natural living solution in a city designed with egalitarian premises.

In a *crescendo* of radicality, from the early Taylorist proposals of Le Corbusier to the implicitly socialist urbanism of Hilberseimer, the work of Karel Teige aimed in the 1930s to state the definitive formulation of the centralized and collectivized housing model.

⁷² Le Corbusier, and Giuliano Gresleri. 2002. *Voyage d'Orient: carnets*. English ed. Milano : [Paris] : [London]: Electa Architecture ; Fondation L.C. ; Distributed by Phaidon Press.

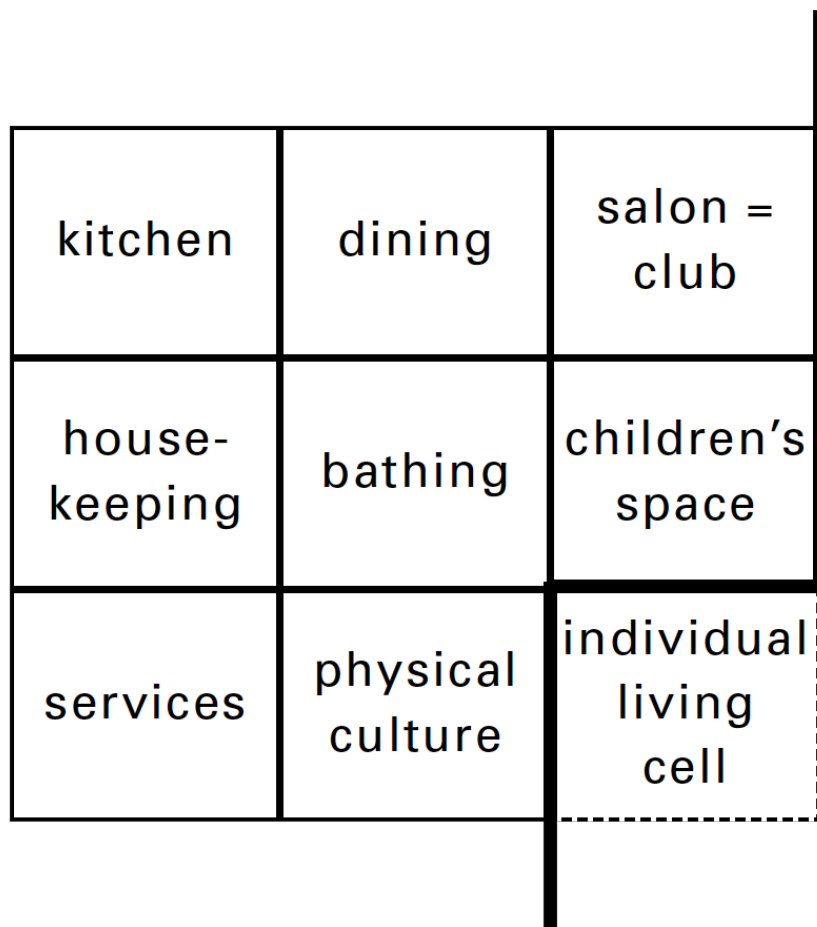


Figure 41 Diagram of the collective house by Karel Teige. 1932. Source: Teige 2002

In his *Nejmensi byt*, Teige moves a critique to the housing status quo proposing a theory for the communal house through the unbuilding and recomposing of existing models. This blueprint of the communal house relied on the hotel as a central reference even if considered a byproduct of the American capitalist economy:

“The hotel, originally intended only for short, temporary stays, has the potential of becoming a place of permanent residence as well. For these reasons alone, the hotel, with all its modern rationalized and mechanized common services, must be considered the most technologically advanced housing type” (Teige 2002, 329)

Teige referred then to two main traditional models to operate his critical materialist conceptual unbuilding of the house. Respectively, the “*differentiated dwelling of the ruling class*” and the “*proletarian abode*” (Teige 2002, 15). The first was the functional bourgeoisie house, based on the nuclear family; the second was the single room (or live-in kitchen) that the working class could afford. Atomizing the different functions of the former and confining the private sphere in the latter, Teige theorized the collectivist housing scheme. A “*single coordinated housing complex*” of individual cells “*complemented by a scheme of central collective facilities*” (Teige 2002, 5).

As Teige’s diagram shows (Figure 41), in a three by three matrix, he allocates in each cell a function –e.g., ‘kitchen,’ or a more generic ‘services.’ In the bottom-right corner, divided from the rest of the table by a bold line, he places the ‘individual living cell.’ What is separated (and connected) by the line is the collectivized and centralized part of the scheme, emphasizing the coexistence of a secluded space for privacy with an interdependent and necessary set of domestic communal services.

In their recent work, Aureli and Tattara try to elaborate Teige’s work applying this diagram to a variety of *minimum* dwellings across architectural history (Aureli, Tattara, and Dogma 2019, 19). The political program behind this work is a revival of the universal room, as a spatial alternative to the political theories on basic income⁷³. Besides the specific actualization work, the persistence through the history of Teige’s reading of the communal house highlights the flexibility of a model initially conceived for Soviet society.

Even if the permanent hotel resident seems to unfit the contemporary housing landscape, from a design point of view, the model of the hotel, once integrated with external forces from the one of commercial hospitality, proves

⁷³ In their work Aureli and Tattara refer to the propositions of Andrea Fumagalli and Stefano Lucarelli on the concept of basic income. (Aureli, Tattara, and Dogma 2019)

to be a fundamental organizational reference in collective housing design since early modernism.

Housing formats as co-living (chapter 3) can be defined as just the last iteration of the absorption of the hotel into collective housing projects.

2.4 How *minimum* is the minimum?

“To every grown-up person his own room even if it is the very smallest”

(Gropius 1930, 15)

The cult of downsizing

The definition of the *minimum* as an architectural and economic issue is still an open-ended question given the complexity and variety of economic, social, and architectural issues connected to the problem. Since the post-war period, urban regulations across the world started to define the minimum dimensional standards for housing. The size definition derives from both the legacy of the existing urban density both on the hygienical ideology applied to urbanism since the mid-nineteenth century (Benevolo 1963).

In the global context of increasing commodification of housing (Madden and Marcuse 2016, 35), the drastic reduction of the minimum standards appears as one of the main pressure points stressed by the market forces and the construction industry. In highly competitive rental markets, the cultural acceptance of the *minimum* is stressed at its limit.

In Japan, the minimum requirement for an inhabitable dwelling is set at 25 square meters, explained by the national law as the acceptable size to conduct a “*healthy and cultural life*.” In Paris, according to the *logement* law of 2002, a dwelling should be at least 9 square meters with a minimum volume of 20 cubic meters⁷⁴. In the state of New York in an apartment building, a one-bedroom flat can be as small as 5,57 square meters with a minimum width of 1,8 meters⁷⁵. Finally, Hong Kong has no dimensional restrictions for dwellings, resulting in an average living area per inhabitant of less than 5 square meters⁷⁶.

⁷⁴<https://www.legifrance.gouv.fr/affichTexte.do?cidTexte=JORFTEXT000000217471&dateTexte=20160323>, Accessed December 19, 2019.

⁷⁵ <https://www1.nyc.gov/assets/buildings/pdf/MultipleDwellingLaw.pdf>, Accessed December 19, 2019.

⁷⁶ <https://www.hongkongfp.com/2015/07/27/the-unlivable-dwellings-in-hong-kong-and-the-minimum-living-space/> Accessed December 19, 2019

The architectural issue of the optimized plan crossed all modernity since the present days, leading architects to propose projects with smaller and smaller dwellings as allowed by building technologies.

From the House for Seven People (2013) in Tokyo by Studio mnm composed by windowless rooms of 7 square meters⁷⁷ to the London real estate company Pocket Living selling at market rate buildings composed exclusively by below-30 square meter units⁷⁸, a variety of projects aimed both to the rental market both to the sales one insist on both savings and compactness.

This tendency, defined by Maak as the “*cult of downsizing*” (Maak 2015, 15), can be understood by observing the pilot project launched in 2012 by New York’s Mayor Bloomberg Adapt NYC. In order to face the growing housing crisis of New York, the brief of the project aimed to test micro-units as a possible solution, as noted by Maak:

“The proposal was to reduce the minimum legal unit size from the current 400 to 275 square feet- a move that pleases the building industry more than troubles it, because if the space thus saved is not used for collective zones or for communal gardens and kitchens, it just means that the building industry gets to squeeze more apartments into the same space as before. Rather than encouraging new forms of housing and lifestyles and a more responsible use of resources, this apparent response to demographic change merely serves as an excuse for another market-friendly radical economization of housing.” (Maak 2015, 15)

Together with these economic reasons, this kind of research focused on the minimum dwelling follows the singularization and individualization patterns highlighted in Chapter 1.2. As the individual household shares in cities as Paris or New York reach almost half of the total urban population⁷⁹, the single studio unit becomes one of the most desirable real estate products available on the market.

The contemporary promotion by the market of *friendly* compact housing solutions is inherited by long-lasting design research started by modern architects in the 1920s.

⁷⁷ <https://studio-mnm.com/projects/houseforsevenpeople/>. Accessed January 23, 2019.

⁷⁸ <https://www.pocketliving.com/projects/>. Accessed January 23, 2019

⁷⁹ Klinenberg 2012



Figure 42 Kisho Kurokawa Capsule Tower interior, 1972. Credits: Noritaka Minami.

The second CIAM congress, held in Frankfurt in 1929, is probably the most renewed collective event where architects gathered to reflect upon the issue of the *Wohnung für das existenzminimum*—combining the architectural issue of floorplan organization with the socio-economic one related with housing for the recipients of the minimum incomes. The *Existenzminimum* congress was less related to the architectural search for a minimum universal size for dwellings, instead of the qualities and features required from a modern large-scale housing industry achievable by scientific research. The relations of Le Corbusier, Ernst May, and Gropius confirmed the need for a rationalized (for Le Corbusier “*taylorized*”) mass housing production to solve the current housing shortage (Internationale Kongresse für Neues Bauen und Städtisches 1930). The research concerning the optimized floorplan of Alexander Klein—widely recognized for its graphic analytical methods—insisted fundamentally on the scientific organization of life within the domestic applying Taylorism to housing design (Korbi and Migotto 2019, 304).

The development of the “*machine à habiter*” (Le Corbusier 1923, 73) will unfold through the constant reference to the transportation industry becoming a cliché in architectural arguments of the 1920s and 1930s, as testified by Hilberseimer:

“A better model than Berlin’s uneconomical apartments is the furnishing of a ship’s cabin, which contains all necessities in the smallest amount of space. Or consider the efficiency of the kitchen and furnishings in a dining car” (Hilberseimer 2013 [1927], 143)

Teige in his *Nejmenší byt* refers to the efficiency of the kitchen of a railway dining car as small as 3.78sqm able to serve between 100 to 150 daily meals, comparing it with the Frankfurt Kitchen of 5.50sqm able to serve between 2 and 6 meals (Teige 2002 [1932], 220). Teige also mentions the transatlantic cabin plans from the *Existenzminimum* exhibition in addition to a section plan of the cabins of the transatlantic steamer Bremen (Teige 2002, 343).

During the same period, in the Soviet Union, the OSA (Association of Modern Architects) and the leading figure of Moisei Ginzburg conducted detailed research and building experimentation in order to identify the minimum dwelling size. Differently from the CIAM architects, the scientific research of the group led to precise figures on various typologies of living units. As testified by Ginzburg, the starting point of the research was quantitative:

“It was necessary to get a feeling for architectural scale in the dimensions of the living spaces in relation to human beings. Four square meters, six square meters: that is what we began with. Can this minimal area serve human beings?”

From this point of view, the results of our experiment are as follows: neither four nor six square meters in a separate room can serve as a habitation for a human being.” (Ginzburg 1934, 88)

Ginzburg categorically dismissed the idea of transporting the ship cabin measures to the residential building in this way. Despite this, the railway carriage proved to be more efficient instead and guided Ginzburg and Milinis in the realization of the rooms of the hostel on the top floor of the *Narkomfin* building⁸⁰. This experience led Ginzburg to state the minimum dwelling size in his opinion:

“However, on the basis of the experiment with the hostel on the top floor, we may calculate the minimal size for habitation for a single person as 10-12sqm. In the event of necessity, the best solution is to reduce the commonly accepted height of the rooms” (Ginzburg 1934, 88)

In this way, modern architects of both Western and Eastern Europe were convinced that a scientific approach would lead to a reasonable sizing of mass housing for the broadest society.

The post-war era will achieve mass housing provision through less elaborate architectural researches, insisting mostly on the construction sector having the political subject of the family as the target user. Nevertheless, the architectural research on the minimum cell will shift in an interregnum between industrial design and interior design in most of the proposals between the 1960s and the 1980s.

This fallback of architecture on design will lead young architectural collectives as Archigram and Archizoom to propose projects of individual living cells as the Gasket Homes of 1965⁸¹ and the plans for the Non-Stop City from 1970⁸² borrowing from the a-contextual aesthetics of spaceships more than from domestic architecture (Gili Galfetti 1997).

In the same year, Kisho Kurokawa realizes the Nakagin Capsule Tower in Tokyo, composed of autonomous living cells –imagined as pied-à-terre for managers– of 10 square meters.

The combination of the scientific approach of the modernists and the critical and playful approach of radical design led to a vast repertoire of

⁸⁰ “Between each pair of rooms are a shower room and a washroom modeled on compartments in international railway carriages” (Ginzburg 1934, 86)

⁸¹ Cook, Peter, and Archigram (Group), eds. 1972. *Archigram*. London: Studio Vista.

⁸² Gargiani, Roberto. 2007. *Archizoom Associati, 1966-1974: Dall'onda Pop Alla Superficie Neutra*. Documenti Di Architettura 170. Milano: Electa.

individual cells contributing to diverse ideas of the *minimum* in the contemporary discourse.

As these two models remain still valid as sources for collective and individual housing projects (see chapter 3), the inclusion of information technology and the advent of the digital era mark a shift from the minimum dwelling to the concept of *compact* living. Projects as the Muji Hut (2017) by Kenya Hara and the Cedar House by Go Hasegawa (2016) serve as examples of a renewed interest in anti-urban abodes. The apparent eremitic lifestyle suggested by these projects is a hyperconnected one with the minimum material infrastructure required by contemporary technologies.

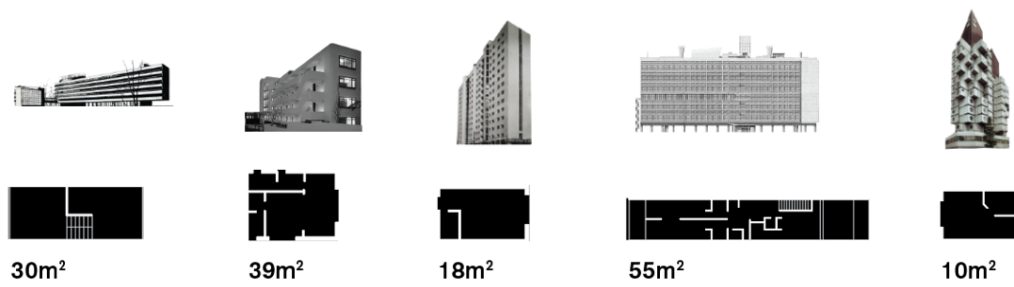


Figure 43 Timeline of iconic minimum living unit plans. Narkomfin building (1930), Isokon (1934), Casa Albergo (1949), Unité d'habitation (1952), Capsule Tower (1972). Drawing by the author

The F-Type unit. Discovering the third dimension of housing

In 1928 the Stroykom of the USSR commissioned Moisej Ginzburg and other members of the OSA⁸³ to develop several prototypes of economic housing units to be applied in the future collective housing projects in the Union (Ginzburg 1934, 66). The team aimed to find different typologies capable of adapting to different household typologies, spanning from small families to individuals and couples. This kind of standard units were to be intended as transitional ones (from pre-revolutionary habits) before each individual should be able to be housed separately:

“The work began with analysis of several different types of habitation in the pre-Revolutionary so-called “revenue-generating house”. The analysis showed that, for all its cultural ugliness, this type of habitation to a certain extent satisfied the interests of the middle and petite bourgeoisie and moreover gave a higher economic effect than, for instance, mass construction of housing in Moscow during the first years following the Revolution.

However, the same analysis showed that, when mechanically transferred to our conditions, this type is socially unsuitable and economically unprofitable.

In order to attain at least economic equilibrium, it was necessary to reduce and densify the ancillary areas. We had to drop the second staircase and the maid’s room; but this was not enough. It was necessary to reduce to an absolute minimum all the passageways and corridors which serve only as connections routes. It was necessary to study in detail the front hall, bathroom and kitchen.” (Ginzburg 1934, 66)

In the view of the OSA architects, the new Soviet housing will result from a work of *privation* instead of one of *invention*. The starting point to develop the prototypes was the pre-revolutionary rental flat that had to be liberated from all the bourgeoisie secondary spaces⁸⁴.

⁸³ The consultancy was led from 1928-29 by M. Barshch, V. Vladimirov, M. Ginzburg, A. Pasternak, G. Sum-Shik

⁸⁴ Ginzburg quotes Lenin condemning women unpaid domestic labor, and the spaces where this unfolds, as a central issue to be resolved: “*The true liberation of women, true communism, will begin only when and where a mass struggle begins, led by a proletariat possessing the power of the state against this form of housekeeping -or, to be more exact, a mass re-ordering of the latter into large-scale socialist housekeeping*” (Ginzburg 1934, 138)

ОА

В СВЯЗИ С РАЗВИТИЕМ СОВЕТСКОЙ АРХИТЕКТУРЫ И НАЗРЕВШЕЙ НЕОБХОДИМОСТЬЮ В ОСВЕЩЕНИИ ГРАЖДАН КОНКРЕТНЫХ ПРОБЛЕМ, СТОЯЩИХ ПЕРЕД НАМИС НОВОАРХИТЕКТУРОЙ, ЖУРНАЛ С А В 1923 ГОДУ БУДЕТ ВЫХОДИТЬ ОТДЕЛЬНЫМИ МОНОГРАФИЧЕСКИМИ ВЫПУСКАМИ, ПОСВЯЩЕННЫМИ СПЕЦИАЛЬНЫМ ПРОБЛЕМАМ:
 СА 1 — НОВЫЕ ИДЕИ
 СА 2 — ЦВЕТ И СВЕТ В АРХИТЕКТУРЕ
 СА 3 — РАБОЧИЙ МЕТОД АРХИТЕКТОРА-КОНСТРУКТИВИСТА
 СА 4 — ПЛАНИРОВКА ГОРОДОВ
 СА 5 — НОВЫЕ МАТЕРИАЛЫ И КОНСТРУКЦИИ
 СА 6 — ПРОВОЖДЕНИЕ СТРОИТЕЛЬСТВА И АДМИНИСТРАТИВНЫЕ ВОПРОСЫ
НЕКОТОРЫЕ ИЗ ВЫПУСКОВ БУДУТ С МИНОГОНРАСЧЫВНЫМИ ТАБЛИЦАМИ. КРОМЕ ТОГО НЕКОТОРЫЕ СТРАНИЦ КАЖДОГО ВЫПУСКА БУДУТ ПОСВЯЩЕНЫ ВОПРОСАМ ЭКОНОМИИ В АРХИТЕКТУРНОЙ ХРОНИКЕ, ОСВЕЩАЮЩЕЙ СЛОЖНЫЕ ВОПРОСЫ НАШЕГО СТРОИТЕЛЬСТВА И ДОСТИЖЕНИЯ СОВРЕМЕННЫХ АРХИТЕКТОРОВ И ИНЖЕНЕРОВ.
ОТВЕТСТВЕННЫЕ РЕДАКТОРЫ А. А. ВЕСНИН И И. Я. ГИНЗБУРГ. РЕДАКТОРЫ: М. О. БАРИЦ, А. А. ВЕСНИН, В. А. ВЕСНИН, Г. Г. ВЕСТИК, В. М. ВОЛОДИМЕРОВ, В. ЛЕКСА ГАН, И. Я. ГИНЗБУРГ, И. А. ГРАСЫЛЬНИКОВ, ЛЕ. КОРЖАВЫЙ (ПАРНИ), И. М. ЛЕВИНОВ, И. И. МУРАВЬЕВ, А. С. НИКОЛЬСКИЙ, П. И. НИКОЛЬСКИЙ, Г. М. ОРЛОВ, А. Л. ПАСТЕРНАК, Н. Е. СКОБОЛОВ, М. ХОЛОДЕНКО (ИВЕС), Ф. И. ЯВОНКИН, Р. А. ХИГЕР, А. С. ФИСЕИКО.

СОВРЕМЕННАЯ АРХИТЕКТУРА

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1929

Основной задачей конструктивной архитектуры является обеспечение работы на техническом уровне, что достигается путем ее максимального освобождения от чисто эстетических требований, а также от излишней сложности и неоправданной роскоши.

Работать это дело можно и в условиях крайнего недостатка средств, и в условиях изобилия их. В первом случае речь идет о рационализации, а во втором — о ликвидации излишества.

В нашей стране в настоящее время мы имеем дело с переходом от старого к новому. Старая архитектура, основанная на традициях прошлого, не отвечает потребностям современного общества. Нам необходимо создать новую архитектуру, которая будет отражать характерные черты нашей культуры и жизни.

Для этого необходимо прежде всего изменить отношение к архитектуре. Архитектура должна быть не искусством, а ремеслом, которое служит интересам общества. Она должна быть простой, функциональной и удобной.

В нашей стране в настоящее время мы имеем дело с переходом от старого к новому. Старая архитектура, основанная на традициях прошлого, не отвечает потребностям современного общества. Нам необходимо создать новую архитектуру, которая будет отражать характерные черты нашей культуры и жизни.

ЦЕРЕЗИТОВЫЙ ЗАВОД О. К. ВАСИЛЬЯ

ХАРЬКОВ

ЦЕРЕЗИТ ДЕЛАЕТ ПОРТЛ-ЦЕМЕНТНЫЙ РАСТВОР

ВОДОНЕПРОНИЦАЕМИМ

ПРЕДСТАВИТЕЛЬСТВА ВО ВСЕХ КРУПНЫХ ГОРОДАХ СССР

ЦЕНА ПОНИЖЕНА КАЧЕСТВО ДОВОЕННОЕ

EIN OEKONOMISCHER VERGLEICH VERSCHIEDENER RAUMANORDNUNGEN DER WOHNUNGSSCHEMEN

Целью настоящей статьи является сравнительное исследование различных вариантов планировки квартир в многоквартирных домах. В частности, рассматриваются варианты с различным соотношением площади пола к площади стен и различным расположением комнат.

Важнейшим показателем эффективности планировки является коэффициент полезного действия (КПД), который определяется как отношение полезной площади к общей площади.

Анализ показывает, что наиболее эффективным является вариант с максимальной площадью пола и минимальными стенами.

В заключение следует отметить, что для повышения эффективности планировки необходимо использовать современные материалы и технологии строительства.

Пусть A — площадь пола, B — площадь стен, C — полезная площадь, D — площадь стен, E — площадь пола, F — полезная площадь.

Тогда коэффициент полезного действия K определяется по формуле:

$$K = \frac{C}{A+B}$$

Для варианта A имеем: $K_A = \frac{C_A}{A_A+B_A}$
 Для варианта B имеем: $K_B = \frac{C_B}{A_B+B_B}$
 Для варианта C имеем: $K_C = \frac{C_C}{A_C+B_C}$
 Для варианта D имеем: $K_D = \frac{C_D}{A_D+B_D}$
 Для варианта E имеем: $K_E = \frac{C_E}{A_E+B_E}$
 Для варианта F имеем: $K_F = \frac{C_F}{A_F+B_F}$

Сравнение значений K для различных вариантов позволяет сделать вывод о том, что наиболее эффективным является вариант с наибольшим значением K .

Таким образом, для повышения эффективности планировки необходимо использовать варианты с наибольшим значением коэффициента полезного действия.

АНАЛИЗ ЭКОНОМИЧЕСКОЙ ЭФФЕКТИВНОСТИ РАЗЛИЧНЫХ СХЕМ ПРОСТРАНСТВЕННОГО РАСПОЛОЖЕНИЯ ЖИЛЬНЫХ ЯЧЕЕК

Целью настоящей статьи является анализ экономической эффективности различных схем пространственного расположения жилых ячеек. В частности, рассматриваются варианты с различным соотношением площади пола к площади стен и различным расположением комнат.

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Figure 44 Diagrams on standard units efficiency by the OSA group led by Moisei Ginzburg, published on Sovremennaiia Arkhitektura, 1. 1929

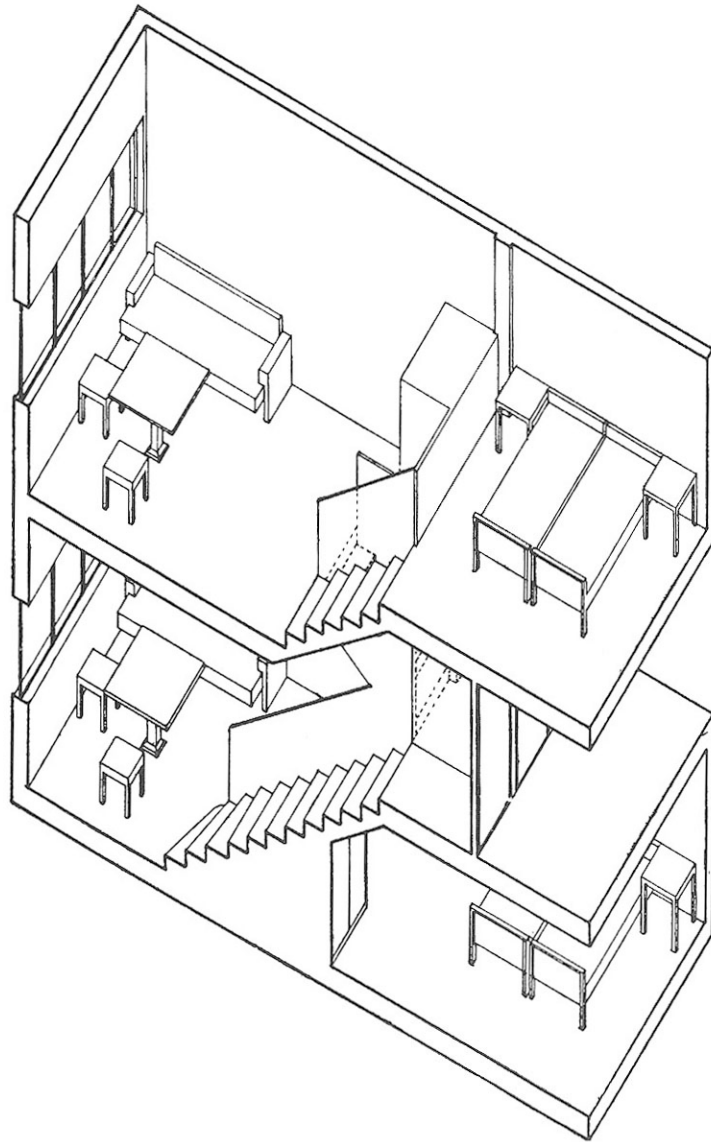


Figure 45 F-Type unit axonometric. Project by the OSA group of Stroykom led by Moisei Ginzburg. 1927

The team strategy started from a volumetric consideration at the building scale instead of the typical planimetric one. Ginzburg aimed to tackle the traditional “*design of housing [that] usually takes place in a horizontal projection only (floor plan)*” (Ginzburg 1934, 66). The living unit was considered in relation to circulation space and the interplay between the two in terms of impact on the building mass.

The result of the research was summarized in a diagram published on the first issue of 1929 of *Sovremennaya arkhitektura*, the magazine of the OSA. The diagram confronted the economic efficiency of six different typologies (A, B, C, D, E, F) of different sizes by relating the usable floor area of apartments (x-axis) to the ratio between the cubic volume to usable floor area (y-axis).

As this method always considered circulation space from its volumetric impact on the construction, Ginzburg understood the possibility of reducing its height and shifting its position on the cross-section, in order to obtain lower service spaces and double-height living areas.

The most profitable unit seems to be the F-type, for singles or couples, of approximately 30sqm, including a bathroom, a kitchen standard component, a living area, and a sleeping area. The three primary functions were divided into three different levels, replacing horizontal circulation space with a vertical one. The other feature of the F-type (anticipating Le Corbusier Unité d’Habitation) was in the double facing section of the living unit allowed by the ‘split’ section.

The F-type was first employed in the iconic *Narkomfin* building, in addition to the K-type units equipped with a 4 square meter kitchen for larger families.

It is important to underline that despite the *Narkomfin* was (and is) praised diffusely as the most relevant example of communal housing and as the ‘social condenser’ *par excellence*⁸⁵, in the words of Ginzburg it performed mostly as a social experiment with several failures (Ginzburg 1934, 82).

The building is connected to a service building with a passageway on the first floor, and this part needed to serve as a laundry, a kindergarten, and, most importantly, as the communal dining room for the F-Type inhabitants. As noted by Ginzburg in a post-occupancy evaluation, the most successful program was the one aimed for the traditional families, as the kindergarten mostly occupied the service building, and in the end “*the majority of residents took their dinners with them to their apartments*” (Ginzburg 1934, 82).

⁸⁵ See: Fernández Per, Aurora, Javier Mozas, and Álex S. Ollero. 2013. *10 Stories of Collective Housing*. Vitoria-Gasteiz: a+t Architecture Publ.; Schoenauer, Norbert. 1989. “Early European Collective Habitation. From Utopian Ideal to Reality.” In *New Households, New Housing*, edited by Karen A. Franck and Sherry Ahrentzen. New York: Van Nostrand Reinhold.

The F-type was also employed in other four projects realized in Moscow and other cities of the Soviet Union. The house of RZhSKT (Workers' Housing-Construction Cooperative of Transport) built for a show construction in Moscow, replicates the principles of the *Narkomfin* in two L-shaped slabs, one entirely composed by A-type units, and the other exclusively by F-Type units. In the house of Uraloblsovnaarkhoz in Sverdlovsk the F-Type unit is even reduced in size by grouping the bathrooms for each coupling adjacent unit.

Finally, the same principle of the *Narkomfin*, a slab of F-Type units connected to a separated service building, was realized in Saratov in the House of RZhSKT (Ginzburg 1934, 120-21).

This list serves to highlight how the *Narkomfin* experience was just one of the various attempts of the OSA architects to realize an efficient model of communal housing. Furthermore, the projects, as mentioned earlier, should be seen as more conservative buildings, explicitly conceived for the 'transitional phase'. At the same time, many proposals for communal houses (most of them never built) will confine the individual space to a sleeping lodging providing large scale communal spaces.

Oversized communal space

In parallel to the research on standardization to satisfy the urgent housing demand, the OSA also focused on the development of an experimental communal house (Dom-kommuna), launching a competition between the Organization in 1927 that will see as winning the proposal of Barshch and Vinogradov.

The Dom-kommuna proposal was composed by a scheme of two crossing slabs of 250 meters, one dedicated to 6 square meter individual lodgings and one to communal services. Ginzburg notes how this clear separation between the residential and the communal required a universal and standardized organization of daily life (Ginzburg 1934, 142). In his opinion, this project and all its subsequent iterations "*suffer from a lack of understanding of the importance of personality in the socialist collective*" (Ginzburg 1934, 138).

The extreme reduction of individual living space led to a paradox: the communal spaces as industrial kitchens and canteens sitting at least a thousand people were contradicting the socialist purpose bringing to "*astronomical dimensions the molecular elements of way of life of the old family*" (Ginzburg 1934, 142).

This communal space hypertrophy will lead to projects as the realized student hostel by Nikolaev (1930), where the sleeping cabins were windowless and with shared bathrooms any two rooms, or Melnikov's Sleep Pavilion for Zeleny Gorod, "*where sleep is declared to be 'socialist', i.e. where people sleep all together in enormous rooms and where special orchestras and reflectors muffle the 'socialized' snoring in accordance with all the rules of modern science and art*" (Ginzburg 1934, 142).

Besides the critiques operated by Ginzburg, this kind of project, together with the OSA formulations, served as a basis for several future iterations of housing experiments aimed at individuals with centralized and professionalized housekeeping (Aureli, Tattara, and Dogma 2019).

If the Soviet research was investigating a multitude of options to house a society of individuals free from familiar bounds, the concurrent research led by the CIAM was moving in a different direction. As noted by Robin Middleton:

"Yet, surprisingly, the single-cell living unit is not included amongst the hundred-odd designs in the report of that title, introduced by the CIAM congress of 1928. All the architects involved considered the minimal existence to be a family affair" (Middleton 1983, 60)

It must be noted that the observation of Middleton may be correct from a labeling point of view in the catalog. At the same time, several units for individuals were included in the repertoire of the exhibition⁸⁶. Nevertheless, the focus of the CIAM on the living unit highlights the major confidence of the West on the self-sufficient living unit with a different understanding of privacy from the Soviets.

The real difference between the two kinds of research is methodological as the CIAM method did not consider the impact of circulation space on the built volume, making the only available tool to evaluate housing the single unit floor plan. The OSA method will be at the basis of most of the housing research up to the present days, replacing a quantitative approach with a parametric one.

The Soviet experience will be an isolated one, as the real estate market tends to privilege the floor area value over the volumetric mass characteristics of the building.

⁸⁶ See Plate 1, individual room of 9,4sqm (Brussels); Plate 102, One-roomed dwelling for a woman with an occupation (Frankfurt); Plate 103, Two-roomed flat for one or two persons earning their livelihood (Frankfurt); Plate 104, One-roomed flats (Wien). (Internationale Kongresse für Neues Bauen und Städtisches 1930)

Chapter 3

Co-living

“The focus is on stimulating needs rather than satisfying them”
(Hilberseimer 2013, 86)

Hybrid format

At the end of the first decade of the 2000s, the Global Financial Crisis occurred in parallel with the introduction of several milestone technologies⁸⁷. Information technology paired with post-crisis austerity mindset opened the way to platform economy and sharing economy (Srnicsek and De Sutter 2016). Real estate was penetrated by some formats relying on traditional models derived by hospitality in a digitalized framework.

Co-living first appeared in London in 2013⁸⁸, is the umbrella name for a multiplicity of housing products developed in this context. Conceived as a hybrid between commercial hospitality, serviced apartments, and co-working spaces, co-living projects propose micro-units combined with collective facilities and services.

Differently from the experimental buildings proposed by modern architects following the 1929 crisis, primarily promoted and debated on architectural magazines and conferences, co-living seems to be off-the-radar from the architectural debate, appearing mostly on few digital magazines at the present day.

Co-living is a byproduct of the metropolis. It would be impossible to understand this phenomenon without the specific economic and social conditions imposed by the global city⁸⁹.

⁸⁷ Think to the temporal sequence of the release of the first iPhone (2007), Lehman Brothers bankruptcy (2008), the official launch of Airbnb (2009), the release of the first version of the messaging app WhatsApp (2009).

⁸⁸ The Collective Old Oak was announced in 2013 by the homonymous real estate company founded by Reza Merchant with a £1.8 million loan.

⁸⁹ Here the term ‘global city’ is used alternatively to ‘metropolis’, as we refer to cities that can be defined as both. For an in-depth analysis of the global city see: Sassen, Saskia. 1991. *The global city*. New York, London, Tokyo. Princeton, N.J.: Princeton University Press.

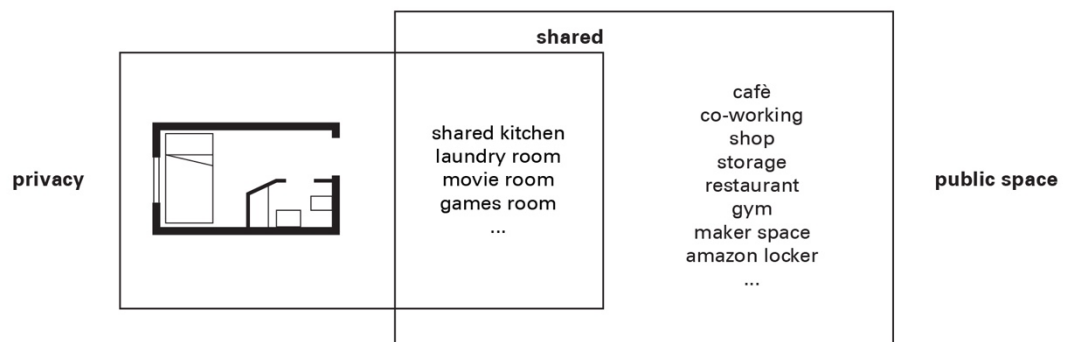


Figure 46 Conceptual diagram of co-living, showing the functional breakdown from privacy to public space. Drawing by the author.

Despite its metropolitan origins, some features of the organizational model of co-living can be traced back to the analysis of older communities with similar dynamics. Groups of individuals living “*together but apart*” (Aureli 2013, 7) existed since antiquity in the form of monastic orders and religious groups. These were typically anti-urban communities, in which each member accepted to abandon any connection with society (Klinenberg 2012, 33).

As mentioned before (see Chapter 2.2), in the analysis of works as the one of Roland Barthes, the cenobitic communities are viewed as the proto-model for modern collective cohabitation (Barthes [1977] 2013). The main similarities can be found in the importance acquired by the single cell (or single room) as the primary spatial separator between individual and shared space, and in the strict correspondence between the spatial and social organization (Aureli 2013). Nevertheless, according to Klinenberg, the phenomenon of singularization belongs to the modern city (Klinenberg 2012, 21), and only within the context of the modern metropolis the uprooted lifestyle beyond the nuclear family acquires the meaning we assign to it today.

Members of the contemporary *singleton* society (Klinenberg 2012, 4), when grouped in a co-living building, tend to act similarly to the Idiorhythms described by Barthes (Barthes [1977] 2013). Individualism and self-realization are counterbalanced by the desire for collective and social gatherings outside the working-week routine. Co-living providers aim to create an ‘intentional community’ among its tenants in an attempt to solve the individual/collective balance in a single building.

However, the only selection criteria to be part of a co-living *community* is the economic capacity of its members. The pricing of most co-living plans is set as what could sound ‘affordable’ to the average single urban middle-classer.

At this stage, the model of co-living can be described as such. It is an urban infrastructure conceived for single dwellers. Instead of proposing a traditional rent contract, co-living is sold as an all-inclusive service, comprising hotel-like amenities and housekeeping, access to co-working spaces, and social clubs.

It should be noted that this definition of co-living leaves intentionally out other forms of self-claimed co-livings, actually referring to traditional rental units. Many professionalized flat-sharing platforms are selling their services as co-living,⁹⁰ but, since this kind of typology does not imply any spatial and organizational experiment, it cannot be considered a co-living in its built form.

⁹⁰ As the US Common. See: <https://www.common.com/>. Accessed august 23, 2018.

The *co-liver* is a consumer included within a market range of the urban population. This target inhabitant reoccurs in various major Western cities with similar features, being the fruit of a global metropolitan culture rather than local specificities. This explains why some media also address the *co-liver* as a *digital nomad* (Outiste 2017). Moreover, the principle of homogeneity characterizing co-living communities is enhanced by the internal policies of the companies. For example, they tend to match *similar* profiles –drawn up based on questionnaires and personal data analysis– for the allocation of adjacent units (Bierbaum 2017).

The community setting strategy is not distant from the problem encountered by early nineteenth-century hotel managers facing a plural society of *strangers* to accommodate (Sandoval-Strausz 2007, 43).

Furthermore, the similarity with hotel-like features in today's co-living plans is visible in characters as rooming service, magnetic key-cards, restrictive rules on furniture usage, and CCTV (Bierbaum 2017, 132).

Even if co-living may appear only a branding label on top of consolidated models, it indicates possible patterns of the broader domestic panorama of the future. A scenario where comfort, security, and sustainability seem to have replaced any egalitarian attempt of the last century (Koolhaas 2014, 14).

3.1 From housing to living

Co's

“The bed is no longer the place where you rest after work or where you have fun, but rather the workplace itself, from which people mail, sell, make phone calls, google. The bed resembles a soft desk and the most intimate spot has become a place of public communication.” (Maak 2015, 103)

Defining co-living drawing from the academic literature is currently tricky. The only extensive and reliable definitions of this phenomenon can be found in the news media, magazine reportages, or in the descriptions provided by the companies (Widdicombe 2016; Konrad 2016; Outsite 2017). From an urban and architectural point of view, the assumption of co-living as a *new* housing typology is questionable. At its present state, co-living is presented from companies and the media mostly for its experiential features rather than its spatial specificities.

However, in architectural terms, it appears as a hybrid based on well-established past housing models: the hotel and the apartment building.

The term co-living is a neologism of recent diffusion since it started to appear on the internet in the mid-2010s. As it happened with other neologisms as co-housing (1960s) and co-working (1990s), the consolidation of a concept can take decades. As argued by some scholars, the term co-housing has often been misused by the media, professionals, and academic sources (Gresleri 2015, 12). Accordingly, it must be pointed out that housing typologies as the Berlinese collaborative *baugruppen*, hacker ‘communes’ of the San Francisco Bay area⁹¹, or other participative forms of collective housing do not match the concept of co-living.

Co-living does not even appear in any official English dictionary, except for the open-source Wikitionary.org, according to which “*coliving*” is “*living together in the same residence*”⁹². The definition, thus, traces back the ‘co-’ to the meaning of ‘collective’, well underlying a feature which is undoubtedly typical of all the existing co-living projects.

⁹¹ We refer, for example, to the improper use of the term co-living as an umbrella for different housing typologies in the article: Bhatia, Neeraj, and Antje Steinmuller. 2018. “Spatial Models for the Domestic Commons: Communes, Co-Living and Cooperatives.” *Architectural Design* 88 (4).

⁹² Source: <https://en.wiktionary.org/wiki/co-living>. Accessed August 23, 2018.

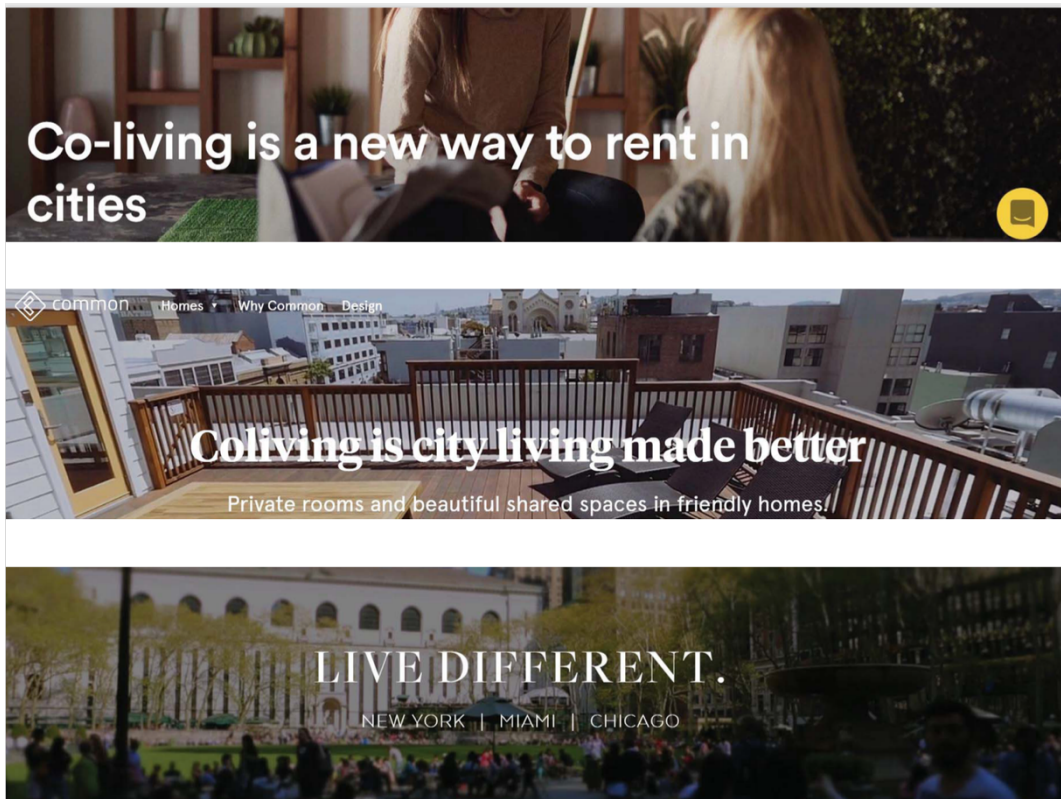


Figure 47 Three website homepages of co-living companies. Source: The Collective, WeLive, Common

Nevertheless, it lacks a precise definition to make clear the specificities of co-living compared to other forms of collective housing. In particular, the various meanings inherent to the word ‘together’ can provide some interpretative keys to distinguish co-living from other typologies. For this purpose, operating an analysis of the definitions of co-living as its providers present them, points out the main recurrent concepts and definitions. Most major co-living companies reserve a section of their websites to explain their idea of co-living, usually in the form of a short text from the title *What’s co-living?*. The fact itself that companies feel the need to explain the concept is revealing of the *newness* and instability of this notion. From the analysis of five websites, several recurrent keywords emerge⁹³.

First, it could be argued that one of the core issues of co-living lies in the balance between individuals and the community. The emphasis on the establishment of an intentional ‘community’ of inhabitants is always declared as a foundational idea of co-living programs. For example, the statement provided by the London-based company The Collective LLC is revealing in this sense:

“Co-living is a way of living in cities that is focused on community and convenience. Live as part of a community, sharing wonderfully designed spaces and inspiring events, with the comfort of being able to retreat to your own fully furnished private apartment at the end of the day. Everything you need to make the most of city life is included in one convenient bill; rent, concierge, superfast internet, all utilities and taxes, room cleaning, exciting daily events and gym membership. So you can do the living, and leave the rest to us.” (The Collective, n.d.)

‘Community’ and ‘convenience’. The recurrence of these two keywords, in addition to the ‘collective’ suggested by the definition of Wiktionary, is an indicator of the multiple meanings that the ‘co-’ could acquire in this neologism. Therefore, as proposed by the companies, it can stand for community-living or communal-living, adding a non-neutral and optimistic layer to the nature of this collectivity. As part of a specific community, a co-living dweller has to accept several social

⁹³ Sources: The Collective Co-living | Co-Working | Co-Living Accommodation. (n.d.). Retrieved from <https://www.thecollective.com/co-living/>. Accessed August 23, 2018. Coliving. (n.d.). Retrieved from <http://www.ollie.co/coliving>. Accessed August 23, 2018. WeWork. (n.d.). Furnished, Flexible Apartments | WeLive. Retrieved from <https://www.welive.com/?ref=footer-v2>. Accessed August 23, 2018. Our Mission. (n.d.). Retrieved from <http://xliving.co/mission/>. Accessed August 23, 2018. Coliving at Common | Flexible, Friendly Shared Housing. (n.d.). Retrieved from <https://www.common.com/>. Accessed August 23, 2018.

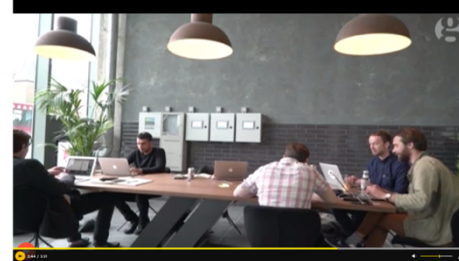
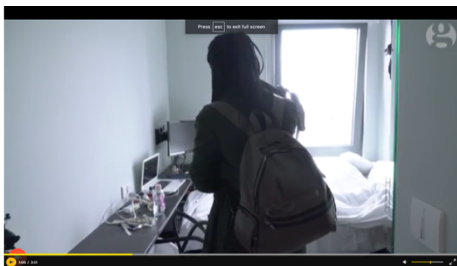
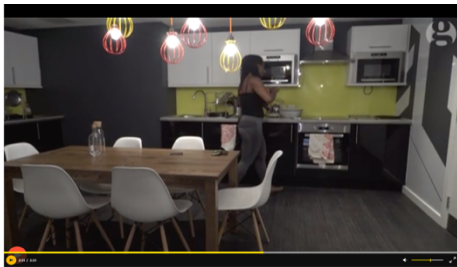
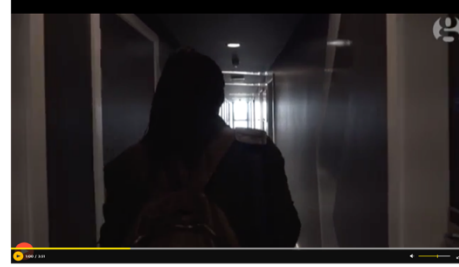
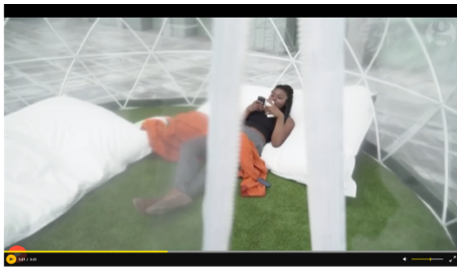
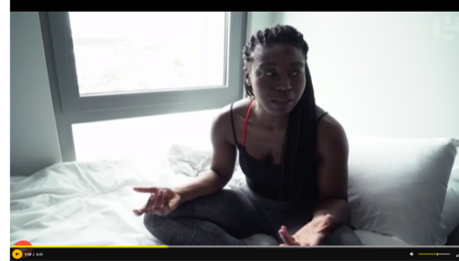
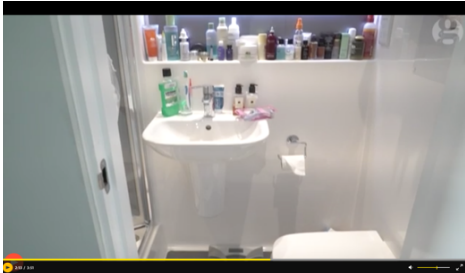
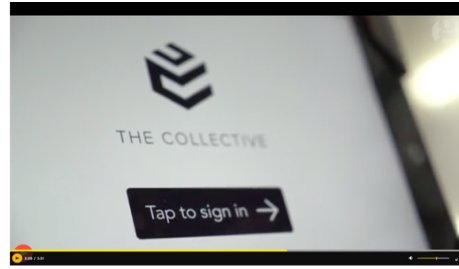
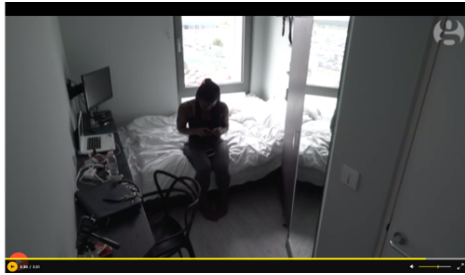


Figure 48 Still frames from The Guardian video: 'Co-living': the end of urban loneliness – or cynical corporate dormitories?. 2019

rules (e.g., declare at the concierge the presence of eventual hosts, or space usage time limitations), explicitly subscribed with the agreement of the service contract⁹⁴.

Secondly, as emerged in The Collective LLC definition, ‘co-’ could also stand for ‘convenient’. The concept of convenience stems in this case from an explicit intent to aim towards affordability. The insistence on the concept of both community and convenience is revealing of the dichotomic relationship with the city, which characterizes co-living promotion. Today’s city appears, on one side, as the natural habitat for co-livers, and, on the other, as the main cause of alienation and isolation to which co-living is presented as an alternative. Therefore, co-living is promoted by companies as a market alternative with extra degrees of comfort and services at lower prices of an average studio flat. According to Common, a New York-based co-living company:

“Shared living spaces, common amenities, and occasional outings provide for a true sense of community that’s often lacking in large cities. (...). co-living is simply a way to make living in a city work better for you.” (Common, n.d.)

Co-living performs as a protected hub intended to safeguard urban life in a facilitated form. This introduces the third issue, the idea of maximization of efficiency through technology. Co-livings are engineered with advanced organizational and digital technologies. According to the US PMG’s X Team:

“Every design and technology decision should be made with your lifestyle and convenience in mind. Like the city around it, your building should shift in countless ways as a reflection of its inhabitants.” (PMG, n.d.)

The main features characterizing co-living, as emerged by the empirical analysis on website definitions, can be summed up as follows. Co-living consists of a commercial real estate product, combining in an all-inclusive service of living space plus other services. Its advertising is generally played around this argument: high rents and limited available residential space typical of urban contexts are tackled pursuing the values of ‘community’ and ‘convenience’. As a result, the praised balance between affordability and appealing social environments serves to address a precise target of users.

⁹⁴ As reported by Max Bierenbaum who lived in The Collective at Old Oak (London) in order to produce his investigative research project (Bierenbaum 2017)

Living taking over housing

Even if numerous recent publications on housing relied heavily on collectivity, the definition of the different mechanisms underlying a more or less communitarian approach remains vague in most cases (Fort 2009; Dömer, Drexler, and Schultz-Granberg 2014; Kries et al. 2017; Fernández Per, Mozas, and Ollero 2013).

This lack of definition leads to several misunderstandings and threads when the concepts are transferred to policymakers, which tend to confuse socially aimed projects with commercial ones in a blurred discourse⁹⁵.

The case of co-living, is open to this destiny, as it does not refer to specifically regulated urban objects either a typology *per se*. In the last four decades, also the term co-housing was employed in a variety of cases that had nothing or little to share with the original concept (Gresleri 2015).

As seen in the previous section, by the deliberate interest of co-living companies, the social aim of ‘community’ building is one of the central values incorporated in its promotion⁹⁶. As a hybrid between commercial hospitality and a traditional rental apartment, the ‘co-’ has no reason to acquire the meaning of ‘collaborative’ and ‘cooperative’, pointing out a radical distinction with co-housing and other participative housing forms.

Collaborative and cooperative housing have different declinations but lay at the origins of the communitarian purpose of co-housing. In its early Scandinavian forms, co-housing unfolded as a series of low-dense suburban housing schemes, where middle-class communities gathered before even construction started to develop the settlement of the residents’ community. This participative act was and is always followed by the subscription of a cohabitation contract that regulates the uses of the shared capital among the resident community, both in the case of permanent residency for homeowners both for temporary rental schemes (McCamant, Durrett, and Hertzman 1994).

As co-housing is regulated by a contract, in the case of co-living, the determination of the community members does not precede. However, it

⁹⁵ As in this article by Bathia and Steinmuller where the concept of co-living is used to ambiguously as a noun and a verb: Bathia, N., & Steinmuller, A. 2018. Spatial Models for the Domestic Commons: Communes, Co-Living and Cooperatives. *Architectural Design*, 88(4)

⁹⁶ As reported by The Guardian in 2019 in an article with an interview to Reza Merchant, the CEO of The Collective LLP: “We’re very different to a conventional property developer,” says Merchant, who has said his inspiration for the Collective draws on experiences at Burning Man festival. “If our driver was pure profit, we wouldn’t be doing this. There are much easier ways to make money.” (Coldwell 2019)

follows the overall spatial and organizational layout of the building, resulting in a top-down scheme rather than a bottom-up self-organized collective rule. Actually, in co-living the supervision of rules and their surveillance through CCTV cameras leads to incentives and penalties for the residents in realized projects as the Collective Old Oak in London (Bierbaum 2017).

The concept of co-living and its digital promotion borrows several strategies by co-working as an organizational format more than from co-housing.

Co-living projects often include co-working spaces, legitimating a bridging of the two 'co's', as a proxy to describe the all-inclusiveness of working and living in the same space. As an example of this correlation, in 2017, the American co-working company WeWork launched its co-living branch: WeLive⁹⁷.

Both existing co-living and co-working projects share the quality to perform as platforms for a vastity of organized activities⁹⁸. The multi-functional spaces and extra-activities allow this kind of buildings to intensify its attendance in different periods of the year and of the day, increasing its attractiveness and subsequent revenues.

In co-living promoters' rhetoric, the predominance of the experiential over real needs marks a crucial shift from the focus on the shelter of *housing* to the performance of *living*. Therefore, co-living and co-housing differ radically also for this aspect due to the de-materialization of social space in social media operated by information technology.

It is the result of strong rhetoric –shared, among other things, with Airbnb campaigns⁹⁹– on the overcoming of the traditional idea of the house as an asset with the idea of the house as a service and an experience.

To quote the American co-living company Ollie:

“The co-living concept reflects the shifting value system of today's renters - values that embrace the quality of relationships and experiences over the quantity of square footage.” (Ollie, n.d.)

⁹⁷ <https://www.forbes.com/sites/alexkonrad/2016/04/04/inside-wework-coliving-space-welive/#3892655a7145>. Accessed August 23, 2018.

⁹⁸ Both the formats often employ full time community managers in order to run the 'social programme' of the co-living or the co-working

⁹⁹ From 2016 Airbnb launches the "experiences", Since then hosts can offer tours and events in addition to places to stay. See: Forge a knife from a horseshoe. (n.d.). Retrieved from <https://www.airbnb.com/host/experiences>. Accessed August 23, 2018.

IS	IS NOT
<p data-bbox="472 253 592 286">Co- living</p> <p data-bbox="424 304 639 338">Collective - living</p> <p data-bbox="411 356 652 389">Convenient - living</p> <p data-bbox="411 407 655 441">Community - living</p>	<p data-bbox="986 253 1142 286">Co- housing</p> <p data-bbox="938 304 1190 338">Collective - housing</p> <p data-bbox="916 356 1212 389">Collaborative - housing</p> <p data-bbox="922 407 1206 441">Cooperative - housing</p>
(LIVING)	(HOUSING)

Table 2 Co-living meanings of the suffix 'co-' compared to co-housing

Living with Ollie means complimentary...

COST SAVINGS

Ollie residents save on average over \$500/month in added perks and complimentary services.

[LEARN MORE](#)

CONVENIENCE

- Weekly Housekeeping
- Linen & Towel Service
- Bath Amenities from Malin + Goetz
- High-speed Wifi & TV Programming

[LEARN MORE](#)

COMFORT

- Fully Furnished Units
- Extraordinary Amenity Spaces
- Linens & Towels Provided
- Dishware Provided

[LEARN MORE](#)

COMMUNITY

- Ollie Social Membership
- Regular In-building Events
- Live-in Community Manager
- Weekend Getaways

[LEARN MORE](#)

Figure 49 Excerpt from the website of the American co-living company Ollie. Source: Ollie.co

3.2 Built projects

Brief history of a housing model

Even if not explicitly labeled as a co-living, The Share in Tokyo may be the first built co-living project. In 2012 an apartment building from 1963 was renovated by Tsukasa Ono, Kento Horiuchi, and Kenji Hashimoto into a combination of individual rooms for rent and a series of collective spaces and services¹⁰⁰.

As noted by Niklas Maak, the organization of the collective program of The Share characterizes the project differently from other mixed-use residential buildings (Maak 2015, 143). The layout consists of a commercial ground floor with a reception lobby, the first floor devoted to office space, topped by three residential floors with single rooms, and the last two floors containing shared facilities as communal kitchens, lounge area, cinema room, and a rooftop garden.

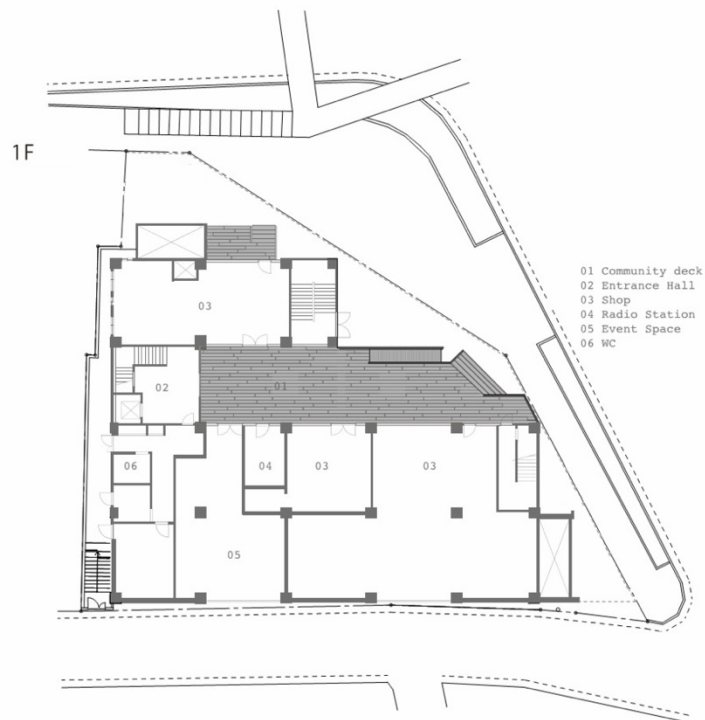
This project contains all the structuring elements of co-living. The extreme reduction of living units to the size of a single room (in this case with shared bathrooms), and the inclusion of communal and public services within the building. The presence of the reception desk and the clear separation between the public and private parts of the building is borrowed by the layouts of professional hospitality that lay at the base of all co-living projects.

Furthermore, the spatial layout of The Share is connected with a fundamental part of the social engineering of the co-living format: the access to the residential part and the common areas is separated using the vertical connection provided by the elevator. An inhabitant of The Share can decide to live in his secluded cell or to access the shared areas and interact with others according to his specific needs. As in a hotel, the collective dimension is not related by any ideological communitarian goal, instead of the typical urban 'landscape' of collective facilities outsourced from the domestic realm (Maak 2015, 143).

The two first built examples of co-living, self-defined by its owning companies as such, are The Collective Old Oak in London (2015), and Ollie at Carmel Place in New York (2016).

Carmel place and The Collective are the results of two different processes, exemplary of the broad and heterogeneous factors which are driving

¹⁰⁰ <https://www.archdaily.com/photographer/rebita>. Accessed August 23, 2019.



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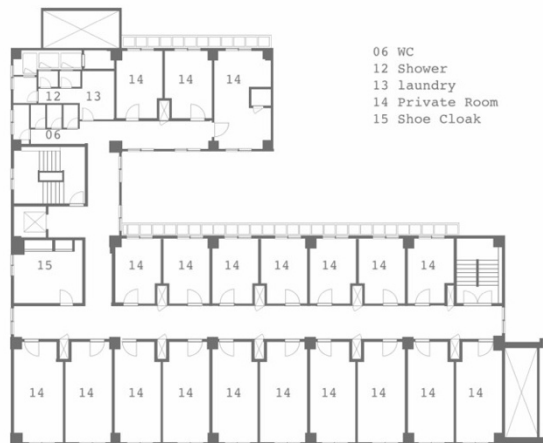


Figure 50 The Share Tokyo, 2012. Floorplans of the ground floor and the residential floors. Source: archdaily.com



Figure 51 Interior view of a communal area of the Share in Tokyo. Source: archdaily.com

co-living diffusion. Old Oak is the largest and first purpose-built co-living project (2013-2015). Carmel Place, instead, was started as a pilot project for affordable housing in New York¹⁰¹ and only later, when the construction was completed, purchased by Ollie “*as an innovative housing model*”¹⁰².

Both projects are located in Western metropolises. Nevertheless, while Carmel Place is in the heart of Manhattan, Old Oak is a brand-new architecture erected in London zone 3, thirty minutes from the city center by Overground. Even if well connected by public transportation, approaching the site conveys the feeling of moving outside the city. This crucial difference in the site selection explains the different marketing policies adopted in respect to the rapport of the building and the city. On the one hand, Ollie at Carmel Place takes advantage of the favorable position to further minimize the square meters of the project by including in the all-inclusive rental package several services and activities to develop in the surroundings.

The result is a relatively ‘narrow’ modular eight-stories building surrounded by the high rises of Manhattan. On the other hand, the 10-stories new building of the Old Oak dominates a landscape of warehouses and low-rise housing, relying on the high number of its residents, amenities, and facilities, standing as an almost self-sufficient urban object. The introduction of functions such as an ample coworking space, restaurants, retails, and bars, is aimed to generate a neighborhood landmark.

The overall dimension and location of the two buildings also affect the internal distribution of private and shared spaces. Carmel Place is composed of 65 prefabricated self-supporting steel-framed modules, prefabricated and assembled on site. They give rise to four ‘mini-towers’ following the reduced width of the prefab modules. According to nARCHITECTS, the designers responsible for the awarded project of Carmel Place:

“Spaces typical of a home are dispersed throughout the building, thereby encouraging residents to interact with their neighbors throughout their daily routine.” (Carmel Place, n.d.)

¹⁰¹ nARCHITECTS’ Carmel Place (formerly known as My Micro NY), with Monadnock Development, is the winning proposal in the adAPT NYC an initiative launched as part of former Mayor Bloomberg’s administration’s New Housing Marketplace Plan to accommodate the city’s growing small household population. Source: <http://narchitects.com/work/carmel-place/>

¹⁰² Source: <http://www.ollie.co/press-inquiries/>, Ollie press releases. <https://static1.squarespace.com/static/55ad3e6ee4b01df99222a9b0/t/583de217d1758e46ff35df74/1480450584121/CarmelPlaceandOllieAnnouncementfinal.docx+%281%29.pdf>



Figure 52 Top: Ollie at Carmel Place exterior view. Bottom: The Collective Old Oak. Source: Ollie, The Collective LLP

This makes evident how the architectural solutions employed in the project, just like the distribution of shared spaces in a vertical line in the core of the building, serves as physical support to the communitarian purposes at the basis of co-living.

The 16000 square meters of The Old Oak building are organized in two parallel slabs of single-room units topping the common areas on the ground and first floor. In the overlapping point between the two volumes additional vertically stacked amenities are provided. If the partial dispersion of shared spaces in the building gives rise to an analogy with the approach adopted at Carmel Place, in the case of the Old Oak, it is also due to the necessity of generating sub-communities in a large number of co-living users (over 500). The ground floors host in the two cases more typically hotel-like amenities and public services -mainly restaurants and bars.

The two projects address the issue of minimum living space in the private space of the rental units. To do that, they challenge the constraints imposed by current regulations in different ways. The micro-units of Ollie, ranging from 23 square meters to 34 square meters, including kitchens and bathrooms, could benefit from several mayoral overrides to overcome minimum dimensional restrictions thanks to the public engagement in the initial project. In the interior design, the architects aimed to contrast the reduced width of the unit with a sense of “*spaciousness*” (Carmel Place, n.d.). To do that, the design strategies include higher ceilings, tall sliding windows, Juliet balconies and flexible furniture to varying the configuration of the space according to the needs.

The living units of The Collective are organized in a typical central corridor circulation scheme. The prevailing units are 462 9 square meter one-bedroom units with included bathroom and 63 11 square meter studios with both bathroom and kitchenette. The typological innovation made on the single unit lies in the inclusion of a shared kitchenette with the neighboring room. This particular coupling of two studio rooms with a shared kitchenette was given the name Twodio from The Collective. Since the kitchen and counter are located in a windowless filtering room between the corridor and the rooms.

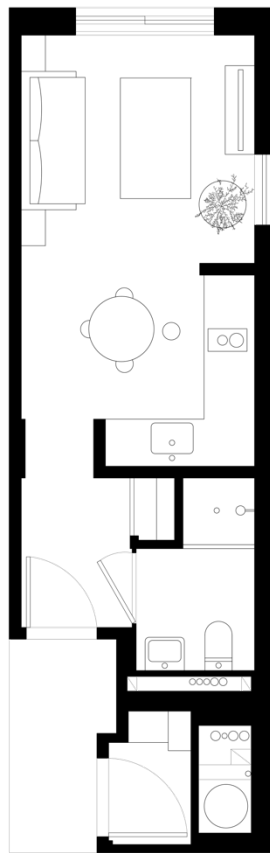


Figure 53 Unit plan of Ollie at Carmel Place. Drawing by the author

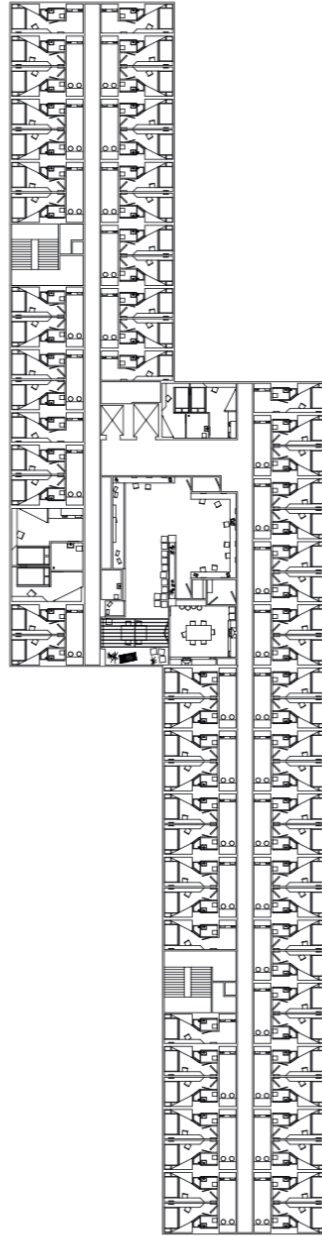


Figure 54 Typical floorplan of The Collective Old Oak, London. Source: The Collective LLP

	Location	Floor area (m ²)	Rental units (number)	Floor area rental units (m ²)
Ollie Carmel Place	Kips Bay, Manhattan (NY)	3.250	55	23 - 34
The Collective Old Oak	Ealing, London (about 30 min from city center)	15.900	550	9 - 12

	Floor area shared spaces (m ²)	Facilities for shared use	Public amenities (ground floor)
Ollie Carmel Place	835 (327 exterior + 508 interior)	Roof terrace, courtyard, laundry, gym, game and multimedia entertainment room, library	Cafe, event room
The Collective Old Oak	3.950 (2.950 office space + 1000 communal space)	Co-working, roof terrace, secret garden, laundry, gym, games room, cinema room, library, private event spaces, shared kitchens, private dining rooms, Spa	Retail, restaurants, cafe, Uber office

Table 3 The Collective and Ollie co-living spatial features. sources: The Collective LLC; Ollie.

Living space and collective space. Affordability issues

Co-living companies usually claim to be a ‘convenient’ alternative to the traditional rental flat, given the included services offered in most of the cases¹⁰³. Convenience differs from affordability not using quantitative aspects –as in Anglo-Saxon culture, the notion of affordable housing is implicitly proportioned to an indefinite income of the tenant– while in other European cultures the employment of the terms ‘social’ and ‘popular’ implies the intervention of the welfare state in a subsidiary form –e.g., *case popolari* in Italian and *logements sociaux* in French. The main difference is that convenience is more related to comfort and affordability to necessity.

Therefore, it is reasonable to stress the affordability of existing co-living projects as The Collective and Ollie at Carmel Place in order to verify in figures the *actual* affordability of convenience.

The analysis of affordability has been developed in two phases. First, all available data gathered from the official websites of Ollie and The Collective have been processed in order to confront them with comparable traditional units referred to the same urban contexts (Table 4). Then, a further step has consisted of the calculation of the value of affordability based on the average net income, considering as affordable the threshold of thirty percent of the average disposable income of London and New York. The data on the two cities have been provided by the analogous work on the affordable rent by Dömer of 2014 (Dömer, Drexler, and Schultz-Granberg 2014).

The results show the high rate of profitability of the investment in co-livings for the companies (Wellman 2018). The optimization and consequent reduction of the living units’ area make co-living extremely adapt to dense metropolises characterized by constant growing land values. Even including in the equation a proportioned part of the spaces shared by all the *co-livers*, the co-living model allows far higher prices per square meter than other ordinary rental options. Indeed, the spending on the dwelling demanded for an ideal user results much above the thirty percent commonly considered to be affordable– seventy-four percent for Ollie and fifty-three for The Collective (Table 4).

It has to be noted that the incidence of collective spaces and amenities on the final rent for tenants moves closer co-living to a commercial hospitality

¹⁰³ The website of Ollie reports convenience as one of the four pillars of co-living together with community, cost savings, and comfort. Source: <https://ollie.co/what-is-coliving/>. Accessed January 13, 2019.

product than a real estate one. As the traditional price per square meter analysis proves the format to be highly unaffordable for the space provided.

In the case of Ollie Carmel Place, the difference between the square meter value between co-living and an average rental flat in the same area is of 100US\$ against 66US\$ for half of the actual individual rented space (28 square meters against 63 square meters).

The rent of co-living includes both the usage of collective spaces both services, that in the case of Ollie amount to 15 square meters per person, and an estimated value of 350US\$ for the services¹⁰⁴.

According to the company, the rent of co-living is, therefore, lower of 610US\$ per month of a regular Craigslist room in the same area.

Even if the disposable data have an approximative accuracy in terms of inclusion of fees and taxes for both the inhabitants and the company, the incidence of collective space on the general economy of co-living represents a central node. From a mere financial point of view, the floor area of the unit of co-living (28,5 square meters) is assimilable to an average studio in New York and its price to a room in a shared flat as mentioned before (approx. 1500US\$) while the composition of the total collective space (835 square meters) is subdivided into areas devoted to shared capital among the residents, as the storage space and the laundry room, and areas for extra-residential activities as the café, the gym, and the multi-purpose room and terrace.

Differently from both a hotel and an apartment building, the collective space introduced by co-living borrows from both these categories, mixing 'necessary' domestic spaces expelled by the reduced unit with commercial ones. It could be argued that according to the position of the co-living in the city, the provided collective services, especially the ones more related to leisure (workspace, gym), could be found in the urban space instead of inside of the building. Therefore, the inclusion of such services in the monthly rent as 'convenient' is arguable depending on location to location.

One first evidence is, consequently, that the co-living model in its current form cannot be considered a response to the housing crisis in general, preferably a competitive solution for a specific target of users: solo or young couples of the urban middle-classes. (Table 4)

¹⁰⁴ The company measures its service price monthly cost savings as follows: weekly cleaning \$250, linen and towels \$20, premium TV \$35, Wi-fi \$30, events \$50, gym \$25. Source: <https://ollie.co/what-is-coliving/>. Accessed January 13, 2019.

	Average cost (€/month)	Average floor area rental units (m ²)	Average price/m ² private space (\$/month)	Average floor area private + shared spaces per person (m ²)	Average price/m ² private + shared space (\$/month)
Ollie Carmel Place	2.500	28,5	87,7	43,5 (28,5 + 15)	57,47
The Collective Old Oak	1.350 (£ 1.050)	10,5	129	17,5 (10,5 + 7)	77

	Cost/m ² of low-cost living space, low-cost price level (\$/month)	Average net monthly income (€)	Affordability: spending of the dwelling on the average income (%)	Included services (besides amenities in shared spaces)
Ollie Carmel Place	40 (34,53 euro)	3.350	74%	Wi-fi, TV, housekeeping, membership to social club, complete furnishings
The Collective Old Oak	24 (20,40 euro)	2.174	53%	Wi-fi, housekeeping, complete furnishings

Table 4 The Collective and Ollie co-living economic performances. sources: The Collective LLC; Ollie; Dömer, Drexler, & Schultz-Granberg, 2014.



Figure 55 Shared spaces of the Collective Old Oak. Source: The Collective LLP

PART 2

Chapter 4

Context; Italy

“Identity conceived as this form of sharing the past is a losing proposition: not only is there –in a stable model of continuous population expansion– proportionally less and less to share, but history also has an invidious half-life –as it is more abused, it becomes less significant– to the point where its diminishing hand-outs become insulting.” (Koolhaas 1995, 1248)

The inherited domestic landscape

The previous chapters investigated the development of rental housing since modernity. The related concepts of ‘housing question,’ ‘generation rent,’ *deregulation* and *commodification* described in Chapter 1 seem to cross all the developed countries in a globalized worldwide market. A widespread housing crisis related to macro-economic trends and shifting demographics led to doubt the efficacy of the dominant owner-occupied home for the nuclear family. Therefore, collective housing formats and communal housing emerge as a countertrend to the relentless real estate value growth in both commercial and ‘market resistant’ forms.

Italy absorbed several of these trends even with significant differences in terms of policy, culture, and its physical manifestations.

Starting from post-war reconstruction, the Italian housing system followed the typical path-dependent course well described by Bengtsson and Ruonavaara (Bengtsson and Ruonavaara 2010, 196). A reduction in public intervention, both in terms of housing provision and regulations, is followed by the expansion of homeownership, leading to a marginalized social housing sector once it released its assets on the market.

In general, the proportion between renters and homeowners, 18,5% against 71,9% (Pittini et al. 2017), is significant but not exhaustive to understand the structure and trends occurring on the private rental market. As shown by Baldini and Poggio, what characterizes most of the Italian housing system is the social institutions in charge of providing housing (Baldini and Poggio 2014). Self-provision and familiar networks have almost

the same impact as the market on the social production of homeownership. On the total allocation of dwellings irrespective of tenure, the family accounts for 39,1% of the total (Baldini and Poggio 2014, 321).

Coherently with the global appreciation of residential real estate values since post-war¹⁰⁵, housing prices grew steadily, while salaries stagnated (see Chapter 1). Plus, the Italian labor market is affected by a high rate of youth unemployment¹⁰⁶ leading more than half of the population aged between 18 and 34 to live with their parents¹⁰⁷. On the other hand, the elderly population is aging in oversized and often economically unsustainable houses.

Even if this condition may seem severe, Italy remains a country with a high median wealth per adult, mostly in the form of residential property¹⁰⁸. The nominal values of real estate are maintained at high levels also from the touristic allure of major Italian cities as revealed by the number of Airbnb listings in cities as Rome, Milan, Florence, and Venice¹⁰⁹.

Baldini and Poggio explained how this mainly static housing system preserved the country from the collapse after the Global Financial Crisis of 2009 (Baldini and Poggio 2014, 332), enhancing the arguments for the political and ideological protection of homeownership as a social stabilizer.

It must be noted that the high value of property in Italy is strictly chained not only with scarce supply but with a cultural inheritance towards preservation of entire city portions¹¹⁰. *Preservation* and *assetization* are two concurrent phenomena that locked value in the urban areas in an often-decaying real estate (Fabian and Munarin 2017).

¹⁰⁵ Knoll, Katharina, Moritz Schularick, and Thomas Steger. 2014. "No Price Like Home: Global House Prices, 1870 – 2012." CESifo.

¹⁰⁶ On January 27, 2020 under-25 unemployment rate was 28,8% against an average 14,3% of the EU-28. Source: Eurostat. https://www.google.com/publicdata/explore?ds=z8o7pt6rd5uqa6_&met_y=unemployment_rate&idim=country:it:es:de&fdim_y=seasonality:sa&hl=it&dl=it#!ctype=l&strail=false&bcs=d&nselem=h&met_y=unemployment_rate&fdim_y=age_group:y_lt25&fdim_y=seasonality:sa&scale_y=lin&ind_y=false&rdim=country_group&idim=country:it:es:de&idim=country_group:eu&ifdim=country_group&hl=it&dl=it&ind=false. Accessed January 27, 2020.

¹⁰⁷ Source: ISTAT

¹⁰⁸ In 2019 the median wealth per adult in Italy amounts to \$91,889, ranking the 16th position of the chart over 171 countries. Source: Credit Suisse. 2019. *Global Wealth Databook*.

¹⁰⁹ "Fattore sharing: l'impatto economico di Airbnb in Italia". Source: <https://www.airbnbcitizen.com/wp-content/uploads/2016/05/fattore-sharing-limpatto-economico-di-airbnb-in-italia.pdf>. Accessed January 27, 2020.

¹¹⁰ The first law protecting the built heritage and entire historical centers dates back to 1939, with the Legge Bottai. Later in the Italian Constitution of 1947, preservation will enter in the first articles (article 9) as a main mandate of the Italian Republic. See: Settis, Salvatore. 2012. *Paesaggio Costituzione cemento: la battaglia per l'ambiente contro il degrado civile*. Torino: Einaudi.

Observing the Italian cultural production regarding the urban around the 1970s, it is possible to note the palpable effects of the general conservative policy and vision on housing.

The focus of the younger generations of architects during the mid-phase of the economic boom shifted from the architectural object to industrial and critical design, as a reaction to the inflexible and conservative mainstream culture.

Archizoom and Superstudio¹¹¹ showcased their work of design and furniture at the seminal exhibition curated by Emilio Ambasz at the MoMa in 1972 (Ambasz and The Museum of Modern Art 1972), demonstrating how Italian design was consciously setting the aesthetics and icons of the *new domestic landscape* from a personal critical perspective. As noted by Leonardo Benevolo:

“Italian design is limited to single items and small environments and does not extend to environments in the wider sense. These much-admired items and microenvironments may be found in some of the ugliest cities in the world, where they spoil rather improve the surroundings.” (Benevolo 1972, 302)

Even the environments and urban proposals of the *radicals* played on the stark contrast between the background of the historical city or nature, refusing any integration¹¹².

Think of the collages of projects as *Italia Vostra* by Superstudio (1972), the replacing of Venice’s canals with a lawn in *Salvataggio del Centro Storico di Venezia dall’acqua alta* by 9999 (1971), and the black and white pattern filling of the loggias of the thirteenth century *palazzo* by Arnolfo di Cambio by Gianni Pettiina (1968)¹¹³.

The utopian projects for the *No-Stop City* (1971) or the *Monumento Continuo* (1969) were critical standings more than proposals, using the description of an alternative world to emphasize the contradictions of contemporary consumerism mass-society.

In the same years, the *actual* private city that was built was proceeding by operations like the one perpetrated by Silvio Berlusconi through his Fininvest, promoting the satellite neighborhood of Milano 2 (1970-1979),

¹¹¹ For a complete overview on the Italian *radical* movement see: Brugellis, Pino, and Centro di cultura contemporanea Strozzi, eds. 2017. *Radical Utopias*. Habitat 16. Macerata: Quodlibet.

¹¹² In the words used by Archizoom in their proposal for the 1972 MoMa exhibition: “*Nature and the city would run on two parallel tracks, without interfering with one another; while in the middle-class city, nature seems to the citizen to be the perfect reconciliation of the industrial system with natural laws, something to be used as a means of consolation, on our hypothetical ‘homogeneous city’, nature is no longer an urban episode, but recovers its own complete autonomy*” (Ambasz and The Museum of Modern Art 1972, 238)

¹¹³ The three projects can be found in the catalogue of the 2018 exhibition *Radical Utopias* (Brugellis et. al 2018)

configured as a middle-class compound of red brick three-story residential buildings surrounded by greenery and artificial lakes¹¹⁴.

Even if dependent on a specific economic conjuncture of the time, this kind of project reveals the evident hiatus between the local and national politics on the city and the intelligentsia.

This *alternative modernity* was also reflected within the Italian academia of the same years. Even if politically aligned with the left –the PCI¹¹⁵– the approach of leading figures as Ernesto Nathan Rogers, Aldo Rossi, and Giorgio Grassi, were putting forward preservation and the *persistence* of the historical city –and of historicity itself– in front of all other urgencies. The reductionist label of ‘neo-liberty,’ ‘postmodernism,’ or ‘regional criticism’ depicts only partially the whole picture. The effects of the self-claimed autonomy of the architectural discipline (Aureli 2008) and the preservation of the historic apparatus of the city –the *persistenze ambientali* theorized by the long-lasting director of Casabella-Continuità Ernesto Nathan Rogers¹¹⁶– were not in contrast with the trajectory of the static Italian housing system.

In *Architettura della città* Aldo Rossi was *de facto* describing the stratified Italian urban fabric, where the *area residenza* (residential area) already absorbed centuries of densification, replacement, and demolition (Rossi [1966] 1987, 80), outlining an adaptive static structural system rather than an open-ended one.

For several commenters, the Italian architectural and political-cultural debate around the 1970s represents the apical expression of the countercultures and mainstream cultures still influencing the political and urban discourses (Baukuh 2012). As a result, the combined issues of urban preservation and conservatism led to a lack of active housing policy, the rise of the no-profit in place of welfare, the semi-private instead of public governance, and local adhocacy instead of a national plan.

¹¹⁴ Cousin, Bruno. 2014. "Refonder Milan : Silvio Berlusconi et la promotion de nouveaux quartiers pour les classes supérieures". *Questions De Communication*. 25 (1): 41.

¹¹⁵ Durbiano, Giovanni. 2000. *I Nuovi Maestri: Architetti Tra Politica e Cultura Nel Dopoguerra*. 1. ed. Polis. Venezia: Marsilio.

¹¹⁶ See: Bonfanti and Porta 2009.

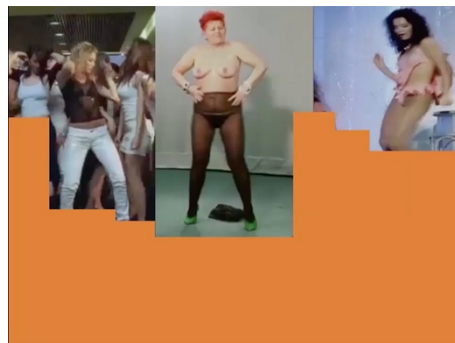
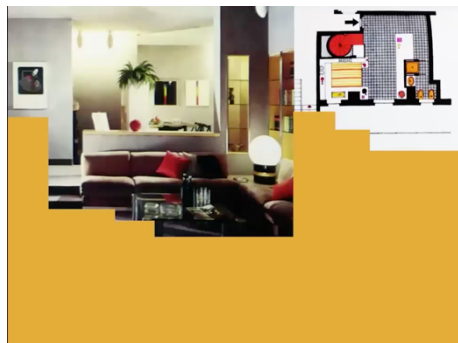
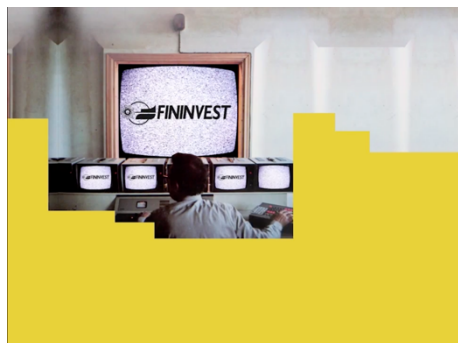
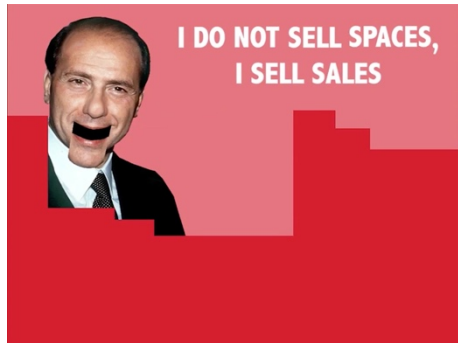


Figure 56 Office for Political Innovation. Video stills from *"SALES ODDITY. Milano2 And The Direct-To-Home TV Urbanism"*. 2014. Monditalia, Biennale di Venezia



Figure 57 Gianni Pettena. *Dialogo Pettena-Arnolfo*, San Giovanni Valdarno. 1968

4.1 Building the ordinary city

The role of institutional landlords

In recent years, scholars from urban studies and urban geography engaged in a debate on the ‘ordinary city.’ This concept acquired different meanings that would be misleading to address in this context, as here the focus is on the specific parts of the city built –mainly during the *trente glorieuses*– explicitly to host the urban middle-classes. Works as the one of Amin and Graham or Robinson interpret the ordinary city inside the debate on globalization and its epistemological fallouts on the urban (Amin and Graham 1997; Robinson 2006). No matter if with a positive or negative meaning, the ordinary city of urban geography plays a deconstructive role in post-colonial and mainstream readings of the clichés of the global city. On the contrary, in this case, the ordinary city is used as a synecdoche to address all the urban areas built for the middle-classes in the rapidly urbanizing cities of the last century. It is not necessarily dependent on a specific position related to the urban center (e.g., suburban) instead on the quality of the urban fabric built of standard housing fulfilling the market propositions of domestic comfort and modernity for the middle-classes since the 1920s.

In its development from the early interventions, the ordinary Italian city increasingly acquired a degree of *genericity* due to market dynamics, even if never becoming an actual Generic City (Koolhaas 1995). Even if speculative developments from the eighteenth and nineteenth century could be addressed as an ordinary city –see the *Hausmanianism* described in Chapter 2– the structures of the labor market and access to personal mobility of mass consumerist economy find their first manifestations in the inter-war period¹¹⁷.

Several contributions built a consistent scholarship, shedding light on the fundamental role played by the post-war Italian ordinary city in the construction of entire urban areas (Caramellino and Sotgia 2014; De Pieri et al. 2014; Caramellino et al. 2015; Caramellino and Zanfi 2015). The theory put forward is that the observation of the realized housing complexes and neighborhoods for the middle-classes highlights the ‘other-half’ of the urban praxis, the other *standard* city built alongside the massive public housing plans.

¹¹⁷ There is a vast literature on the inception of the metropolitan culture and its consequences on the economy and society. In particular, referring to the shift of Berlin during Weimar’s Republic towards a white-collar city. See: Simmel 1971; Hilberseimer 2012; Benjamin [1935] 2008.

The actors involved acquire a particular relevance as often their original business aim was not real estate¹¹⁸. Private companies, as FIAT or ENI, banks, foundations, and most importantly, insurance companies played a crucial role in public-private negotiated urbanism during the twentieth century (Caramellino et al. 2015). The institutional investment in real estate was often initiated in order to build employee housing. However, increasingly it shifted to long-term investments on apartment buildings to let on the private market.

Institutional landlords play within the market one of the most conservative roles when acting as developers since their real estate revenues are aimed to guarantee funds for the company shareholders and customers. In the case of insurance companies, this mechanism was required by law since the early twentieth century¹¹⁹. A significative part of their technical reserves had to be invested into rental real estate (*immobili a reddito*) in order to assure cash flow from a 'secure' asset.

This means a different temporal timeframe of investment and a focus on real estate maintenance shared more with a housing association than a private developer. Therefore, durability and flexibility become a necessary aspect of the asset portfolio. The speculative model of developers differs mainly because the revenue is expected to happen by upfront sales once construction ends. This means mainly market attractiveness but not necessarily a durable quality of the building (Derrington 2018, 98).

In the early 2000s, property companies and real estate branches of several institutions started to feed the private market dismantling their real estate. The public pension company INPDAP¹²⁰, the largest institutional landlord in Italy until 2008, sold on the private market over forty-three-thousand units during the first years of the 2010s (Sidief 2015, 57).

Comparing the Italian context to other European countries, big players as property companies find narrow space on the rental market as housing providers. To give a scale comparison, the largest private property company in Germany owns more than thirty times the units of its Italian equivalent¹²¹.

Today, property companies are marginalized in a housing market dominated by individuals and families acting as landlords. In figures, large-

¹¹⁸ An exception is represented by the major public-private developer, the Società Generale Immobiliare

¹¹⁹ For the Italian law this is regulated by the Codice delle Assicurazioni Private until 2008

¹²⁰ Istituto nazionale di previdenza e assistenza per i dipendenti dell'amministrazione pubblica. A public institution founded in 1994 to collect different public workers pension companies. From 2011 it was renamed and incorporated in the public INPS.

¹²¹ The major Italian property company owns 9.000 units, while the major German one owns over 350.000 units. (Sidief 2015)

scale landlords represent only nine percent of the total rental offer in Italy (Sidief 2015, 123).

It must be noted that in urban and metropolitan contexts, these figures can change radically, as in the case of Milan, almost eighteen percent of the total rented units are owned by a large-scale¹²² landlord (Cognetti and Delera 2017, 125).

According to Cognetti and Delera research on the rental market dynamics in Milan, institutional landlords can be summarized in five categories as follows: a) foundations and charities; b) banks and insurances; c) real estate companies; d) service companies; e) housing cooperatives (Cognetti & Delera 2017, 126).

The differences between these landlords may be significant, but the consistency and development of the real estate of institutional landlords as banks and insurances (b) can be observed as a proxy for middle-class housing development in Italy. This is mainly for two reasons. The first, because from its origins their real estate was conceived *for* and *from* the market, while charities and foundations (a) and co-ops (e) have always devoted their buildings to specific social groups with the final goal of sustainability if not self-sufficiency in some cases (Quinzii & Terna, 2012). Secondly, the specific architectural layout of buildings owned by banks and insurances often include a mixed program of residential, commercial, and office spaces, often changing and adapting over the years.

Furthermore, the housing stock of insurers and banks is mostly concentrated in strategic urban areas –often central– acquiring a crucial role to describe the approach towards large scale urban renewal operations in different historical phases (De Pieri et al. 2014; Gaeta 2013).

¹²² In Italy, a large-scale landlord is defined by law as a single entity owning more than one-hundred units. According to the Law 9 n.431 1998. Source: Cognetti & Delera 2017, 125.

An insurance company acting as a housing agency

The present study focuses on the residential real estate of the insurance company Reale Mutua¹²³. The company –established in Turin in 1828– has a long-standing history preceding the Unification. Its real estate operations started consistently from the 1880s in the city of Turin, and later all over the national territory and abroad.

Currently, the residential portfolio of the company is composed of around forty-five entire buildings and a vast number of individual dwellings, resulting in more than four-thousand-and-five-hundred units for rent in total, distributed principally between Turin and Milan. The scale of this figure is relevant to the Italian private rental market, as the largest Italian property company, Sidief Spa, manages nine-thousand units initially built for the employees of the Italian central bank¹²⁴.

The development of Reale Mutua's real estate, purposely built for rent and still available on the market, serves as a mirror to evaluate the parallel history of the ordinary Italian city.

What are the equivalents of the *Mietskaseme* or the *Parisian Flat* investigated in Chapter 2 in this context? How did the ordinary Italian city absorb or reject the internationalist impetus of modernity? What kind of domestic standards were developed in these projects?

The objective is not to build an alternative history to the ones already told by Tafuri and Benevolo¹²⁵, but to offer an alternative point of view. The evolution of this real estate starts from the central stage of both the architectural and political history of Italy, ending up behind the curtains of urban speculation on the verge of the 1980s.

Nevertheless, the case of Reale Mutua, together with other institutional and private landlords building the ordinary city, follows the 'rules' of the political and ideological climate set after the reconstruction by

¹²³ Established in 1828 in Turin as "Società Reale di Assicurazioni generale e mutua contro gli incendi". Initially aimed at fire prevention, it subsequently expanded to all the branches of insurance system and also the financial one. In 1859 it opens in Milan, followed by 1870 in Rome and 1889 in Naples. Currently the company is named as Reale Group, comprehensive of several branches. The property management branch is currently represented by Reale Immobili. From 1933 the headquarters are moved in via Corte d'Appello, in a steel structure office building built by Armando Melis de Villa. The architect will be involved also in the construction of the Torre Littoria in Piazza Castello (1936) and other residential buildings in Turin for the company.

¹²⁴ Source: (Sidief 2015)

¹²⁵ See: Tafuri 2013 and Benevolo 1963; 1972. In addition to these works employed in this work as primary historical readings of the period, it is worth to mention other fundamental references as: Bartolini 2001; Dal Co 1997; Irace 1996.

centrist politics. Therefore, it serves to have a focus on the evolution of the notion of ‘comfort’ and domestic ‘standard’ of the middle-classes.

From its first developments in Turin, the company expanded its operations in Milan mainly during the reconstruction, and in Rome with the acquisition of high-end properties.

This study proposes a tripartition in the chronology of this history. Plus, a ‘pre-history’ unfolding in Turin a few years after the establishment of the unitary Kingdom of Italy.

The first period is the one spanning between 1925 and 1945 when Reale Mutua erects its landmark buildings with the assistance of the Fascist government, its headquarters in via Corte d’Appello (1933) and the Torre Littoria (1934). Both the works of Armando Melis de Villa¹²⁶ are inscribed in the complicated stylistic quest between rationalism and classicism disputed between architects during the fascist dictatorship (Ciucci 2002).

The second period is the most relevant in quantitative terms. It corresponds to the economic boom and the sheer housing production of the post-war reconstruction occurring between 1945 and 1965. Reale Mutua shifts its attention to less prestigious housing complexes to differentiate the risk and the scale of investment, also promoting suburban projects for the lower middle-classes. In the same years, Italy experienced the ‘populist’ architecture of the Ina-Casa Plan (Tafuri [1982] 2013), and the effects of the *Manuale dell’architetto* (1946) stimulating more an artisanal construction sector than an industrial one. The Torre Velasca by BBPR (1957) and the works by Piero Bottoni in Milan represent two counterexamples of residential interpretations of modernity of the epoch.

The last period –from 1965 to 1980– is characterized by the last phase of economic acceleration, while the construction sector slows down¹²⁷. The operations of Reale Mutua are mainly intermediated by ad-hoc real estate companies in Milan, with as an outcome large residential complexes in substantial continuity with the *pop modern* buildings of the 1960s (Tosi 1994).

¹²⁶ Armando Melis de Villa (1889-1961) was an architect and urbanist active mostly in Turin. He taught as professor at Politecnico di Torino from 1936 to 1959. He was the director of the Italian magazines *Urbanistica* (1932-44) and *L’architettura italiana* (1933-44). Together with the works for Reale Mutua, he participated to numerous commissions for the general masterplans of Monza, Aosta, Vigevano, and Pistoia among the others. His membership of the INU (Istituto Nazionale di Urbanistica) distinguished him for his theoretical contributions as an urbanist before the national law (legge urbanistica) of 1942. (Melis and Guerrisi 1936)

¹²⁷ Source: <http://www.reconomics.it/costruzioni-e-crescita-economica-in-italia-1950-2011/>. Accessed January 20, 2020

Early urban interventions

The first residential realizations of the company start with several interventions at the end of the 1800s on the axis of via Garibaldi in Turin, one of the main commercial streets of the city in proximity to the central palaces of the Savoia family and the municipal government.

Comparing the urban evolution of Turin to the other European cities and capitals of the time, the city was growing fast but still with a contained population of 210000 –half of Naples or Rome in 1871¹²⁸.

This justifies the less radical transformation of large portions of the urban fabric, instead of the implementation or replacement on the existing urban grid of urban blocks. The outcomes were generally more modest than the ones of major European urban expansions. Nevertheless, the observation of the two interventions of the late 1800s of Reale Mutua, and still part of the residential portfolio of the company, highlights the average bourgeoisie apartment of the time in a core city of the Kingdom.

The case of via Barbaroux¹²⁹ (1888) (Figure 60), built on a triangular lot, shows the influence of the Parisian model of the *maisons à loyer*, with a balance between comfort and optimization of space (see Chapter 2.1). In its cross-section, the building respects the Parisian model, with the typical vertical stratification of commercial and office space on the ground floor and mezzanine, a *piano nobile* with higher ceilings, two additional floors with regular height ceilings and two apartments per floor, and an inhabitable mansard.

The organization of the typical floor plan is similar to the plans of Daly's *l'Architecture privée* (Daly 1864), with the pivotal role of the *antechambre* to separate public and private parts of the house –the servitude rooms from the family ones. Differently from the Parisian cases, we can notice the absence of the separate service staircase, which was one of the fundamental features for all the Parisian Haussmanian experience. The domestic rooms are disposed in an enfilade layout as the bare loading structure is organized on the perimeter and a central spine wall (Figure 61).

The second development, ten years later than Via Barbaroux, insists on the lot today hosting the headquarters of Reale Mutua. In 1893, the Società Reale di Incendi assigned to the engineer Peyron the project of a narrow housing building on via Garibaldi. Even if it is the smallest property

¹²⁸ The national census of 1871 registered a population of 210.873 in Turin, 489.008 in Naples, and 433.044 in Rome. Source: ISTAT

¹²⁹ 1893_TO_Garibaldi. Source: Archivio Storico Reale Mutua, Turin. Folder 100.n-42*/21FF*/9/10/12FF

1. 1888_TO_Barbaroux
2. 1893_TO_Garibaldi
3. 1908_TO_Re_Umberto
4. 1903_TO_Abruzzi
5. 1928_TO_Cavour
6. 1929_TO_Umberto
7. 1931_TO_Torre_Littoria
8. 1936_TO_Arcivescovado
9. 1950_TO_Garibaldi
10. 1955_TO_Magenta
11. 1962_TO_Giulio_Cesare
12. 1967_TO_Frejus
13. 1968_TO_Vittorio

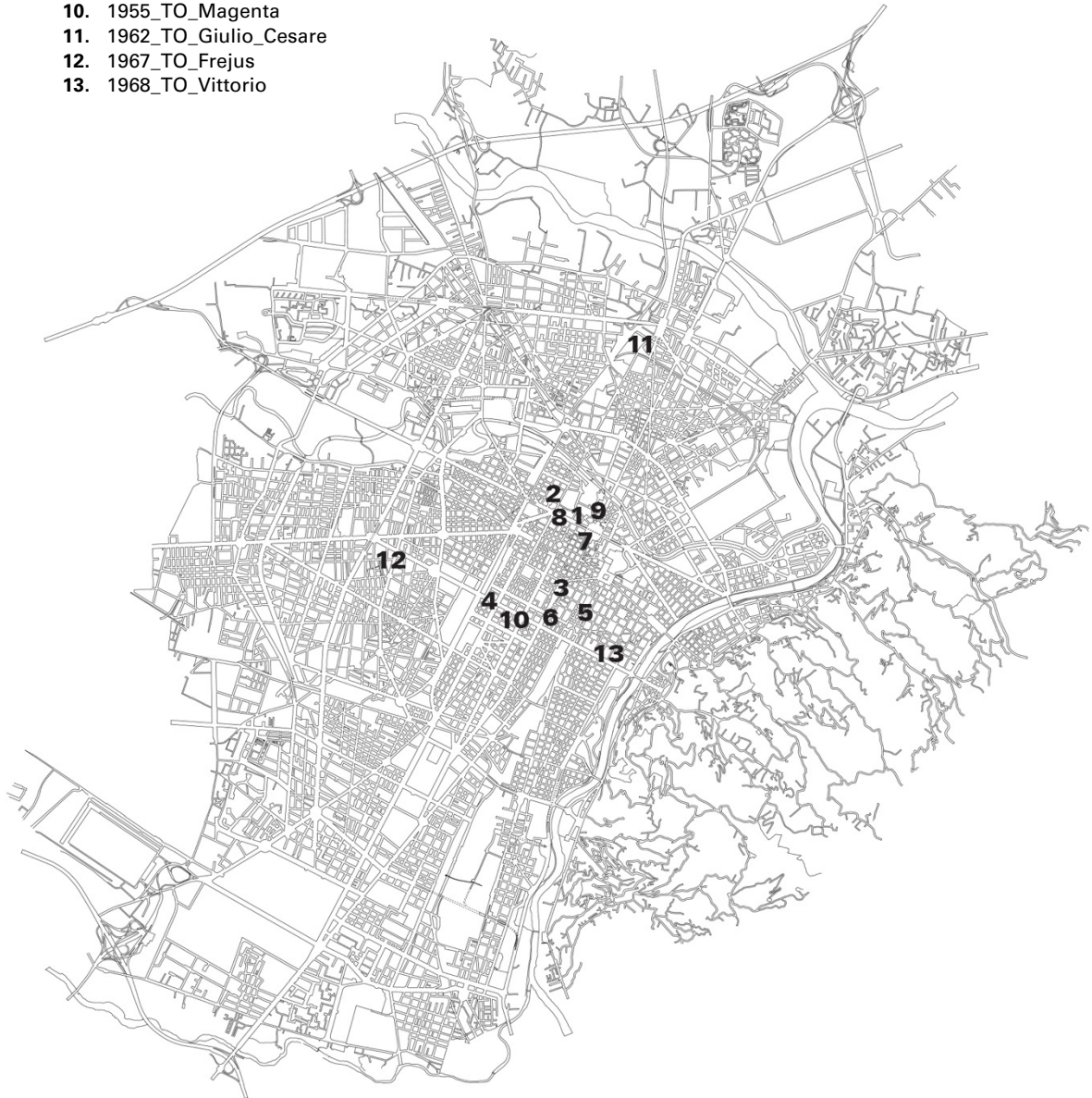


Figure 58 Location of Reale Mutua residential buildings in Turin. Drawing by the author.

1. 1850_MI_Venezia
2. 1955_MI_Piazza_Liberty
3. 1960_MI_Pattari
4. 1960_MI_senato_spiga
5. 1960_MI_santa_maria_porta
6. 1963_MI_Lazzaro_Palazzi
7. 1963_MI_Ruggiero_Lauria
8. 1964_MI_Tito_Speri
9. 1964_MI_Magenta
10. 1964_MI_Tolstoi
11. 1966_MI_Puccini
12. 1969_MI_Elba
13. 1969_MI_Ferrucci
14. 1970_MI_Sempione
15. 1980_MI_Venezia



Figure 59 Location of Reale Mutua residential buildings in Milan. Drawing by the author.

	1850-1925	1925-1945	1945-1965	1965-1980
MILAN	1850_MI_Venezia		1955_MI_Piazza_Liberty 1960_MI_Pattari 1960_MI_senato_spiga 1960_MI_santa_maria_porta 1963_MI_Lazzaro_Palazzi 1963_MI_Ruggiero_Lauria 1964_MI_Tito_Speri 1964_MI_Magenta 1964_MI_Tolstoi	1966_MI_Puccini 1969_MI_Elba 1969_MI_Ferrucci 1970_MI_Sempione 1980_MI_Venezia
TURIN	1888_TO_Barbaroux 1893_TO_Garibaldi 1908_TO_Re_Umberto 1903_TO_Abruzzi	1928_TO_Cavour 1929_TO_Umberto 1931_TO_Torre_Littoria 1936_TO_Arcivescovado	1950_TO_Garibaldi 1954_TO_Risorgimento 1955_TO_Magenta 1962_TO_Giulio_Cesare 1967_TO_Frejus	1968_TO_Vittorio

Table 5 List of the residential buildings of Reale Mutua distributed in Turin and Milan. Source: Archivio Storico Reale Mutua, Turin.

The list of the selected cases was retrieved at the Archivio Storico Reale Mutua in Turin. For practical reasons the original archival codes have been converted in the form of date-city-address (DDDD_PP_Address)¹³⁰.

¹³⁰ The complete list of the archival sources is available at the archive's website: <https://www.realemutua.it/Shared%20Documents/Archivio%20storico%20reale%20mutua%20-%20schema%20di%20ordinamento.pdf>

in terms of square meters of the complex, it was a priority of the company to provide itself a 'face' by renovating the façade on via Garibaldi. The building is a traditional one with no particular features, but it is worth noting how its designer presented the project. In a large-format book of drawings (Figure 62), the main concern of Peyron is not to show only the architectural features, instead to show clearly the quantities of the areas and the rentable space. In his *Cabreo* detailed tables of each floor of the complex give the figures on which the company could calculate its rents, values, and yields.

At the turning of the nineteenth century, Italian urban expansion was prompted by actors connected to the new centralized bureaucratic apparatus in Rome. In the early 1900s, the Italian State gave birth to several institutions devoted to the production of housing for its employees and the market. Among these, it is worthy of mentioning the Banca d'Italia (1894), which currently owns one of the largest professional rental housing company in Italy¹³¹; INA¹³² (1912), that will launch the most extensive national public housing plan from 1949 to 1963¹³³; INCIS¹³⁴ (1924), founded to build housing for public employees.

Reale Mutua in the same years contributes to the expansion of the city of Turin in the new neighborhood of Crocetta. Two interventions of 1903 and 1908 contribute to the completion of the urban blocks, with a dimension of roughly seventy meters by seventy meters, in two corner projects. The first in Corso Duca degli Abruzzi (1903)¹³⁵, on a corner layout comparable with a *mietskasern* of Berlin, using the typical Mitteleuropean device of the *erker* on the urban corner with a vertical row of bow windows (Figure 64).

In the later intervention, the resulting exedra from the intersection between Corso Re Umberto¹³⁶ and Corso Sommelier gives place to a curved façade of the building with early liberty motifs (Figure 66).

In both cases, each floor was subdivided in two flats originally, with a single staircase, but with an average flooring of around 150 square meters. This kind of units reflected what at the time was perceived as a balanced investment for the company in terms of revenue and plot optimization. The central spine bearing-wall structure allowed for a constant redefinition of the transversal partitions in case one additional room was required.

¹³¹ Managed through the 100% owned Sidief.

¹³² Istituto Nazionale delle Assicurazioni. (National Insurance Institute)

¹³³ The piano "Ina-Casa". Which produced almost a million of public housing units during its 14 years of life. (Di Biagi 2001)

¹³⁴ Istituto nazionale per le case degli impiegati statali. (National Institute of Housing for Public Employees). In 1973 all the housing stock was transferred to local authorities and municipalities. (Caramellino and Sotgia 2014)

¹³⁵ 1903_TO_Duca_degli_Abruzzi. Source: Archivio Storico Reale Mutua. Folder 100.b-1/2/3

¹³⁶ 1908_TO_Umberto. Source: Archivio Storico Reale Mutua. Folder 100.e-1/2FF/3FF

Nowadays, most of these early interventions are used as offices for professionals and small-scale companies.



Figure 60 Section of the *immobile da reddito* in via Barbaroux in Turin. 1888. 1888_TO_Barbaroux.
Source: Archivio Storico Reale Mutua. Folder 100.j-1FF

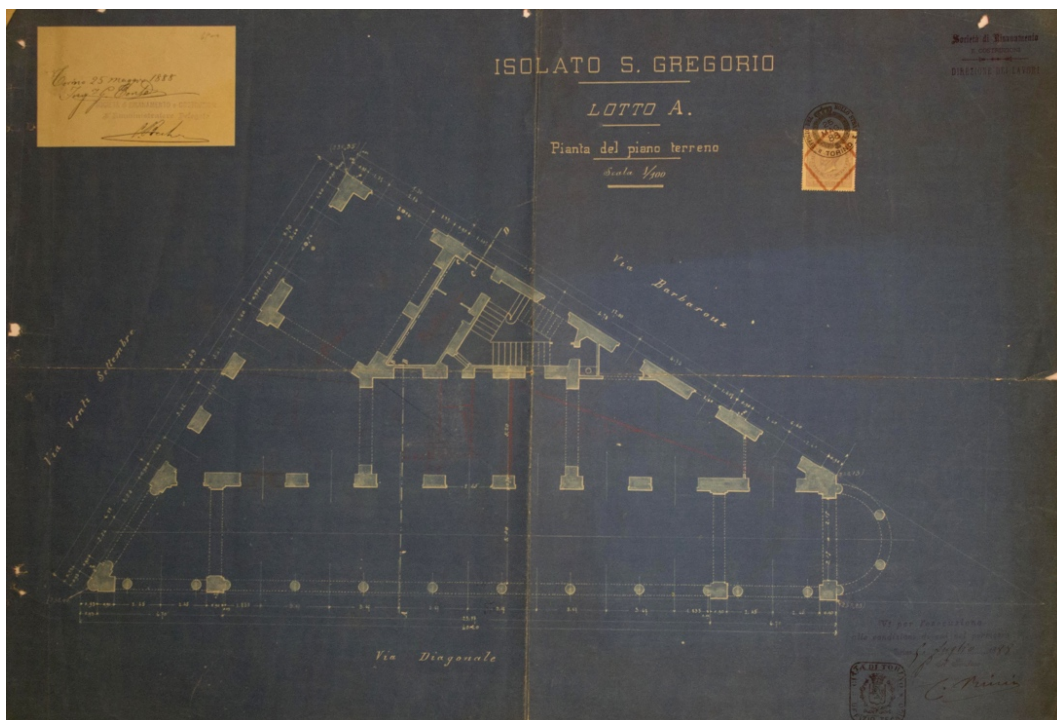


Figure 61 Plan of the immobile da reddito in via Barbaroux in Turin. 1888. 1888_TO_Barbaroux. Source: Archivio Storico Reale Mutua. Folder 100.j-1FF

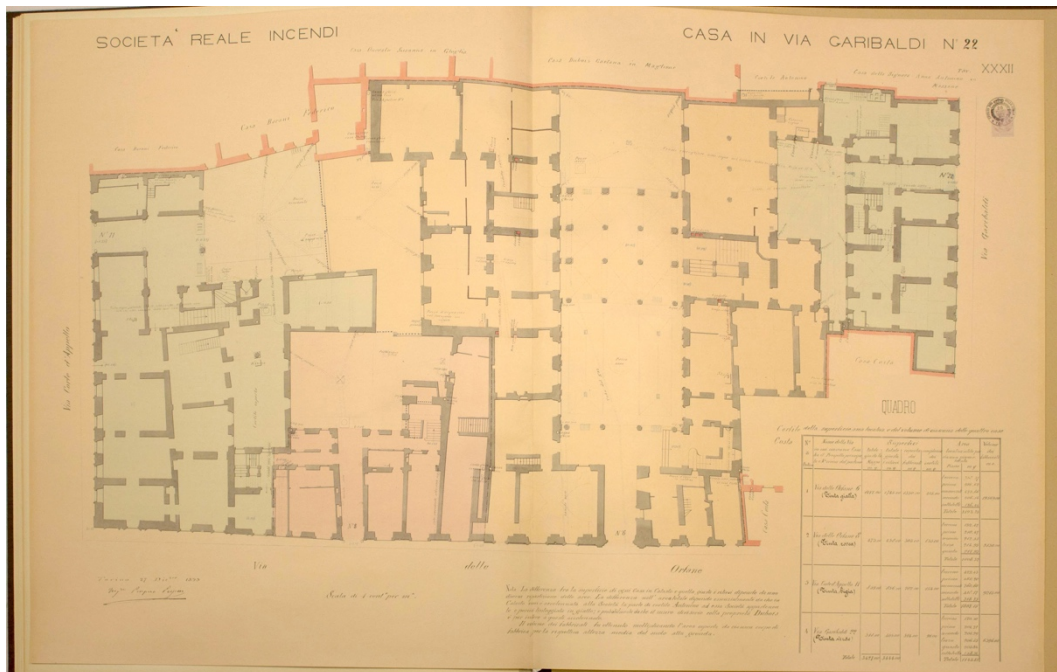


Figure 62 Plan of the groundfloor of the renovation by Peyron in via Garibaldi in Turin. 1885. 1885_TO_Garibaldi. Source: Archivio Storico Reale Mutua. Folder 100.n-11FF/13FF/17/26/44

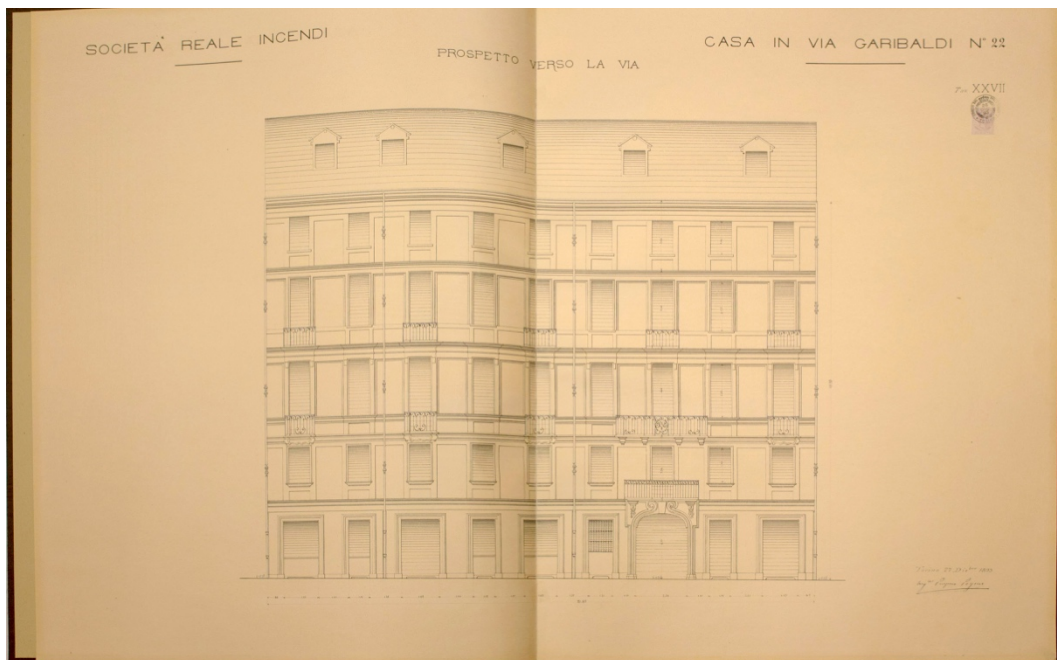


Figure 63 Elevation of the renovation by Peyron in via Garibaldi in Turin. 1885. 1885_TO_Garibaldi.
Source: Archivio Storico Reale Mutua. Folder 100.n-11FF/13FF/17/26/44



Figure 64 Exterior of 1903_TO_Duca degli _Abruzzi. Picture by the author

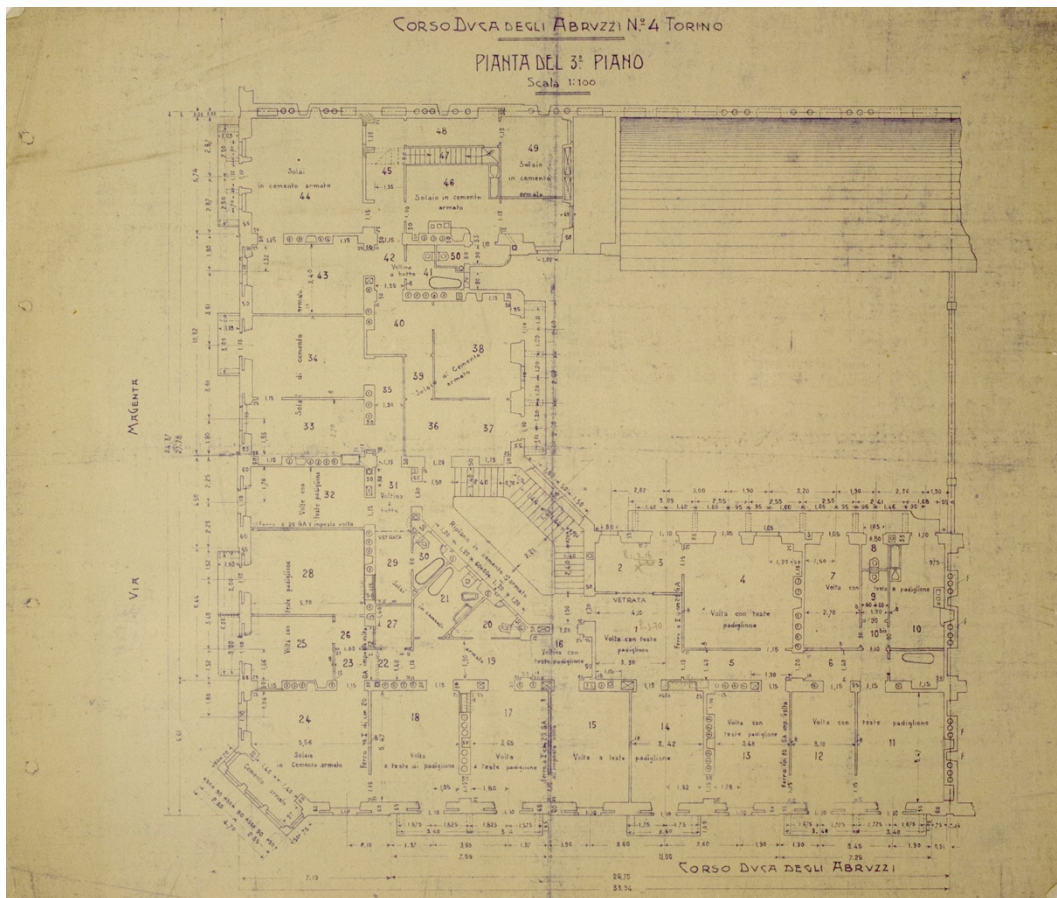


Figure 65 Plan of 1903_TO_Duca degli Abruzzi. Source: Archivio Storico Reale Mutua. Folder 100.b-1/2/3.

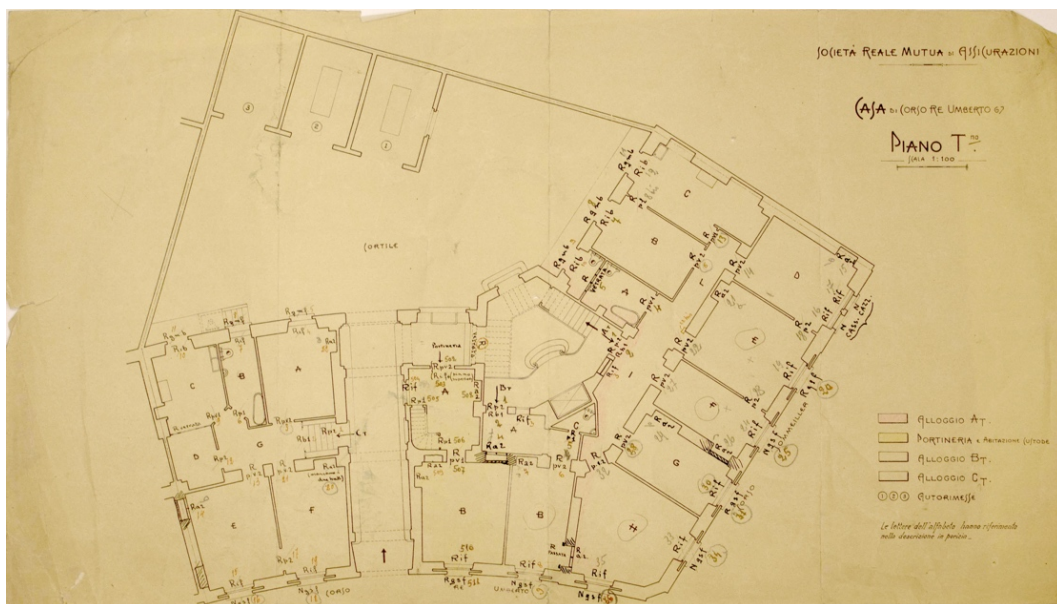


Figure 66 Plan of 1908_TO_Umberto. Source: Archivio Storico Reale Mutua. Folder 100.e-1/2FF/3FF

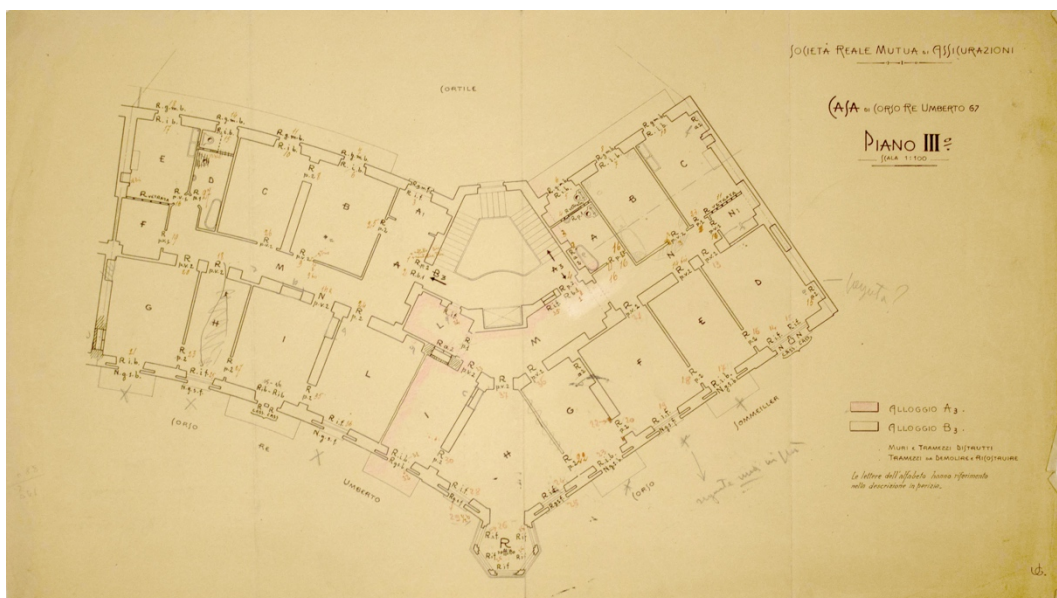


Figure 67 Plan of 1908_TO_Umberto. Source: Archivio Storico Reale Mutua. Folder 100.e-1/2FF/3FF

1925-1945

During the fascist regime period, the activity of Reale Mutua was at the center of the profound transformations occurring in most Italian cities. In this period, the company will instruct Armando Melis de Villa as the architect of all its main operations in Turin. In less than a decade, the architect will build two bourgeoisie apartment buildings in 1928 and 1929, the iconic Torre Littoria in piazza Castello (1934), and the headquarters of the company in via Corte d'Appello (1933).

These interventions follow stylistically and typologically –with some exceptions– the ethos of the time. As noted by numerous contributions from urban historians, Italy had a complicated and often contentious internal debate on the employment of the modern canon developed in the early twenties in the Weimar Republic (Benevolo 1972, 104). According to Benevolo, modern architecture arrived in Italy as late as 1926 with the first expositions of the MIAR (Movimento Italiano Architettura Razionalista) aiming to import in Italy the ideas of orthodox modernists as Walter Gropius (Ciucci 2002). The often dichotomic approach between the Roman classicism of Piacentini and the rationalism of Northern architects –Terragni, Figini, and Pollini, and Bottoni, among the others– resulted in a hybridized and local experience.

Even in terms of housing provision, the institution of the Istituti Fascisti Autonomi Case Popolari (Autonomous Popular Housing Fascist Institutes) resulted in new workers districts mainly in a vernacular and eclectic style¹³⁷, with the sole exception of the Fabio Filzi neighborhood in Milan by Franco Albini (1938) –an urban composition of slabs breaking the structure of the compact block (Tafuri [1982] 2013).

The residential built projects by Armando Melis of 1928 and 1929 – the casa Koelliker¹³⁸ and the Palazzo SCEIAT¹³⁹– substantially respect the urban grid structure of dense blocks. Service courtyards lit the apartments and serve as parking spaces, while the exterior façades are treated with Art Déco motifs and a reductionist classical decorative apparatus (Figure 68).

The dimensions of the apartments in both the projects reach two-hundred square meters for a single unit, highlighting the upper-class target tenant that the company was seeking.

¹³⁷ For example, the Garbatella neighbourhood in Rome realized between 1920 and 1935.

¹³⁸ 1928_TO_Cavour. Source: Archivio Storico Reale Mutua. Folder 100.m-1

¹³⁹ 1929_TO_Umberto. Source: Archivio Storico Reale Mutua. Folder 100.s-1FF/2s

The major urban intervention both in terms of square meters both in terms of impact was the isolato Sant'Agostino with the landmark high-rise Torre Littoria¹⁴⁰ (Figure 70) –part of the renovation of the axis of Via Roma– started in 1931 and ended in 1934 with the project of Marcello Piacentini. As historians widely discuss this episode as one of the significant interventions of fascist urban renovation outside Rome (Ciucci 2002), it is worth noting that the role played by Reale Mutua as an investor was crucial. The idea to incorporate on via Roma two portico wings of 5,8 meters and a minimum height of seven meters was embedded in the General Masterplan of 1930 (Ciucci and Muratore 2004, 361). However, the resources to realize this grand plan were demanded mainly to private enterprises. In this public-private collaborative spirit, Armando Melis was called to reconfigure the whole block facing piazza Castello, designing the eighty-five-meters-high Torre Littoria. The apparent *pastiche* resulting by a classical building on the foreground and the fascist Piacentinian style tower derives by the rules of the Plan to keep the facing buildings on via Roma and on the squares at a maximum height of twenty-one meters –in respect of the existing buildings on the seventieth-century Piazza San Carlo. Melis employed a steel structure on the new volumes, with a travertine and brick cladding, the typical materials of the fascist institutional architecture. The resulting tower is the first steel structure high-rise realized in Europe at the time, and for years the second highest building of Turin after the Mole Antonelliana.

Built with the deliberate willingness to represent the regime symbolically, the Torre Littoria still performs as an *asset* of Reale Mutua's portfolio, hosting mainly office spaces and residential units.

Reale Mutua was also active in the second part of the realization of the new via Roma. After the competition of 1933, the municipality delegated to Marcello Piacentini the project of the blocks connecting the station of Porta Nuova with Piazza San Carlo. The resulting urban structure continues the first part of via Roma with the portico wings and the eave streetscape set at four floors. The urban rules allowed for a setback that will characterize all the blocks realized in this area, climbing up to seven floors with terraced sections. The project promoted by Reale Mutua on via dell'Arcivescovado, cornering via Roma (Figure 72), follows these rules in two parallel buildings connected on the first three floors, with larger apartments on the porticoed side and one-bedroom ones on the other side. The terraced layout allows from the fourth floor for each flat on the upper floor to benefit from a longitudinal terrace.

¹⁴⁰ 1931_TO_Torre_Littoria. Source: Archivio Storico Reale Mutua. Folder 100.o

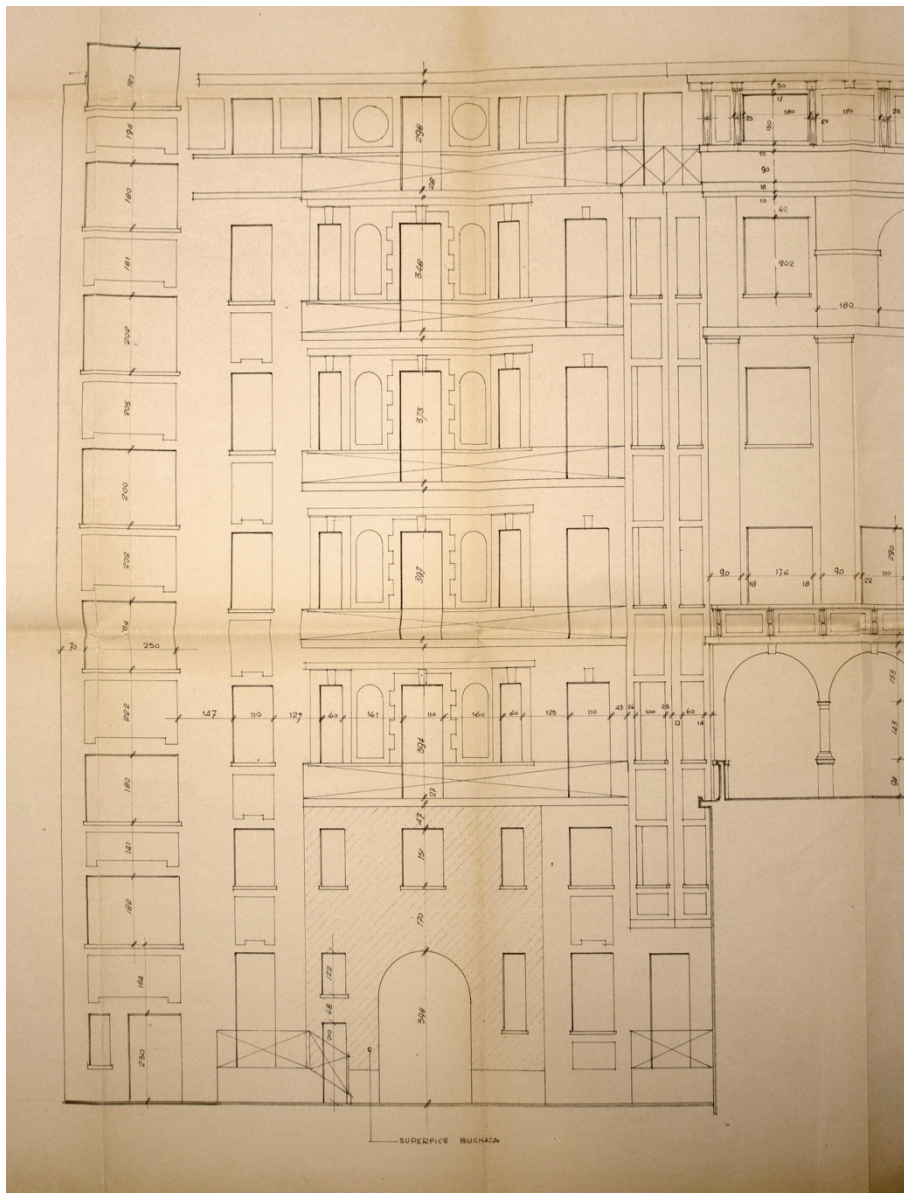


Figure 68 Elevation of 1929_TO_Umberto. Source: Archivio Storico Reale Mutua. Folder 100.s-1FF/2s



Figure 69 Exterior picture of 1929_TO_Umberto. Picture by the author.

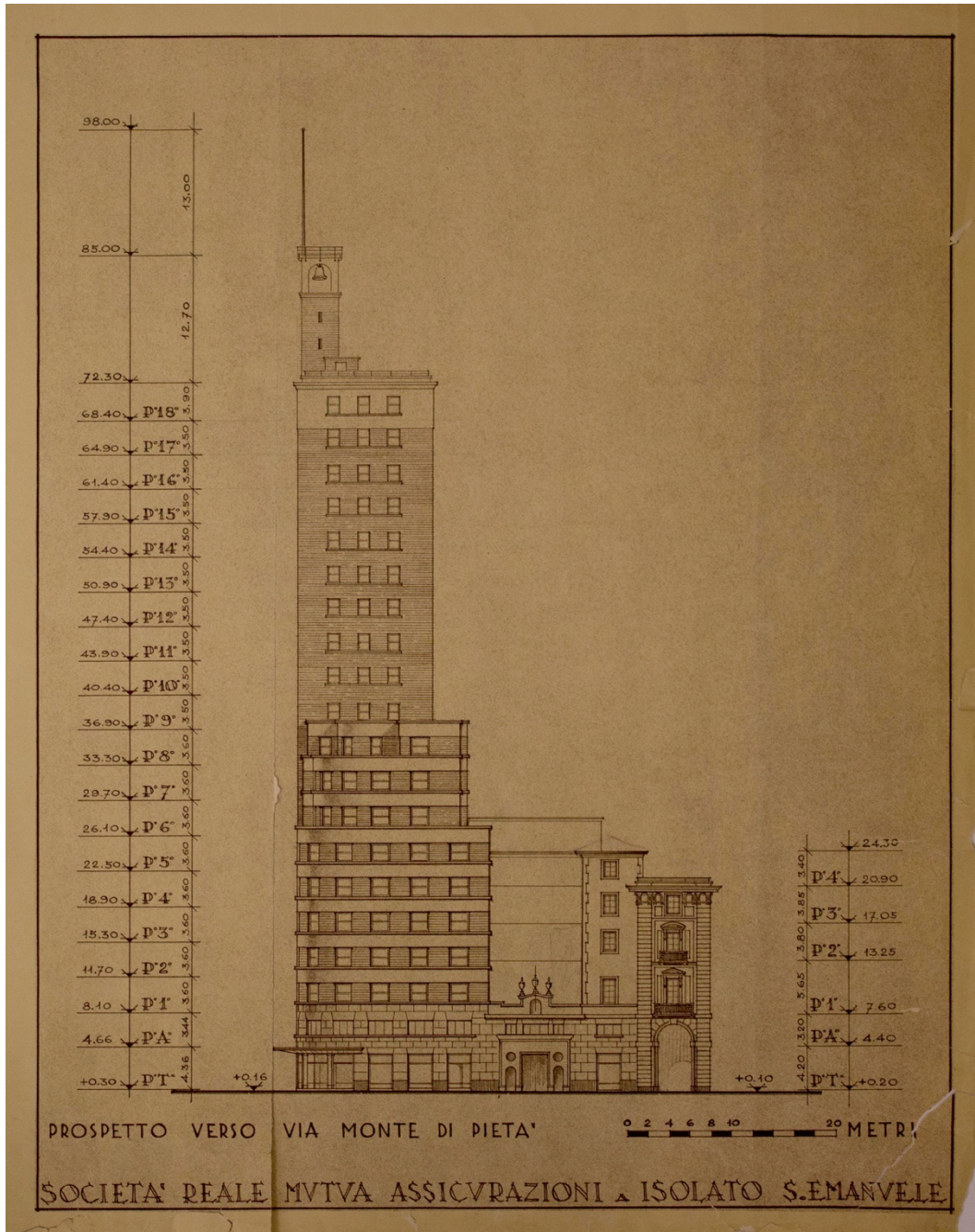


Figure 70 Elevation of the Torre Littoria in Turin, 1931. 1931_TO_Torre_Littoria. Source: Archivio Storico Reale Mutua. Folder 100.o



Figure 71 Historical picture of the Torre Littoria in Turin, 1931. 1931_TO_Torre_Littoria. Source: Archivio Storico Reale Mutua. Folder 100.o

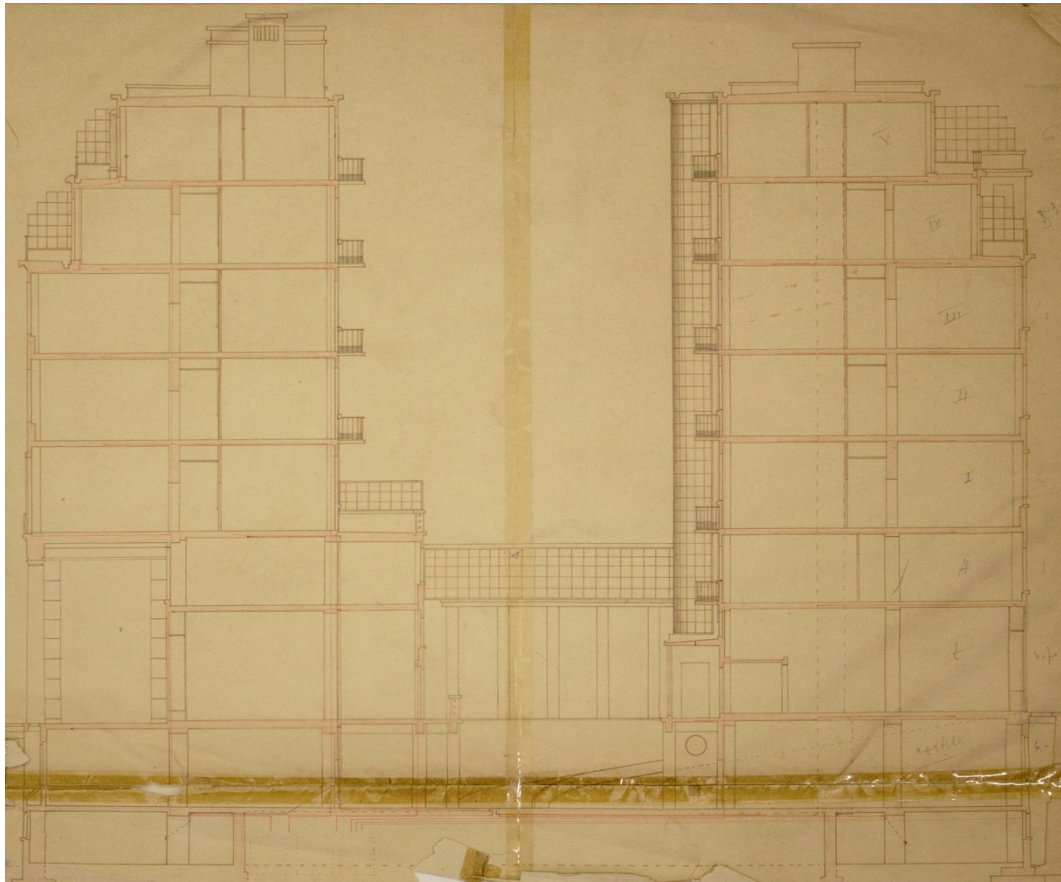


Figure 72 Section of 1936_TO_Arcivescovado. Source: Archivio Storico Reale Mutua. Folder: 100.i.-1FF

1945-1965

A generally conservative approach to urbanism characterized post-war reconstruction in Italy. According to Manfredo Tafuri, initiatives as the *Manuale dell'architetto* (1946) and the piano Ina-Casa (1949-1963) were led by a populist agenda, adopting regionalism as a style with vernacular suggestions and artisanal praxis in the construction industry (Tafuri [1982] 2013, 18).

The Piano AR proposed for Milan in 1945 by the Italian Ciam group including Franco Albini, Piero Bottoni, and Ignazio Gardella, envisioned for the city center a reconstruction with the same density of the former bombed city, continuing the nineteenth-century praxis of urbanizing through courtyard urban blocks (Tafuri [1982] 2013, 10).

Even in the single interventions of the piano Ina-Casa, the predominance of regionalism followed the technical suggestions of the Institute guidelines regarding the maximum height of buildings and the presence of gabled roofs (Di Biagi 2001). Nevertheless, the primary concern of the central state in the early days of the reconstruction was the occupational crisis and to find quick measures to provide jobs. Therefore, the construction sector and workers' housing seemed to be a natural solution to assist fourteen years of the economic boom. On the other hand, in continuity with the early decades of the century, public and private institutional landlords were expanding their investments in the ordinary city.

Together with Rome, Milan and Turin are the cities where institutional landlords invested more (Caramellino et al. 2015). Profiting from the strategical areas left available by the destructions of WWII, companies as RAS¹⁴¹ and the public insurer INA gave birth to iconic buildings as the Torre Velasca by BBPR (1957) and the high-rise building in Corso Sempione by Piero Bottoni (Figure 73), widely recognized as icons of Italian housing architecture of the time (Bonfanti and Porta 2009; Irace 1996). Turin, along with Reale Mutua, housed other major Italian insurance companies as Toro Assicurazioni that contributed to building large scale housing complexes for the higher and lower middle-classes (Caramellino et al. 2015).

The direct intervention of institutional landlords characterized this period in both the commission and management of their buildings due to the availability of land and resources. It must be said that at the end of the 1960s, the market was so trustful in those landlords that promoters started

¹⁴¹ Riunione Adriatica di Sicurtà. Founded in 1838 in Trieste it was later moved in Milan in 1947. In 2007 it merged in the Allianz Group.



Figure 73 Top: Advertising for the Torre Velasca by BBPR in Milan. 1957. Bottom: Piero Bottoni, Casa INA, Milan. 1958. Credits: Barbara Palazzi.

to invest in residential buildings without even knowing the final buyer, sure that one of the abovementioned companies would purchase their products (Gaeta 2013). This kind of intermediate bodies were the *Immobiliari*, constituted ad hoc for the upfront sale to a unique buyer once construction ended.

The realizations of Reale Mutua in Milan and Turin in this period follow three different design cultures. In any case, the predominance of the *Immobiliare* as an intermediate broker, instead of the direct commission, is visible in the built outcomes, also in terms of quality of the employed materials and durability, confronting them with the monumental operations of the fascist era. The genericity stemming from this mechanism is evident, especially in the residential complexes (*complessi residenziali*), where design actions had to meet maximum optimization of the plot and density of dwellings. The three different groups of projects can be drafted as follows:

- a) *Professionismo*. The Italian resistance to modernism in its most minimalist and reductionist forms by the wealthiest classes, allowed a large group of architects to realize apartment buildings that hybridized *modern* comfort with traditional materials and decorative motifs. Luigi Caccia Dominioni, together with Asnago & Vender, for example, embodied this attitude. The produced projects are residential blocks without particular urban experimentations, where the design effort focused in particular in the interior and on the façade. The project in vicolo Por Santa Maria by Caccia Dominioni (1960) is a typical example (Figure 74). As also the projects in Turin as the palazzo SACRAS in via Garibaldi (1950) (Figure 75), with its stone façade cladding, or the multifamily *villino* in via Magenta, in the neighborhood of Crocetta¹⁴², reminiscent of nineteenth-century typologies. Today all of these projects host mainly prime office space locations.
- b) *Complessi residenziali*. Construction overcomes architecture in the application of the domestic cliché for the middle-classes. The role of the *Immobiliari* is crucial in building residential clusters within and in the immediate outskirts of the city. This is the case of via Ruggiero Lauria in Milan (1963), where the speculative approach isolates

¹⁴² 1955_TO_Magenta Archivio Storico Reale Mutua. Folder 100.u-10FF

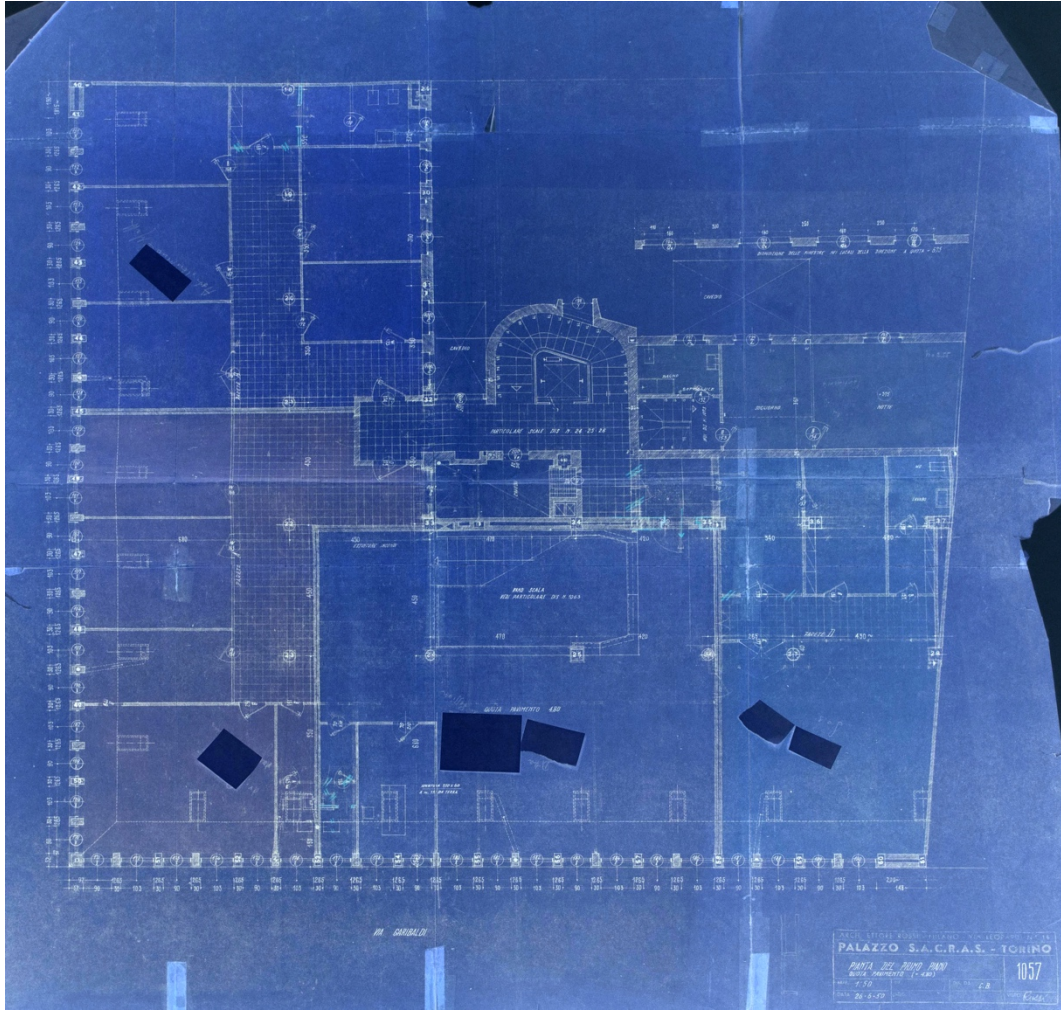


Figure 75 Blueprint of the plan of 1950_TO_Garibaldi Archivio Storico Reale Mutua. Folder 100.r-2FF/3/5s

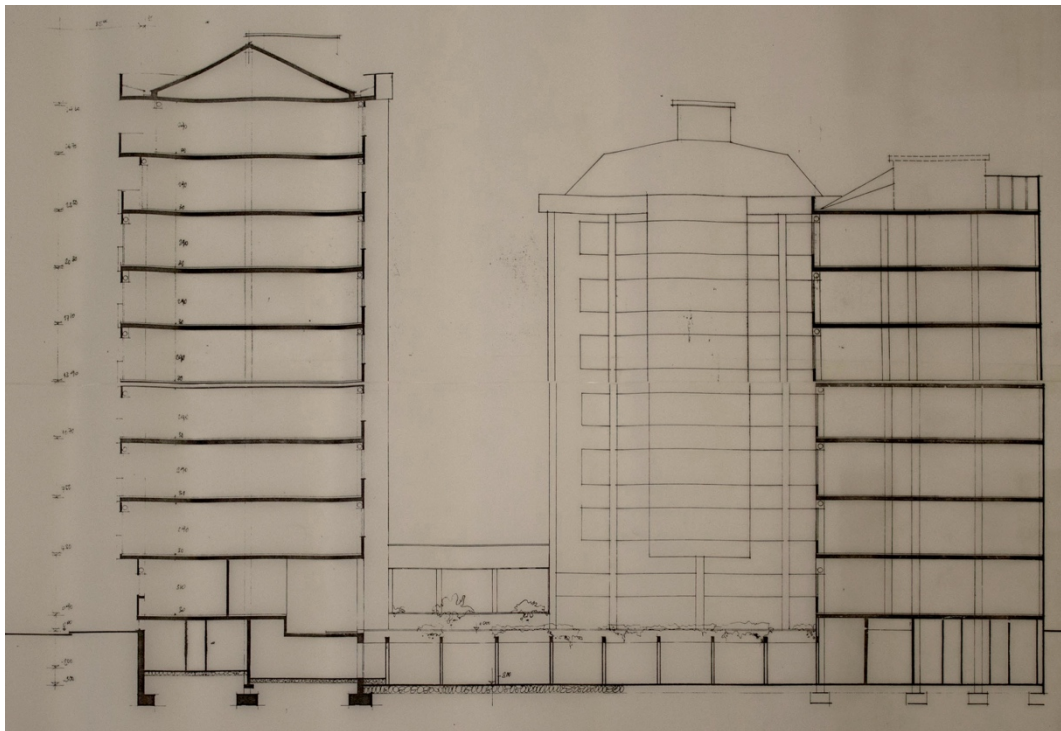


Figure 76 Section of 1963_MI_Ruggiero_Lauria. Source: Archivio Storico Reale Mutua. Folder 59.m-2

inside a larger *ilot* residential blocks of 10 floors immersed in a private macro-courtyard, used most as parking space (Figure 76).

- c) *Popular-modern*. As noted by Tosi, the industrial home production of the second part of the twentieth century was only partially a matter of modernist towers and slabs (Tosi 1994; Urban 2013). In Italy, the ordinary city is mostly built by high-density blocks for the lower middle-classes as the tower-block units of via Tolstoi¹⁴³ in Milan (1964), or the intervention in piazza del Risorgimento¹⁴⁴ in Turin (1954) and via Frejus¹⁴⁵ (1957), built with slighter higher standards from some of the second wave of the Ina-Casa program.

It is worth to note that if the considered period saw the predominance of regionalist and localist culture, several projects contributed to criticize the urban block in alternative forms. This will happen mostly in Milan due to the presence of the bridging institutions between the academia, politics, and the professional world, as the Triennale –that under the guidance of Piero Bottoni will promote the construction of the experimental QT8 neighborhood in the occasion of the eight Triennale exhibition (1947)–, and the cultural circle gravitating around the two magazines Casabella-Continuità and Domus, that counterbalanced the Roman APAO led by Bruno Zevi.

The Case Albergo by Luigi Moretti are probably one of the most relevant counter-model offered to the urban panorama during the first years of the reconstruction (Irace 1996; Collotti 2011). Through his COFIMPRESE¹⁴⁶, Moretti initially convinced the administration of Milan in 1947 to build twenty-two complexes of serviced rooms with collective facilities inspired to the model of the American Hotel. In the end, Moretti will realize in 1949 only three projects, the one of via Corridoni comprising of two slabs of twelve and six floors respectively with collective ground floors, and the two other minor projects in via Bassini and via Lazzaretto (Irace 1996, 13). The aim was to provide temporary accommodation to singles and young couples. Within structural bays of 3,5 meters, Moretti produced several studies of the different configurations of single rooms of twelve square meters, including a private bathroom, fixed furniture, and storage space.

¹⁴³ 1964_MI_Tolstoi. Archivio Storico Reale Mutua. Folder 59.b-1FF/3FF/4

¹⁴⁴ 1954_TO_Risorgimento. Archivio Storico Reale Mutua. Folder 100.h-5/8s

¹⁴⁵ 1957_TO_Frejus. Archivio Storico Reale Mutua. Folder 100.h-2FF/7s

¹⁴⁶ Founded in 1946 together with count Fossataro while they were imprisoned in San Vittore after the war for political reasons. The society will build projects in Rome and Milan as the Casa Girasole in Rome (1950) and the residential complex of Corso Italia in Milan (1955)



Figure 77 Luigi Moretti, Casa albergo in via Corridoni. Milan. 1946. Source: Archivio Civico di Milano. Ripartizione Servizi e Lavori Pubblici

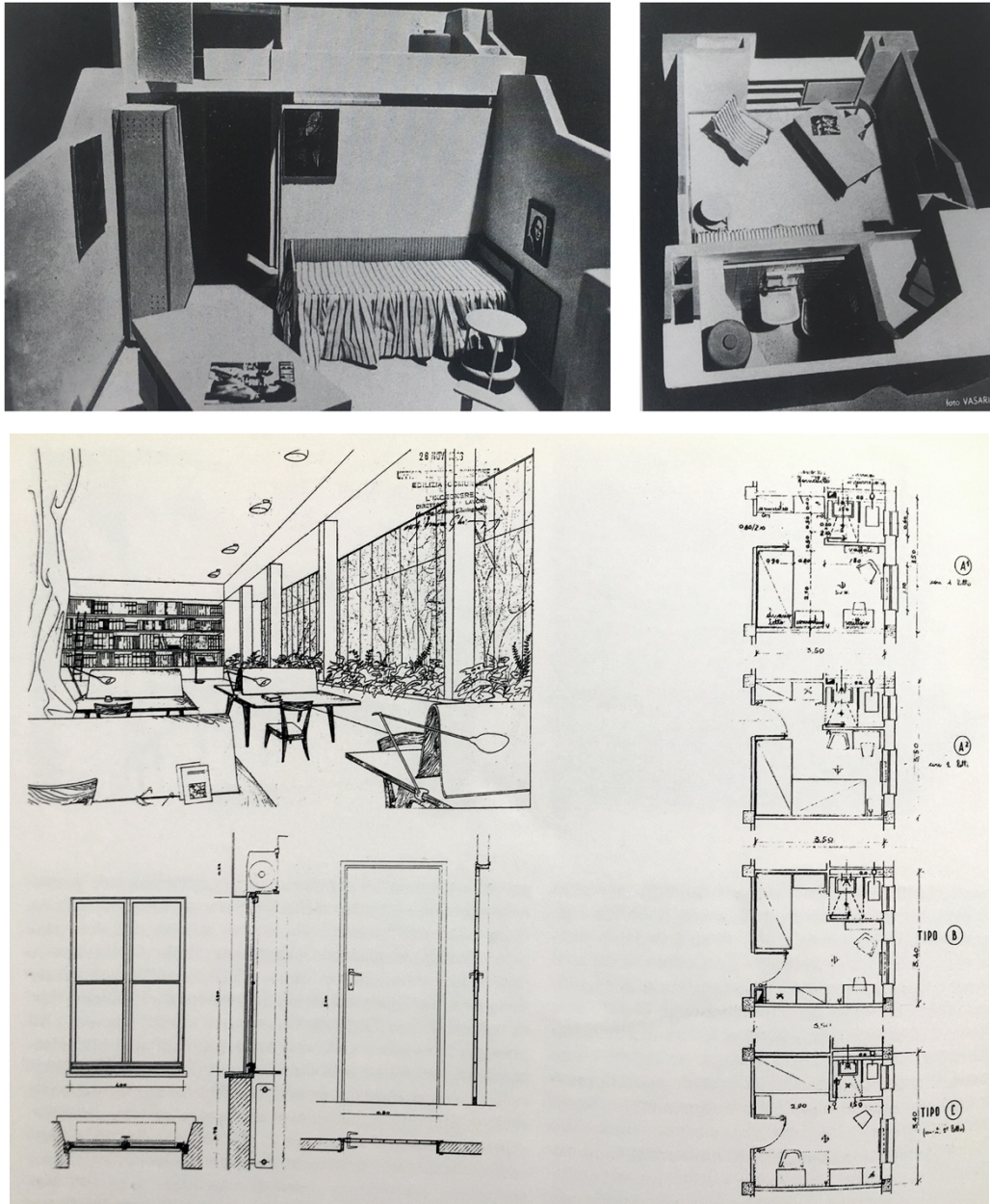


Figure 78 Plans, perspectives and maquettes of the units of Luigi Moretti, Casa albergo in via Corridoni. Milan. 1946. Source: Irace, 1996

1965-1980

The ending phase of the constitution of the ordinary city sees a progressive contraction of the construction sector, as it was leaving space to other industries to lead the constant national economic growth.

In 1962 the introduction of the Legge 167¹⁴⁷ allowed municipalities to devote specific areas to housing projects on low priced former agricultural land. Even if it was aimed principally for social housing, it was frequent to find middle-class public-private funded housing projects in those areas (De Pieri et al. 2014).

Reale Mutua will operate mainly in Milan, both in the residential western part of the city, both on the northern axis of Corso Sempione.

The first of the two interventions in the west area of Milan represents an exception to the ordinary developments in free plots as it articulates around a sixteenth-century cloister of the Palazzo Dal Verme¹⁴⁸. The palace was damaged heavily by the bombings of 1943; instead of a reconstruction, the authorities opted to preserve only the trace of the portico with its decorated vaults demolishing the upper floors. The intervention is articulated as a 'donut' of eight-floor blocks in regionalist style. This kind of operation highlights the more permissive behavior of the Milanese local authorities regarding preservation in a time of negotiated and speculative urban interventions.

The near acquisition by Reale Mutua of the nine-floor block in via Elba in 1969¹⁴⁹ describes well the general trends of the market of the time. As two *Immobiliari* handed the building¹⁵⁰ before the final purchase by Reale Mutua. This intervention follows the praxis of the previous period to clad the basement floors with stone to provide the building with some precious details. In contrast, the upper floors are treated with ordinary and standard materials.

The last two interventions in Milan see the completion of an urban block in a significant part of Corso Sempione for the concentration of icons of the Italian housing history. In front of the two adjacent buildings by Reale Mutua¹⁵¹ (Figure 80), the casa Rustici by Terragni and Lingeri (1935), and on the neighboring block, the casa INA by Piero Bottoni (1959). Contrarily

¹⁴⁷ Legge 18 aprile 1962, n. 167. Source: https://www.gazzettaufficiale.it/atto/serie_generale/caricaDettaglioAtto/originario?atto.dataPubblicazioneGazzetta=1962-04-30&atto.codiceRedazionale=062U0167&elenco30giorni=false

¹⁴⁸ 1966_MI_Puccini. Archivio Storico Reale Mutua. Folder 59.I-1FF/5S

¹⁴⁹ 1969_MI_Elba. Archivio Storico Reale Mutua. Folder 59.h-5s

¹⁵⁰ The 'F.lli Volpato', and subsequently the Imm. Elba S.a.s

¹⁵¹ 1969_MI_Ferrucci. Archivio Storico Reale Mutua. Folder 59.i-2FF/3S and 1970_MI_Sempione. Archivio Storico Reale Mutua. Folder 59.c-1FF

to the interventions of Reale Mutua, these two projects are based on the rupture of the urban block; the first aimed to the bourgeoisie, the latter to the middle-class employees of INA. The project by Bottoni results as the only realization of the Milano Verde Plan of 1938 –with twenty years of delay– proposing a modernist interpretation of density in a transversal slab to the street alignment (Irace 1996).

In Turin, in the same period, Reale Mutua completed another urban block on the central axis of Corso Vittorio Emanuele II (1970), By Nino Rosani –the architect with Gio Ponti in 1958 of the Grattacielo Lancia in Turin. The six floors project follows the regionalist style of the *professionismo* combining some ‘neo-liberty’ details with modernist characters as pseudo-ribbon windows. The entire façade is clad with stone as the building was aimed at a mix of residential and representative office space program (Figure 79).

This period seals the expansion of housing construction and housing provision definitively. The neo-liberal turn occurring in the USA and the UK will soon invest the intricate Italian political system leaving housing policy at the bottom of the political agenda. If the economy was still growing, and coherently the value of the real estate, the start of this stagnation turned the activities of Reale Mutua to property management and ceased the ones of urban development. From this moment onwards, the choices of the company will be operated on the shorting or purchase of housing assets. Surprisingly, on the verge of the 2000s, most of the initial real estate of Reale Mutua is preserved and is actively on the market –with few exceptions as a complex by BBPR in Piazza Statuto in Turin sold in the mid-2000s.

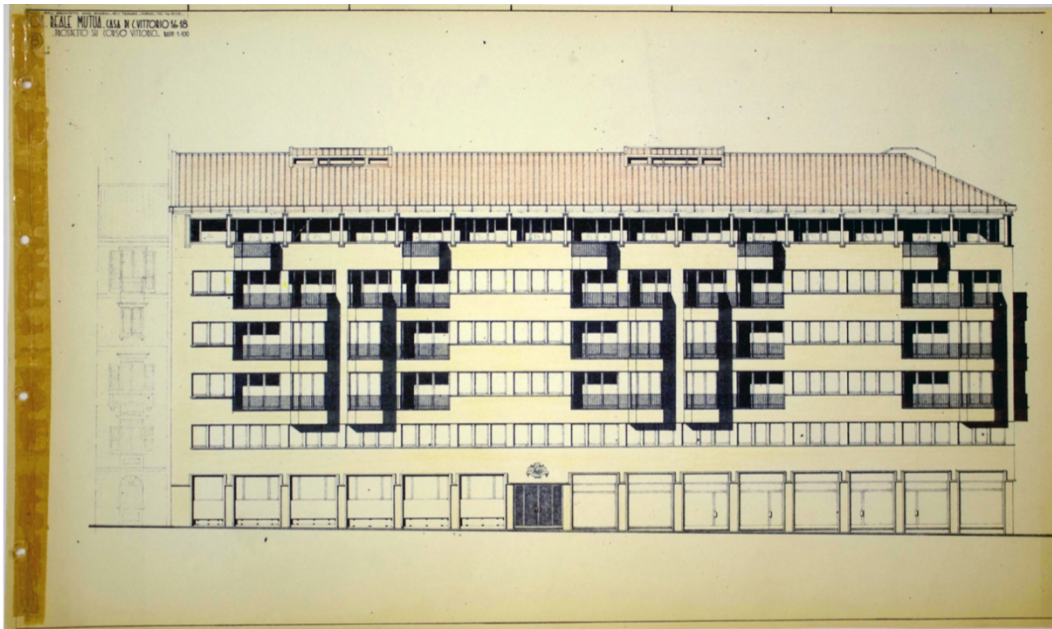


Figure 79 Elevation of 1968_TO_Vittorio. Nino Rosani. Residential building in Corso Vittorio Emanuele II, Turin. Source: Archivio Storico Reale Mutua. Folder 100.g-1/4/5/12s/13s/14FF/16/20s/21s/22



Figure 80 External picture of 1969_MI_Ferrucci. Archivio Storico Reale Mutua. Folder 59.i-2FF/

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Figure 81 Advertisement of the Società Generale Immobiliare of new realizations of housing complexes in Turin, 1970. Source: La Stampa, 24 November, 1970

4.2 The new housing demand

Shifting demographics and the offer

During the first decade of the 2000s¹⁵², the growing gap between salaries and rents contributed to further disqualify tenancy over home ownership in Italy.

The effects on the potential and actual tenants' demand are such that the younger and elder shares of the population are facing difficulties limiting labor mobility and welfare efficacy.

The status quo of the critical conditions of the housing demand in Italy can be summarized in three key observations.

First, an overall aging population of 6,3 million of over-65 individuals is currently living alone, often in a house of five or more rooms¹⁵³. Secondly, sixty-six percent of the population between eighteen and thirty-four-years old lives with their parents¹⁵⁴. Lastly, one out of four private renters is a foreign citizen, with a salary gap between Italian citizens and 'new Italians' of almost 1.5 times¹⁵⁵.

In synthesis, what statistical data shows is an oversized real estate for a lonely aging population with a young and migrant population facing difficulties in accessing the market. The *static* Italian housing system (Baldini and Poggio 2014, 318), coupled with few inflexible long-term contract schemes¹⁵⁶, foreshadows increasingly worsening trends if no political shifts will take place.

Together with the most recent economic trends of growing inequality between salaries and rents, the social pattern that led the majority of the younger population to live with its parents stems from a rapid shift that

¹⁵² "from 1998 to 2008, market rents increased by 57% compared to a growth in household income of 31%. After 2008, rents actually decreased more than incomes (-17.4% and -6% respectively) and as a result the rent to income ratio decreased to the levels registered in the early 2000s (23% on average). Nevertheless, in 2014 about 34% of tenant households spend more than 30% of their income on rent, a sharp increase compared to 16% in the Nineties." (Pittini, Ghekière, Dijol, & Kiss 2017, 76).

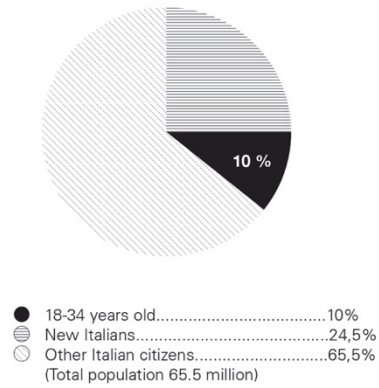
¹⁵³ Source: Istat

¹⁵⁴ Ibid.

¹⁵⁵ <http://www.fondazioneleonemoressa.org/new/wp-content/uploads/2018/03/Slide-18.10.2017.pdf>. Accessed January 23, 2020.

¹⁵⁶ Italy adopts mainly a long-term "4+4" years contract scheme for private renters. In alternative, law proposes a transitory contract scheme (contratto transitorio) up to 3 years of occupancy (Festa 2017).

Italian renters by social group



Housing tenure of 18-34 Italian population



Distribution by house dimension of over-65 Italian population



Figure 82 Three diagrams showing the composition of Italian housing demand by social category. Sources: ISTAT

occurred in two generations. In 1945 87,5 percent of the Italian population left their parental home before reaching their thirties. In 1979 the number fell to 66,6 percent, and in 2017 to 33,4 percent¹⁵⁷. The reasons are multiple and heavily influenced by the expansion of higher education and the de-localization of public institutions on the national territory. Nevertheless, 'generation rent' in Italy is preventing itself from housing overburdens by avoiding labor mobility and contributing to unemployment.

After having analyzed the aspects concerning the demand, to understand the available data on the offer, it must be noted that possible inaccuracies derive from a generalized scarcity of public data on housing.

The only official data provided by the central government are the ones of the National Institute for Statistics (ISTAT) and the Agenzia delle Entrate. At the present day, the available data on the Italian household composition and its housing condition is dated at the national census of 2011. Other information is provided by the research branch of the Italian Central Bank and reports by private and semi-private foundations.

For this reason, the data analyzed takes into account only the ones with considerable gaps between the values absorbing possible errors or oversimplifications.

According to national statistics, Italy does not suffer from a housing crisis in terms of average rent price. The main issues involve the lower incomes, as the number of applications for social housing and the yearly housing production is far from fulfilling the demand (Pittini et al. 2019).

Nevertheless, the private rental market on an average level could be defined as *affordable*.

In Italy, the average rent is 650€ in major urban areas for a median eighty square meter unit¹⁵⁸. The latter figure reveals that the national market is set on the flooring of the nuclear family home (the two-bedroom house).

Comparing the average national rent with the average salary (differing among the sources from a net average of 23.500 to 24.000 per year), it means that an eighty square meters unit will cost to an Italian tenant between thirty and forty percent of its salary if the calculation is extended to the household income the rate of affordability increases accordingly.

This kind of analysis avoids the radical differences between major cities and other Italian areas. Observing the data provided by the Agenzia delle Entrate, we assist to some differences between the market standard surfaces of the rental unit in Rome, Milan, Florence, Palermo, and Turin. We are spanning from a maximum of 94.9 square meters in Palermo to a minimum of 69.6 square meters in Turin.

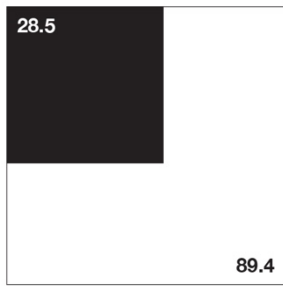
¹⁵⁷Istat. 2014. *Generazioni a confronto*. Rome: Istituto Nazionale di Statistica. p 99.

¹⁵⁸ Source: Agenzia delle Entrate

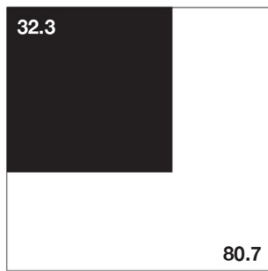
Embracing the general definition of affordability as one-third of the salary spent on rent, it is possible to conduct a stress test of the *actual* affordable unit for an individual tenant in terms of square meters. Dividing the average salary of each city by a third and multiplying this figure for the average square meter price of the same city, the resulting value informs of the size of the ‘affordable surface’ (Figure 73).

For example, in the case of Milan, where the average salary is higher than the rest of Italy, but also the rents are at the highest levels of the country, the average affordable dwelling should have an area of 35.9 square meters while the market average is of almost the double (seventy-one square meters).

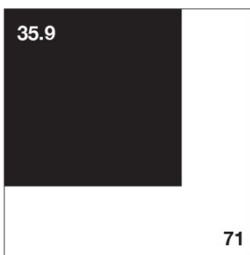
For comparison, the same calculation applied to Manhattan leads to an affordable surface of twenty-eight square meters, with a market average surface of sixty-six square meters (Dömer, Drexler, and Schultz-Granberg 2014).



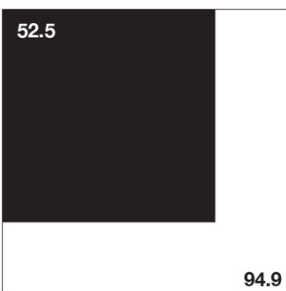
Florence



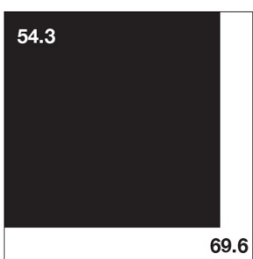
Rome



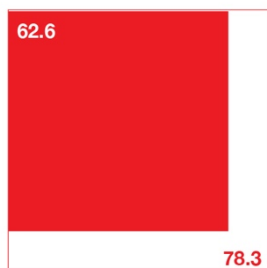
Milan



Palermo



Turin



Italy

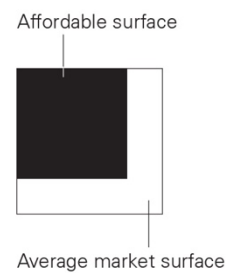


Figure 83 Comparison between affordable surface and average market surface of 5 cities in Italy.
Source: Agenzia delle Entrate, immobiliare.it

	Average market surface (m ²)	Average gross salary (€*1000)	Average monthly rent (€/m ²)	Affordable Surface*
Rome	80.7	23.3	14.16	32.3
Milan	71	29.6	16.1	35.9
Turin	69.6	24.5	8.67	54.3
Palermo	94.9	17.3	6.4	52.5
Florence	89.4	25	17.07	28.5
Italy	78.3	24.4	8.4	62.6

Table 6 Table showing the input data for the calculation of the affordable surface in 5 Italian cities. Source: Agenzia delle Entrate, Immobiliare.it

*The affordable surface is calculated by multiplying the 30% of the net average salary for the average monthly rent cost per square meter. The average gross annual salary has been divided by 12 and deducted of a 30% as a plausible tax deduction.

Intensification?

The mismatch between the affordable and the average market surface of housing units in Italian cities reflects a global trend investing most of the Western countries. Together with this economic evidence, the demographic trends occurring from the end of the last century show constantly growing sizes of dwellings against shrinking households (Nelson 2018, 241).

The issue of intensification rises as an immediate statistical response to the housing question, as a way to widen the housing supply. The concept of supply in this context is not related to the production of housing, instead of the renovation and reconfiguration of the existing urban fabric.

In the dense Italian urban context, transformations of the housing stock face social, regulatory, and physical resistance. The fragmentation of private property controlled largely by families (Baldini and Poggio 2014) does not allow to intervene in apartment buildings in need of renewal.

The arguments for intensification cross the debate on the housing crisis from different perspectives. In a ‘gradient’ from radicalism and populism to more conservative “*technological fixes*” the various positions in the literature resemble the roles caricaturized by Colin Ward in 1985, as seen in Chapter 1 (Ward 1985, 9–10).

For Anitra Nelson, in hers *Small Is Necessary*, the global shrinking of households should be followed by a consequent reduction of the ecological footprint of the built environment. Observing the hypertrophic sizes of the market average American and Australian home –respectively two-hundred-and-one and two-hundred-and-fourteen square meters– Nelson praises for a significant reduction of housing size according to the fact that in most OECD countries the average household has become a one-person household in roughly a third of the cases (Nelson 2018, 35). This reduction should materialize in forms of eco-collaborative housing, relying on strong associationism of communities, as for the author “*sharing is becoming a natural and necessary complement to small*” (Nelson 2018, 18).

Nelsons’ position, which can be ascribed in the radical and activist movements with a sharp ecological aim, is influenced by the suburban and low-density Anglo-Saxon territory outside few core cities. As this work provides insights for a comparison between the Italian dense urban condition and other contexts, it leaves untold the question of how to operate the transition to eco-communities inside the dense residential fabric of the European city.

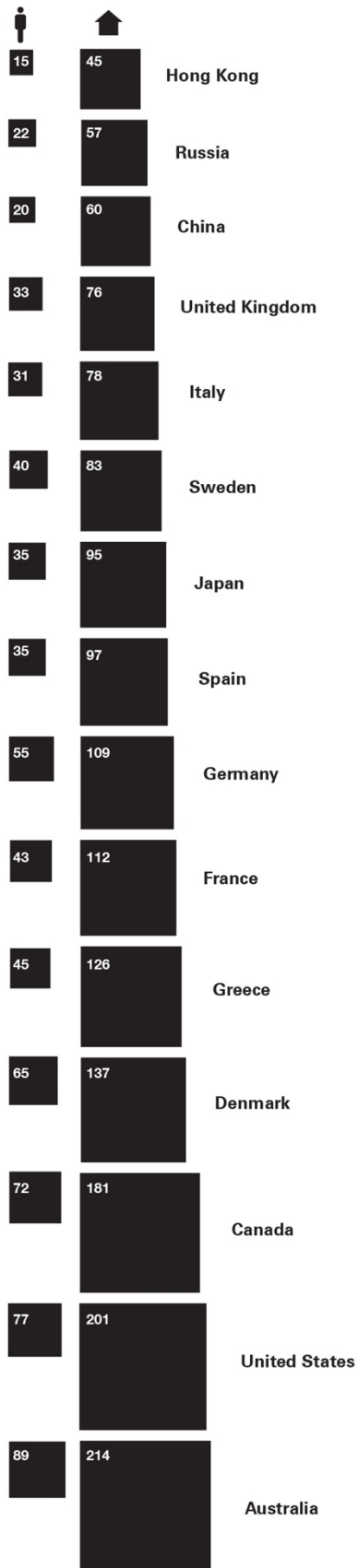


Figure 88 Per capita and average market size of newly built houses in 15 OECD countries. Source: Lindsay Wilson 'How big is a house? Average house size by country', April 2013

The point of view of Aureli and Tattara in *Loveless* is at the same a technical and a populist one (Aureli, Tattara, and Dogma 2019). After a detailed analysis of the history of the minimum dwelling from pre-modern societies to the one described by Karel Teige in *Nejmensi byt* (See Chapter 2), the authors identify the contemporary micro-dwelling as an extreme condition imposed by the market. The authors propose to provide a ‘universal basic room’ for all citizens, expanding the ideas of the universal basic income (Aureli, Tattara, and Dogma 2019, 23). This view adds to the arguments on the Lefebvrian *right to the city*, and more recently the right to housing expressed by Madden and Marcuse as a goal to achieve for all democracies, highlighting the central role of the state behind any technical solution or market initiative (Madden and Marcuse 2016).

On the ‘realist’ side, some Italian scholarship focused on the possible strategies to re-cycle the large abandoned portions of real estate and facilities left behind by the industrial era. Inside this debate involving numerous researchers from different fields, the proposal of Zanfi and Lanzani of 2017 focuses on three possible scenarios to densify and restore the existing middle-class housing stock in Italy (Fontanari and Piperata 2017). First, the possibility of selective demolition and intensification of distressed assets in cases of particular decay of the real estate. Second, adding value to potentially underused buildings by incorporating new functions and programs. Lastly, the possibility for some owners to delegate the management of their property to a social housing agency in return for reasonable economic compensation (Fontanari and Piperata 2017, 12). These proposals may seem reasonable and aim to stimulate the public sector to innovate housing policy. On the other hand, they require a collective effort of the fragmented homeowner geography that seems to countertrend the status quo with academic speculation beyond a ‘realistic’ proposal.

All of these positions address the same three actors. The state, the market, and the resident community, no matter how radical the proposal and the action that has to be undertaken by each of these subjects. At the same time, the trigger for all the proposals is the profound mismatch between current demographics and housing supply, labor market and rental market, state policy, and the actual housing demand. In any case, the quest for a quantitative intensification within the existing housing stock seems a natural answer.

To give an insight into the effects of a ‘quantitative’ solution in the Italian case, it is possible to make pure speculation on the actual figures analyzed in the former paragraph. If the over-65 population living alone – counting circa six-million people – would leave two of the five-or-more-rooms of their average house to an under thirty-four, the number of young people

living with its parents will fall from sixty-six percent to eleven-percent, the seniors living alone will be reduced to zero, and the average dwelling size of both categories will fit a figure closer to the ‘affordable surface’ described in the previous paragraph.

This quantitative manipulation of simple figures shows how other socio-economic and cultural issues contrast an apparently banal problem-solving. Furthermore, the digital economy already made it possible to stimulate similar dynamics for short-term rentals after the widespread diffusion of Airbnb¹⁵⁹. Thanks to the dynamic match between demand and offer mediated by the platform, entire apartments or portions of a house can now be monetized on the commercial hospitality market and generate an extra income for the household.

Airbnb already applied this ‘two-tier’ form of rent-to-rent with its experiment of Niido in Nashville and Orlando¹⁶⁰. This scheme of rental housing provides on its online portal a calculation sheet of the expected nights that the prospective tenant will not be at home, making it correspond to a monetary reduction from the rent due to the income generated by ‘airbnb’ the unit in the vacant days. In theory, it is possible to benefit from free rent gaining an even balance between the ‘productive’ days as host and the days as a paying tenant.

In various forms, this is already happening in a much less professionalized market, ruled by individuals and families profiting by extra incomes on the platforms.

However, intensification is not necessarily connected only to the quantitative redistribution of dwelling sizes. The contribution of an architectural perspective to the issue of intensification can be addressed spatially. Meaning that space partitioning scenarios can respond to a given socio-technical issue providing a reading point of view, highlighting issues more than solutions. Furthermore, a spatial reading of a building over a quantitative one reveals the physical resistance to some pre-determined quantitative goals.

Focusing on entire buildings owned by institutional landlords opens up to strategies transcending the individual unit scale and allowing to rethink the real estate of actors as Reale Mutua on a general level, taking into consideration the crossing of economic and spatial aspects.

¹⁵⁹ The company founded in San Francisco in 2008 is currently the major hospitality provider of the world, having 3.6 active listings in the world. Source: Adamiak, Czeslaw. 2019. “Current State and Development of Airbnb Accommodation Offer in 167 Countries.” *Current Issues in Tourism*.

¹⁶⁰ Source: <https://www.niido.com/>. Accessed January 19, 2020

Chapter 5

Scenarios

“More than just a building type or a market sector, housing is a primary architectural act. It begins when a line is drawn that separates inside from outside, and ultimately, one house from another. Under the rule of real estate development, that relation is structurally unequal.” (Martin et al. 2015, 18)

Adaptability and flexibility, a spatial definition

As noted by Till and Schneider, the notion of *flexibility*, when applied to housing, has to be differentiated by the one of *adaptability*. The former refers to the ability of a residential layout to be transformed physically, while the latter implies mainly a change in the social content of the housing unit (Till & Scheider, 2007). This means that housing can always be adaptable but not necessarily flexible.

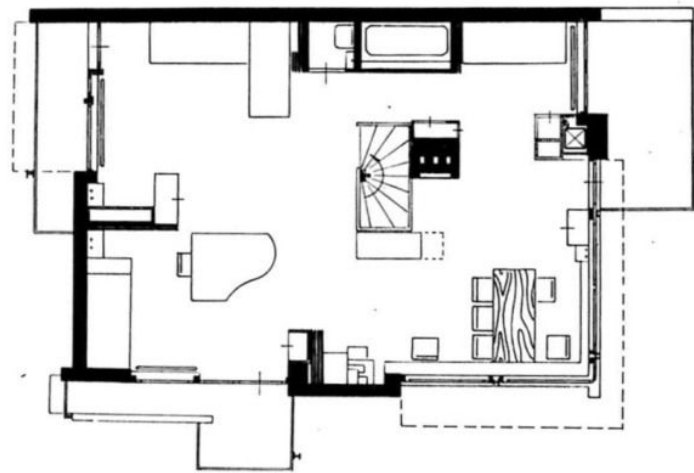
The analysis of flexibility leads to consider what could be the transformative potential of a project. This kind of assessment is strictly dependent on a design intention, as it depends on a particular strategy addressing different spatial configurations.

Flexibility is a neutral concept, as it highlights the degree of *change* that can be obtained in spatial terms. The flexibility of a given residential floor layout is mainly dependent on fundamental constitutive elements of a project as the structural layout and the width of the body of the building. Consequently, the domestic qualities of a given floor plan layout can be read only when a scenario is fixed. Flexibility *per se* does not charge the domestic unit with a specific character, even if modern architects attempted to overlay some residential projects with this embedded potential. For example, the Schroder house by Gerrit Rietveld in Utrecht (1924) aimed to multiply the configurations of the second floor of the project employing sliding walls forming a cross plan.¹⁶¹

¹⁶¹ Fanelli, Giovanni. 1983. *De Stijl*. 1a ed. Guide All'architettura Moderna. Roma: Laterza.



52. Schröder House, plan, upper floor, closed



53. Schröder House, plan, upper floor, open

Figure 89 Gerrit Rietveld. Schröder house. 1924. Utrecht. Plan of the 'open' and 'close' configurations

The Maison Dom-ino by Le Corbusier (1914) is probably the seminal project initiating the tradition of flexible residential projects¹⁶² (Le Corbusier 1923, 181), making flexibility one of the strong points of modernism. The focus of residential architecture from that point onwards was on its infrastructural elements, leaving to the interior design and the market the infill of the shell. This theory will be perfected by Habraken in *Supports: An Alternative to Mass Housing*, assigning to the inhabitant the full responsibility for its environment. At the same time, the architects' expertise was bounded to the primary structure and distribution of the buildings' elements (Habraken [1972] 2011).

In the case of a renovation project –as the scenarios proposed in the following section– the assessment of flexibility is retroactive and requires an abstraction from the current physical reality of the building. Martin Boesch in *Yellowred* describes how the demolition-construction yellow and red drawings usually required by authorities can act both as an analytical and a design tool (Boesch et al. 2017, 8).

The contemporary approach to housing renovation developed significantly after the diffusion and discussion on the contemporary projects by Lacaton & Vassal and Druot as Tour Bois le Prêtre (2011) and Le Grand Parc in Bordeaux (2016) (Ruby et al. 2012; Druot, Lacaton, and Vassal 2007). Both the projects apply the strategy envisioned by the architects in *Plus+* (Druot, Lacaton, and Vassal 2007) –namely the expansion of the housing units up to forty percent, with external glazed loggias functioning as a thermal buffer and an extra-room of the house. Lacaton & Vassal projects quickly became 'new classics' in the debate on the preservation of social housing complexes. Even if aimed to lower incomes, these projects are built on the legacy of the *modern project*, as the buildings are immersed in open spaces in areas detached from the city –and from its preservation restrictions– with frame structures and poor-materials finishing. This allowed the architects for a holistic approach redesigning the building from the outside. In the dense ordinary city, the combination of the land value and preservation laws make the operational field more related to isolated interventions and mainly within the interior domestic realm.

In parallel, a hyper-conservative approach to preservation led to paradoxical conditions, as in the case of the Kiefhoek neighborhood by J.J.P Oud in Rotterdam (1930). Demolished and reconstructed exactly as it was in

¹⁶² For more critical insights of the role of Le Corbusier's Maison Dom-ino see the centenary celebration number of *Log 30*, Winter 2014. In particular the essay by Pier Vittorio Aureli: Aureli, Pier Vittorio. 2014. "The Dom-ino Problem: Questioning the Architecture of Domestic Space". *Log*. (30): 153-168.

1995, it resulted in below-the-standard living spaces as the rebuilt units were complying with the living standards of 1930¹⁶³.

As the debate on preservation and heritage is a wide field of research, the present study focuses mainly on the perspective of architectural design as a form of thought, intervening with basic spatial partitioning without digging into technicalities.

Observing the reuse project of The Share in Tokyo (2012) –identified as one of the first realized co-living projects in Chapter 3– it is possible to note how the flexibility of a modern generic apartment building from 1963 can adapt to this format employing space partitioning. Furthermore, it emerges how flexibility in this kind of scenario intertwines with the economic values of private space and collective space. A generic open space plan with a frame concrete structure adapts easily to a double-wing central corridor room floor. Stressing at the maximum degree not only the minimum size of a unit/bedroom but also the rent price per square meter. To balance this shrinking operation, the ground floor and the last floor are left entirely to collective functions as lounges and kitchens.

Space partitioning, beyond the physical consistency of the building, becomes a limit between economic values and privacy.

¹⁶³ See: Spoormans, Lidwine. 2018. "Our Daily Heritage" DASH, no. 14.

5.1 Hypothesis

Graphic anatomy

The issue of intensification raised in the former chapter stems from a growing mismatch between oversized housing stock and the shrinking expectations of the demand. Consequently, the proposed methodology is the one to stress a selected housing stock through residential unit downsizing.

The object of study is composed of twelve case studies selected from the residential portfolio of Reale Mutua in Turin and Milan. The case studies are selected according to the tripartite chronology established in the previous chapter. Three cases from the 1925-1945 period, five from the second period (1945-1965), and four from the last one (1965-1980). Seven of the cases are located in Turin and five in Milan. Together with this geographical distribution, these cases share the programmatic feature of being predominantly residential, allowing in most cases commercial space on the ground floor and office space on the first floors. The current prices of the rents proposed by Reale Mutua span from the high end to the lower average according to location. Many cases located in prime locations of the city have converted most of the residential spaces in representative offices for professionals and small-scale companies, transforming them into *de facto* office buildings. Therefore, these cases were excluded by the selection. In terms of massing, the twelve cases are mainly urban courtyard block buildings, with exceptions in the intermediate phase of the chronology where it is possible to find different arrangements of the built masses over the plot.

This research by design phase will be accompanied by an analysis of the quantities, as the covered plot area, the ground floor usage, gross floor area, and the average unit size. This graphical diagnosis –inscribed in the long-lasting research tradition on the floor plan initiated during the Modern Movement (Klein, Baffa Rivolta, and Wettstein 1981; Internationale Kongresse für Neues Bauen und Städtisches 1930)– will also comprise an analysis of the structural system and the horizontal and vertical circulation patterns.

The scenarios will then be articulated as a progressive partitioning and redistribution of the interior, in order to reach the maximum floor usage in terms of number of living units capacity. This partitioning act is not only a matter of walls, but it involves three variables:

- a) Financial considerations (rent paid by tenants and gains for the landlord)
- b) Amount of private space (individual living units)
- c) Amount of collective space (including circulation space)

This progressive subdivision of the floorplan is aimed to reach a plausible minimum critical mass based on furnished rooms up to a minimum size of fourteen square meters¹⁶⁴. A fundamental observation on all the selected cases is the lack of collective space, if not the one of the halls, courtyards (usually used as parking space), and circulation spaces. The progressive reduction of the living units corresponds to an expansion of collective space on the floor plan suggesting an alternative format to the typical rental flat, implying shared areas among the residents as would happen in a co-living (Chapter 3).

The goal of this research by design is twofold. On the one hand, localized actions on the single floor plans of the residential buildings serve to provide possible scenarios to stress the current housing typologies owned by Reale Mutua. The input for intensification is given by the model of co-living discussed in chapter 3. This model is not embraced optimistically as a proposal, instead as an analytical instrument to stress at the maximum optimization the oversized and sometimes outdated real estate of the last century. On the other hand, a general investigation of the effects of the scenarios on the twelve buildings as a whole can reveal the economic and spatial non-senses or paradoxes given the spatial nature of the investigated building or its location in the city.

¹⁶⁴ For the Italian law this is the minimum for a double bedroom, even if a single room can be as small as nine square meters in a residential project. This norm is contained in the following Italian law: Decreto ministeriale Sanità 5 luglio 1975. Modificazioni alle istruzioni ministeriali 20 giugno 1896, relativamente all'altezza minima ed ai requisiti igienico-sanitari principali dei locali di abitazione (G.u. n. 190 del 18 luglio 1975)

5.2 Case studies

The following section analyzes the selected twelve case studies graphically. For a more comfortable reading, the cases have been labeled with a code, including the construction date, a tag for the location (TO=Turin, MI=Milan), and the name of the street address. The list is ordered as follows:

1. 1928_TO_Cavour
2. 1929_TO_Umberto
3. 1936_TO_Arcivescovado

4. 1950_TO_Garibaldi
5. 1954_TO_Risorgimento
6. 1963_MI_Ruggiero_Lauria
7. 1962_TO_Giulio_Cesare
8. 1964_MI_Tolstoi

9. 1968_TO_Vittorio
10. 1969_MI_Elba
11. 1969_MI_Ferrucci
12. 1970_MI_Sempione

The scenarios were built based on the combination of the Reale Muta database and data from the Agenzia delle Entrate and Immobiliare.it (the primary Italian online housing portal). Each scenario was operated on a single residential floor plan per each building. The four ‘stages’ of densification have been divided into the four following categories:

0. Existing – The present state of the building at its current market price
1. Regular flat – The subdivided apartment floor without demolishing any partition wall
2. Cluster units – A significant intensification preserving most of the partition walls, imagining studio or one-bedroom furnished units
3. Micro-units – The intensification scenario based on the redrawing of the living unit in the form of a single furnished room and a consequent amount of collective spaces

Each scenario results in a variation on the number of units and a different rent per square meter. In the case of the ‘cluster’ scenarios and the ‘micro-unit’ scenarios, the prices per room have been set on the median price for that area for a single room¹⁶⁵.

¹⁶⁵ Source: Immobiliare.it

6_1963_MI_Ruggiero_Lauria
 7_1964_MI_Tolstoi
 9_1969_MI_Ferrucci
 10_1969_MI_Elba
 11_1969_MI_Sempione

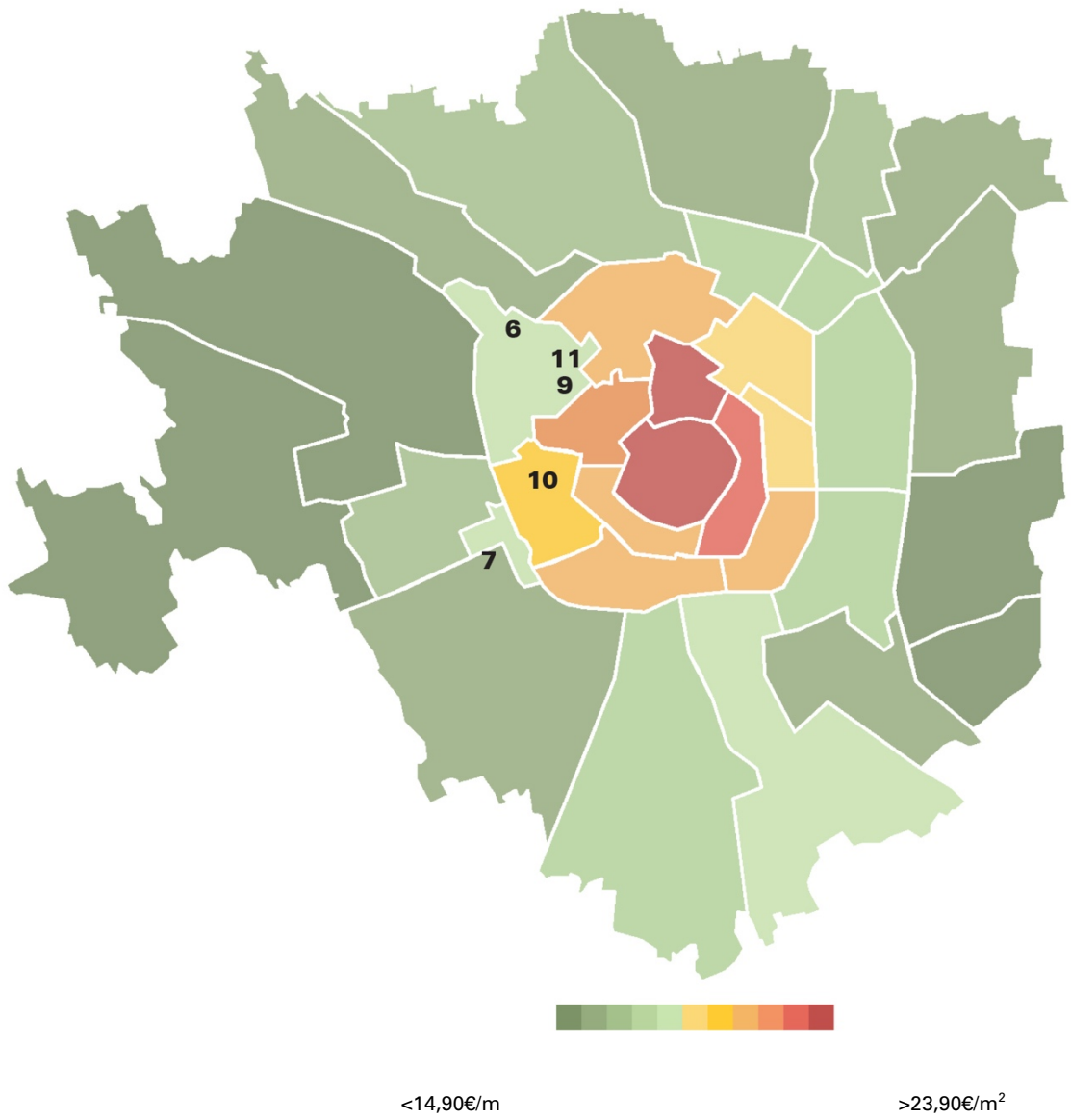
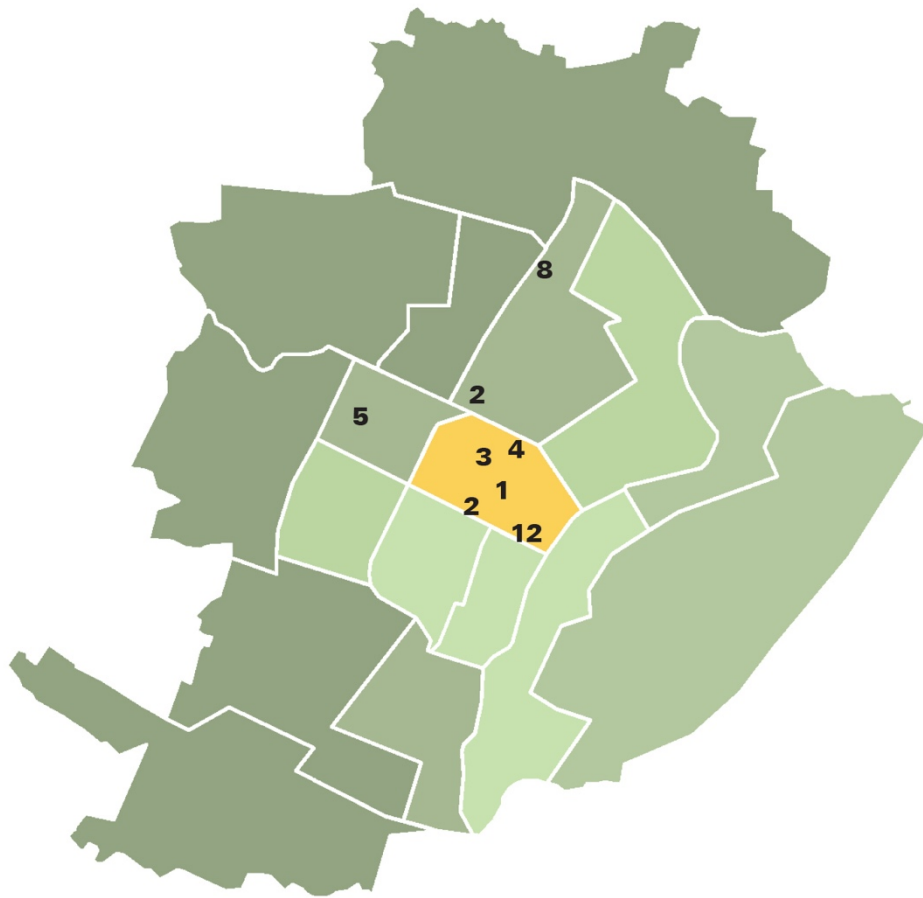


Figure 91 Location and average rent per square meter of the selected twelve cases according to location. Breakdown on the single units. Drawing by the author. Rent data: Immobiliare.it

- 1_1928_TO_Cavour
- 2_1929_TO_Umberto
- 3_1936_TO_Arcivescovado
- 4_1950_TO_Garibaldi
- 5_1954_TO_Risorgimento
- 8_1968_TO_Giulio_Cesare
- 12_1970_TO_Vittorio



<math><7,70\text{€}/\text{m}^2</math>  >math>>12,20\text{€}/\text{m}^2</math>





1.
1928_TO_Cavour
11,2 €/m² mo



2.
1929_TO_Umberto
11,2 €/m² mo



3.
1936_TO_Arcivescovado
11,2 €/m² mo



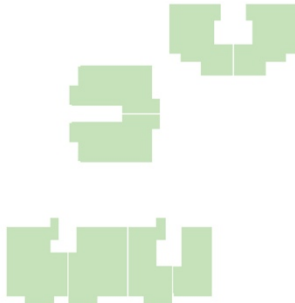
4.
1950_TO_Garibaldi
11,2 €/m² mo



5.
1954_TO_Risorgimento
8,2 €/m² mo



6.
1962_TO_Giulio_Cesare
8 €/m² mo



7.
1963_MI_Ruggiero_Lauria
19 €/m² mo



8.
1964_MI_Tolstoi
16 €/m² mo



9.
1968_TO_Vittorio
11,2 €/m² mo



10.
1969_MI_Elba
22 €/m² mo



11.
1969_MI_Ferrucci
19 €/m² mo



12.
1970_MI_Sempione
19 €/m² mo

Figure 93 Rent price analysis of the selected cases. Drawing by the author

1928_TO_Cavour

1929_TO_Umberto

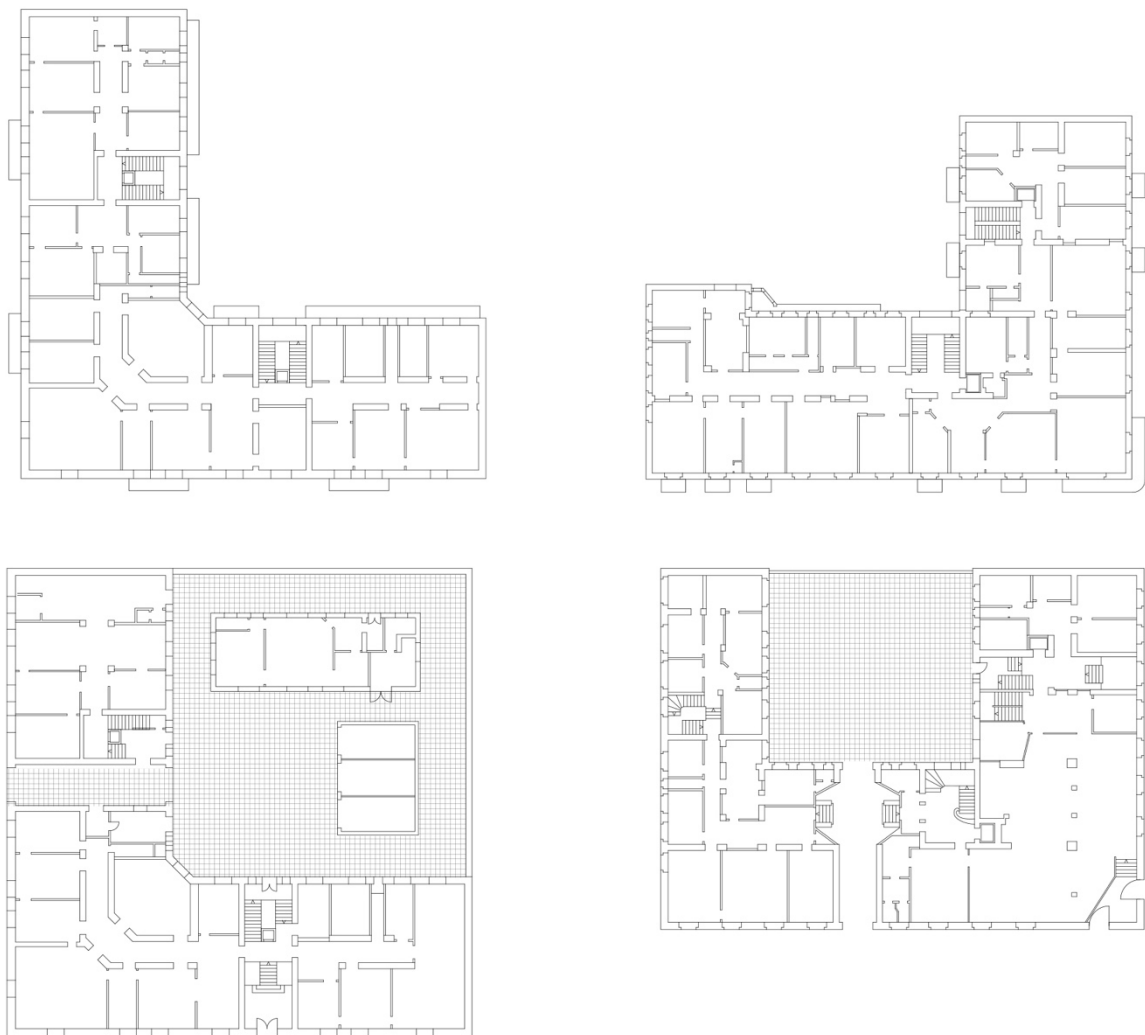
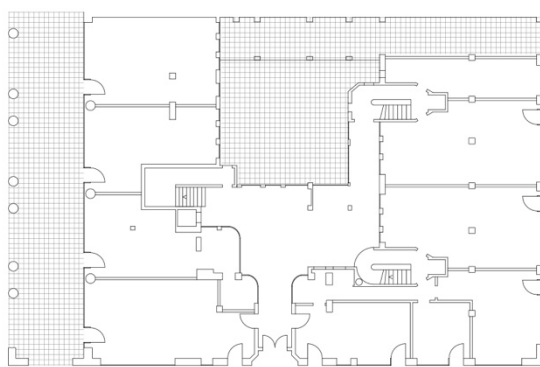
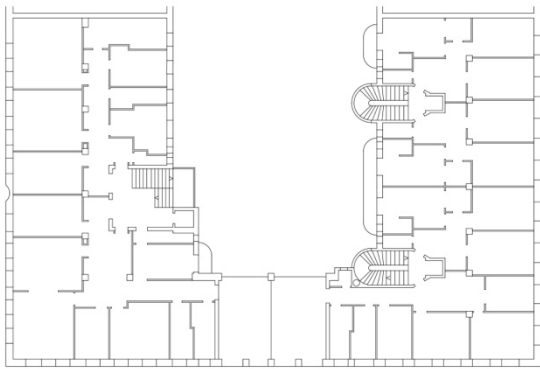
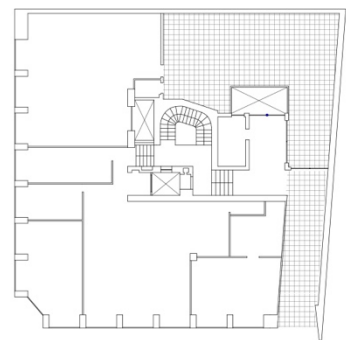
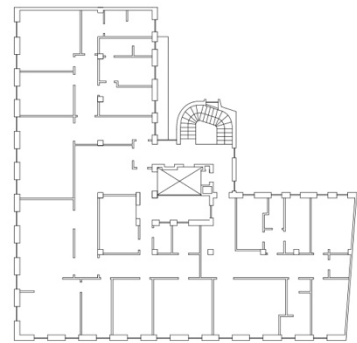


Figure 94 Plans of the groundfloor and typical floor of the selected cases. Drawing by the author

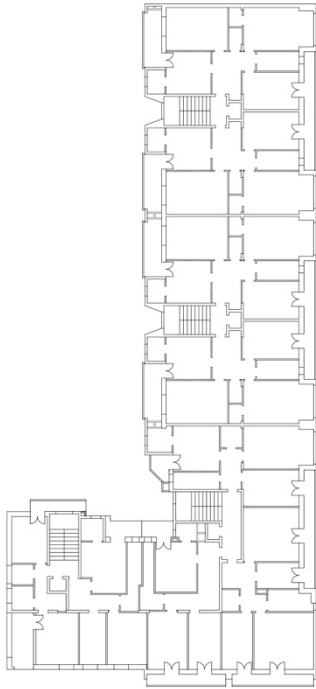
1936_TO_Arcivescovado



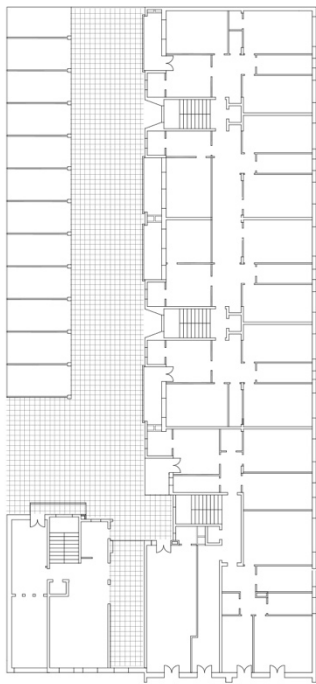
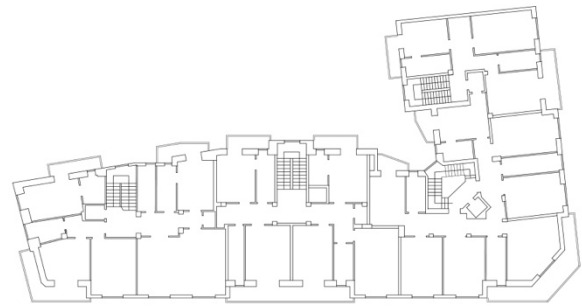
1950_TO_Garibaldi



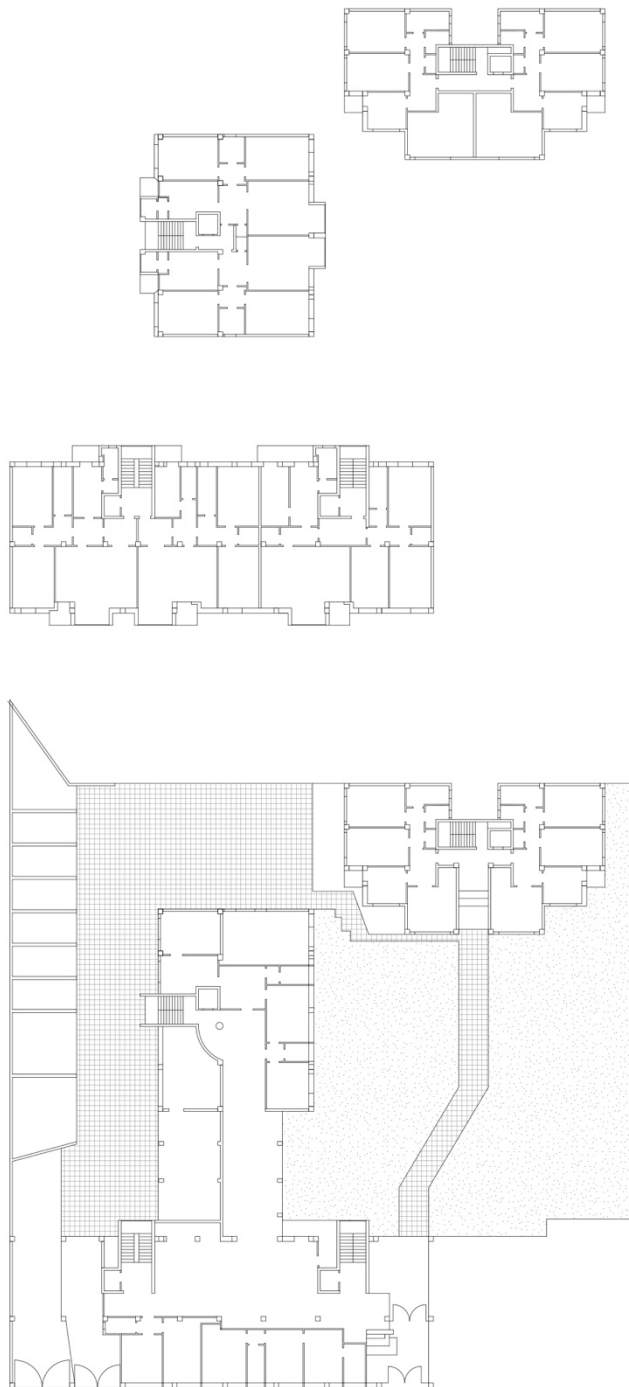
1954_TO_Risorgimento



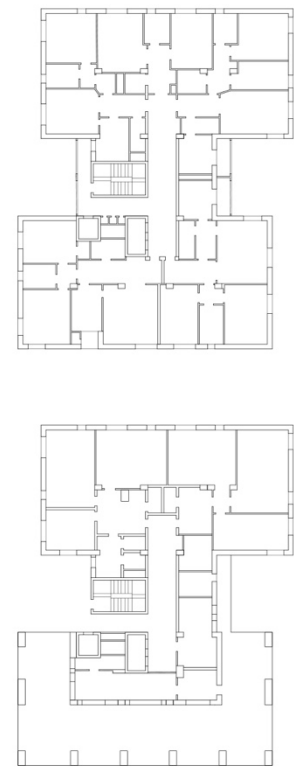
1962_TO_Giulio_Cesare



1963_MI_Ruggiero_Lauria

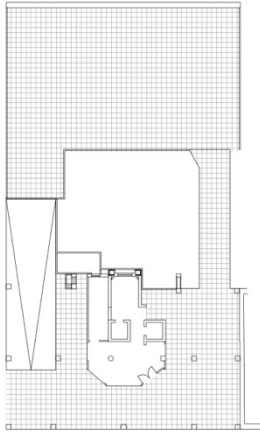
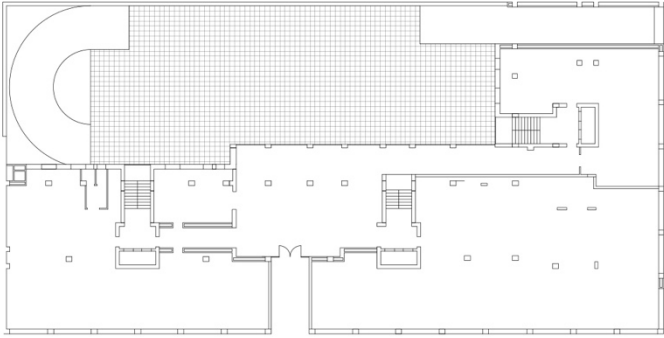
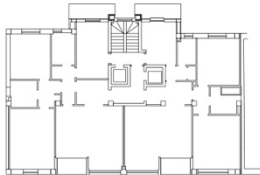
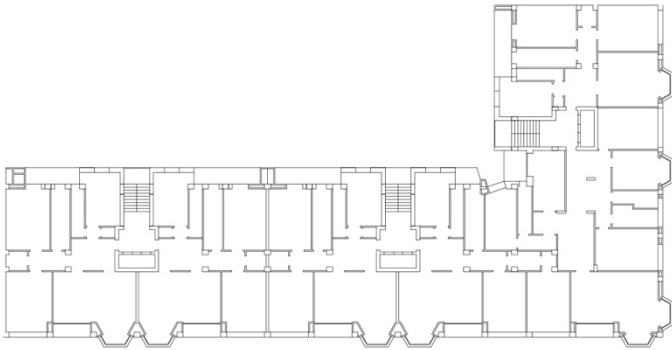


1964_MI_Tolstoi

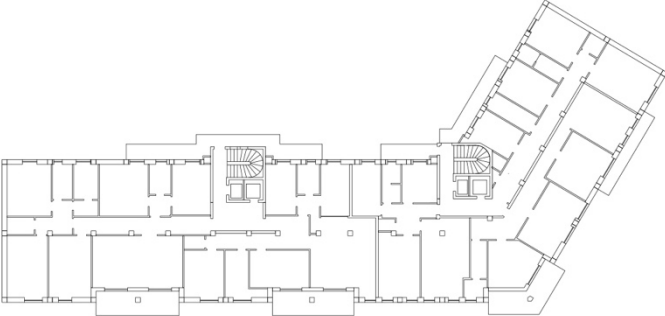


1968_TO_Vittorio

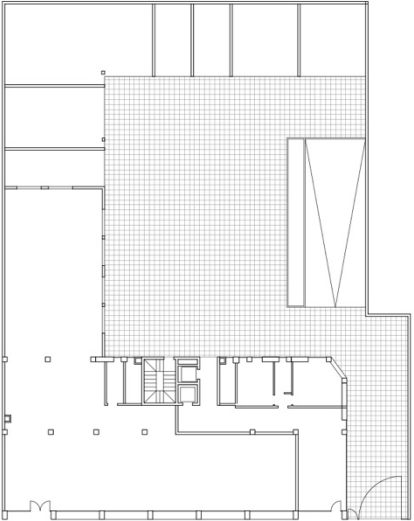
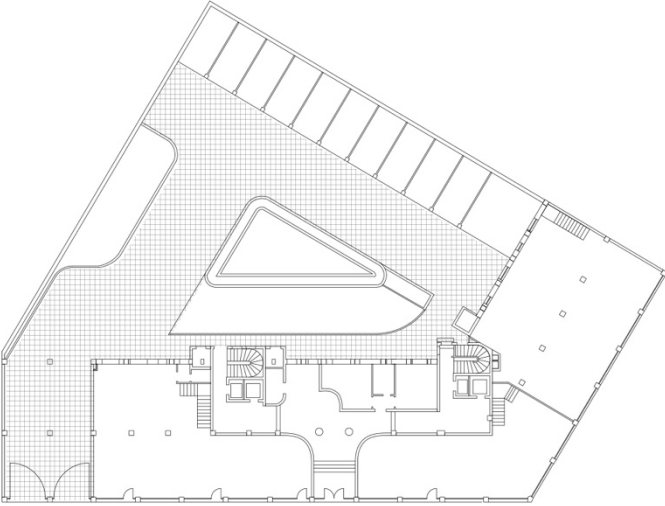
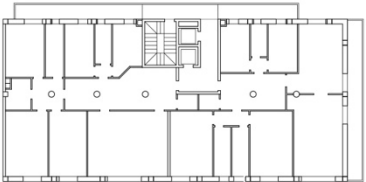
1969_MI_Elba



1969_MI_Ferrucci



1970_MI_Sempione



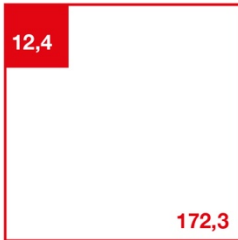
1928 TO Cavour



Floors	4
Dwellings (at built state)	20
Total dwelling area	2757
Structure	Loadbearing walls
Extra	Garage boxes, Guardian house
Plot area	1477
Covered area	1059
Open areas	418
Common areas (halls, corridors, terraces)	118
Private Circulation	174
% Circulation dwelling area	4%
Min unit area	71
Max unit area	310
Avg unit	178.7



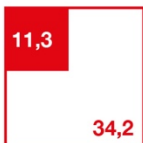
Turin affordable unit and average rental unit



0
Existing
Units: 4
Avg. unit: 172,3 m²
Communal areas: 49,9 m²
Total rent: 7719 €/mo



1
Regular flats
Units: 10
Avg. unit: 58,9 m²
Communal areas: 110,8 m²
Total rent: 6596 €/mo



2
Cluster units
Units: 14
Avg. unit: 34,2 m²
Communal areas: 158,8 m²
Total rent: 7000 €/mo



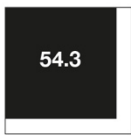
3
Micro-units
Units: 19
Avg. unit: 19,5 m²
Communal areas: 282 m²
Total rent: 9500 €/mo



1929 TO Umberto

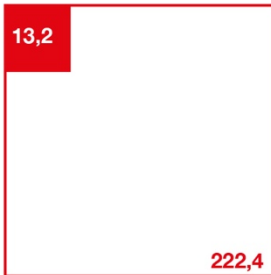


Floors	8
Dwellings (at built state)	23
Total dwelling area	3990
Structure	Loadbearing walls
Extra	Garage boxes, Guardian house
Plot area	1200
Covered area	929
Open areas	271
Common areas (halls, corridors, terraces)	411
Private Circulation	318.4
% Circulation dwelling area	8%
Min unit area	106
Max unit area	291
Avg unit	198.5



69.6

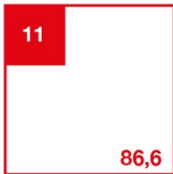
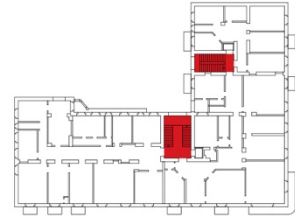
Turin affordable unit and average rental unit



222,4

0

Existing
Units: 3
Avg. unit: 222,4 m²
Communal areas: 39,8 m²
Total rent: 7472 €/mo



86,6

1

Regular flats
Units: 6
Avg. unit: 86,6 m²
Communal areas: 66,4 m²
Total rent: 5819 €/mo



40,6

2

Cluster units
Units: 14
Avg. unit: 40,6 m²
Communal areas: 109,8 m²
Total rent: 7000 €/mo



26,8

3

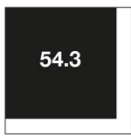
Micro-units
Units: 18
Avg. unit: 26,8 m²
Communal areas: 185,8 m²
Total rent: 9000 €/mo



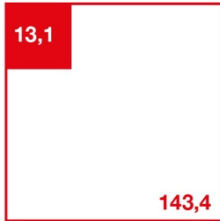
1936 TO Arcivescovado



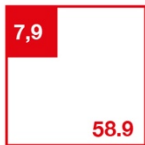
Floors	7
Dwellings (at built state)	26
Total dwelling area	3220
Structure	Concrete
Extra	Commercial space, Office space, Guardian house
Plot area	1273
Covered area	911
Open areas	362
Common areas (halls, corridors, terraces)	408
Private Circulation	328
% Circulation dwelling area	10%
Min unit area	79
Max unit area	192
Avg unit	119



Turin affordable unit and average rental unit



0
Existing
Units: 5
Avg. unit: 143,4 m²
Communal areas: 65,6 m²
Total rent: 8018 €/mo



1
Regular flats
Units: 11
Avg. unit: 58,3 m²
Communal areas: 87,4 m²
Total rent: 7182 €/mo



2
Cluster units
Units: 17
Avg. unit: 34,5 m²
Communal areas: 244,2 m²
Total rent: 7650 €/mo



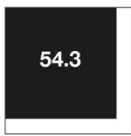
3
Micro-units
Units: 21
Avg. unit: 20,6 m²
Communal areas: 355,3 m²
Total rent: 10500 €/mo



1950 TO Garibaldi

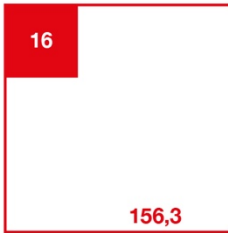


Floors	6
Dwellings (at built state)	11
Total dwelling area	1876
Structure	Concrete
Extra	Commercial spaces, Office space, Garage boxes, Guardian house
Plot area	700
Covered area	557
Open areas	143
Common areas (halls, corridors, terraces)	142
Private Circulation	289
% Circulation dwelling area	15%
Min unit area	131
Max unit area	198
Avg unit	156



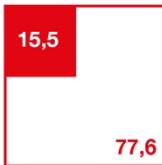
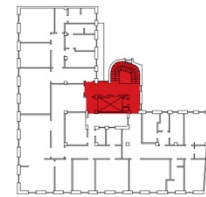
69.6

Turin affordable unit and average rental unit



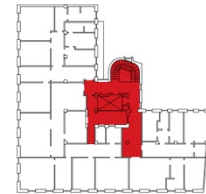
0

Existing
Units: 3
Avg. unit: 156,3 m²
Communal areas: 48,2 m²
Total rent: 5252 €/mo



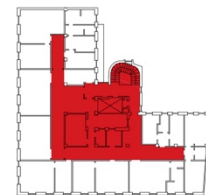
1

Regular flats
Units: 5
Avg. unit: 85,7 m²
Communal areas: 77,6 m²
Total rent: 4793 €/mo



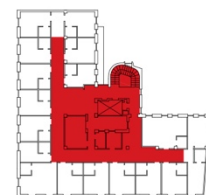
2

Cluster units
Units: 9
Avg. unit: 51,7 m²
Communal areas: 183,1 m²
Total rent: 4050 €/mo



3

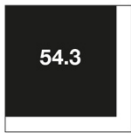
Micro-units
Units: 18
Avg. unit: 17 m²
Communal areas: 192,8 m²
Total rent: 9000 €/mo



1954 TO Risorgimento

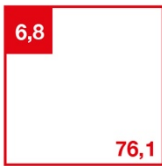


Floors	9
Dwellings (at built state)	81
Total dwelling area	6167
Structure	Concrete
Extra	Basement, garage, guardian house
Plot area	1405
Covered area	1076
Open areas	329
Common areas (halls, corridors, terraces)	120
Private Circulation	551.7
% Circulation dwelling area	9%
Min unit area	40.4
Max unit area	91.7
Avg unit	76.1



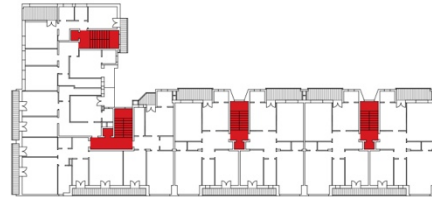
69.6

Turin affordable unit and average rental unit



0

Existing
Units: 9
Avg. unit: 76,1 m²
Communal areas: 61,3 m²
Total rent: 5619 €/mo



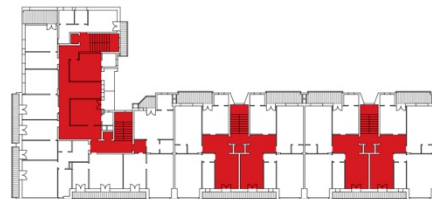
1

Regular flats
Units: 17
Avg. unit: 38,2 m²
Communal areas: 89,8 m²
Total rent: 5325 €/mo



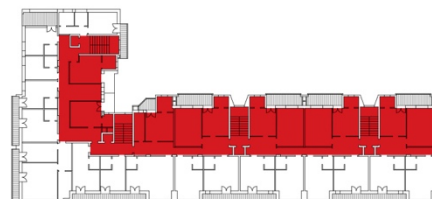
2

Cluster units
Units: 20
Avg. unit: 25,3 m²
Communal areas: 227 m²
Total rent: 7000 €/mo



3

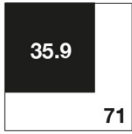
Micro-units
Units: 17
Avg. unit: 18,5 m²
Communal areas: 367,1 m²
Total rent: 6800 €/mo



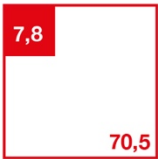
1963 MI Ruggiero Lauria



Floors	7-9 (three buildings)
Dwellings (at built state)	62
Total dwelling area	5008
Structure	Concrete
Extra	Commercial spaces, garage, car boxes, guardian house
Plot area	2368
Covered area	1536
Open areas	832
Common areas (halls, corridors, terraces)	358
Private Circulation	533
% Circulation dwelling area	10%
Min unit area	24.8
Max unit area	115.6
Avg unit	82.6

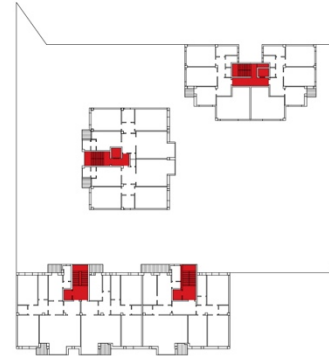


Milan affordable unit and average rental unit



0

Existing
Units: 9
Avg. unit: 82,6 m²
Communal areas: 70,5 m²
Total rent: 14117 €/mo



1

Regular flats
Units: 16
Avg. unit: 44 m²
Communal areas: 112,1 m²
Total rent: 13376 €/mo



2

Cluster units
Units: 17
Avg. unit: 37,4 m²
Communal areas: 177,9 m²
Total rent: 12750 €/mo



3

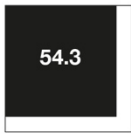
Micro-units
Units: 22
Avg. unit: 18,6 m²
Communal areas: 407,2 m²
Total rent: 17600 €/mo



1962 TO Giulio Cesare

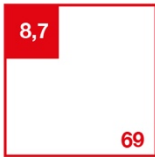


Floors	9
Dwellings (at built state)	48
Total dwelling area	3864
Structure	Concrete
Extra	Commercial spaces, office space, guardian
Plot area	894
Covered area	646
Open areas	248
Common areas (halls, corridors, terraces)	180
Private Circulation	490.4
% Circulation dwelling area	12%
Min unit area	51.5
Max unit area	92.8
Avg unit	69



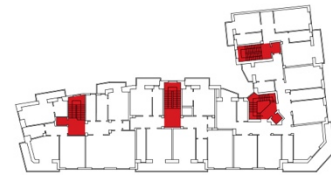
69.6

Turin affordable unit and average rental unit



0

Existing
Units: 7
Avg. unit: 69 m²
Communal areas: 61,3 m²
Total rent: 3864 €/mo



1

Regular flats
Units: 11
Avg. unit: 42,7 m²
Communal areas: 68,9 m²
Total rent: 3752 €/mo



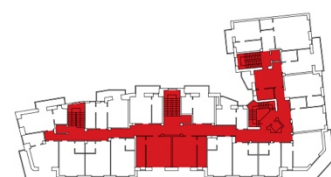
2

Cluster units
Units: 14
Avg. unit: 24,8 m²
Communal areas: 157,2 m²
Total rent: 4900 €/mo



3

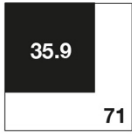
Micro-units
Units: 18
Avg. unit: 19 m²
Communal areas: 191,7 m²
Total rent: 7200 €/mo



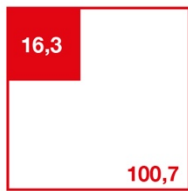
1964 MI Tolstoi



Floors	10 (6 buildings)
Dwellings (at built state)	470
Total dwelling area	22932
Structure	Concrete
Extra	Basement, guardian
Plot area	30000
Covered area	3222
Open areas	26778
Common areas (halls, corridors, terraces)	1380
Private Circulation	3910
% Circulation dwelling area	17%
Min unit area	85.8
Max unit area	121
Avg unit	100.7

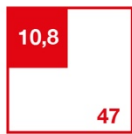
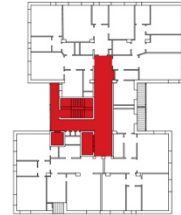


Milan affordable unit and average rental unit



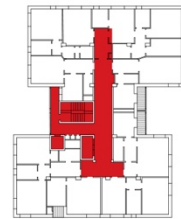
0

Existing
Units: 4
Avg. unit: 100,7 m²
Communal areas: 65,3 m²
Total rent: 6448 €/mo



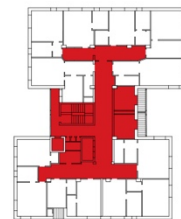
1

Regular flats
Units: 8
Avg. unit: 47 m²
Communal areas: 87 m²
Total rent: 6016 €/mo



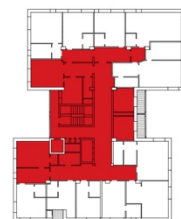
2

Cluster units
Units: 13
Avg. unit: 24,5 m²
Communal areas: 141,8 m²
Total rent: 7800 €/mo

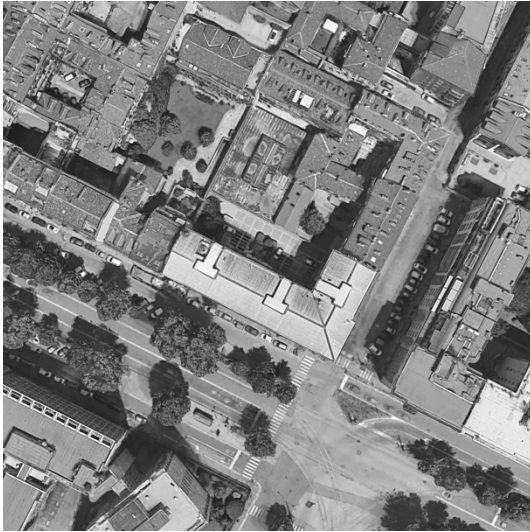


3

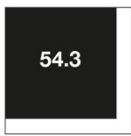
Micro-units
Units: 11
Avg. unit: 23,4 m²
Communal areas: 208,5 m²
Total rent: 7700 €/mo



1968 TO Vittorio

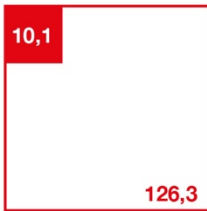


Floors	6
Dwellings (at built state)	30
Total dwelling area	3785
Structure	Concrete
Extra	Commercial spaces, office space, guardian, garage
Plot area	1500
Covered area	1009
Open areas	491
Common areas (halls, corridors, terraces)	208
Private Circulation	365.4
% Circulation dwelling area	9%
Min unit area	107
Max unit area	175
Avg unit	126.3



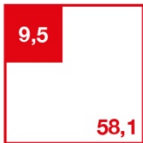
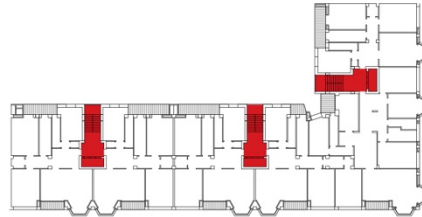
69.6

Turin affordable unit and average rental unit



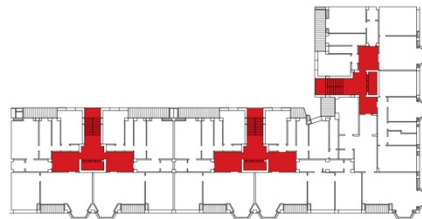
0

Existing
Units: 6
Avg. unit: 126,3 m²
Communal areas: 60,9 m²
Total rent: 8478 €/mo



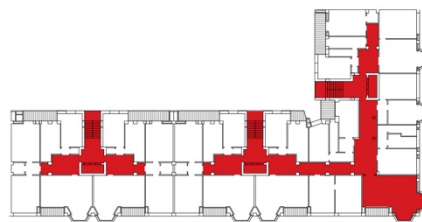
1

Regular flats
Units: 12
Avg. unit: 58,1 m²
Communal areas: 114 m²
Total rent: 7806 €/mo



2

Cluster units
Units: 18
Avg. unit: 34 m²
Communal areas: 202,6 m²
Total rent: 8100 €/mo



3

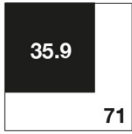
Micro-units
Units: 25
Avg. unit: 20,2 m²
Communal areas: 246,8 m²
Total rent: 12500 €/mo



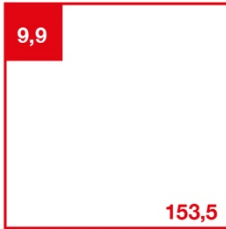
1969 MI Elba



Floors	9
Dwellings (at built state)	16
Total dwelling area	1532
Structure	Concrete
Extra	Garage box, terrace, basement
Plot area	678
Covered area	221
Open areas	457
Common areas (halls, corridors, terraces)	277
Private Circulation	178.2
% Circulation dwelling area	11%
Min unit area	92
Max unit area	99.6
Avg unit	95.8

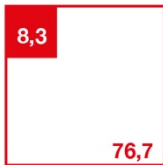
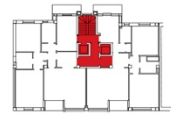


Milan affordable unit and average rental unit



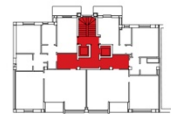
0

Existing
Units: 2
Avg. unit: 95,8 m²
Communal areas: 19,8 m²
Total rent: 4215 €/mo



1

Regular flats
Units: 4
Avg. unit: 43 m²
Communal areas: 33,4 m²
Total rent: 3784 €/mo



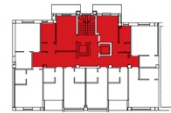
2

Cluster units
Units: 7
Avg. unit: 21 m²
Communal areas: 55,7 m²
Total rent: 5250 €/mo



3

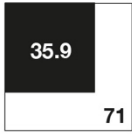
Micro-units
Units: 8
Avg. unit: 15,7 m²
Communal areas: 77,7 m²
Total rent: 6400 €/mo



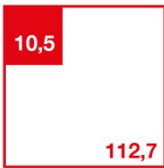
1969 MI Ferrucci



Floors	7
Dwellings (at built state)	27
Total dwelling area	3220
Structure	Concrete
Extra	Commercial spaces, garage, guardian
Plot area	1495
Covered area	883
Open areas	612
Common areas (halls, corridors, terraces)	141
Private Circulation	366
% Circulation dwelling area	11%
Min unit area	79.5
Max unit area	119.7
Avg unit	112.5



Milan affordable unit and average rental unit



0

Existing
Units: 5
Avg. unit: 112,7 m²
Communal areas: 52,4 m²
Total rent: 10678 €/mo



1

Regular flats
Units: 13
Avg. unit: 39,6 m²
Communal areas: 92,5 m²
Total rent: 9766 €/mo



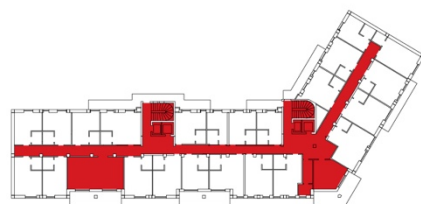
2

Cluster units
Units: 15
Avg. unit: 30,5 m²
Communal areas: 144,3 m²
Total rent: 11250 €/mo



3

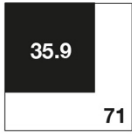
Micro-units
Units: 23
Avg. unit: 18,5 m²
Communal areas: 189,4 m²
Total rent: 18400 €/mo



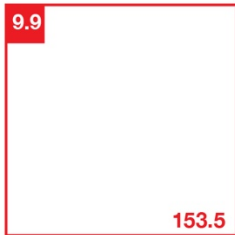
1970 MI Sempione



Floors	10
Dwellings (at built state)	13
Total dwelling area	2763
Structure	Concrete
Extra	Garage boxes, Commercial space, Guardian house
Plot area	1346
Covered area	747.7
Open areas	583
Common areas (halls, corridors, terraces)	640.3
Private Circulation	109.17
% Circulation dwelling area	3%
Min unit area	147
Max unit area	161
Avg unit	153,5
Unit typologies	2

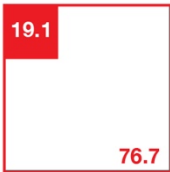


Milan affordable unit and average rental unit



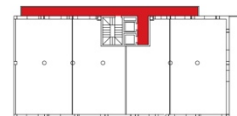
0

Existing
Units: 2
Avg. unit: 153,5 m²
Communal areas: 19,8 m²
Total rent: 5219 €/mo



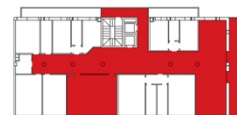
1

Regular flats
Units: 4
Avg. unit: 76,7 m²
Communal areas: 33,4 m²
Total rent: 5219 €/mo



2

Cluster units
Units: 9
Avg. unit: 14,2 m²
Communal areas: 164 m²
Total rent: 5400 €/mo



3

Micro-units
Units: 9
Avg. unit: 18,5 m²
Communal areas: 189,4 m²
Total rent: 6750 €/mo



5.3 Observations

Flexibility, a matter of space

Repurposing the definition of flexibility and adaptability by Till and Schneider (Till and Scheider 2007), it is possible to observe how the two qualities can co-occur or prevail on the other according to a different project scenario. The research by design employed in this chapter allows us to assess various observations from a spatial perspective.

First of all, as the operations on the twelve case studies started by a reorganization of the floor plan preserving most of the existing partition walls, this analysis serves to assess mostly adaptability. In all the cases, this operation demonstrated that it is possible to double the existing living units, reducing the initial average of one-hundred-and-twenty square meters to sixty square meters. It's important to note from an architectural point of view that this led to a systematic downside revealing a lack of flexibility. Because the structural and circulation layouts are usually organized around a longitudinal central spine, each staircase can usually distribute two apartments per time. Therefore, the apartments' subdivision had to be operated on the longitudinal axis of the slab losing the double exposure of the apartments. This would require a balcony circulation typical of modernist slabs or courtyard housing for the lower classes of the early twentieth century¹⁶⁶.

Except for the first two cases of the case selection, all the other cases are built with a concrete frame structure (Figure 95).

In the 'cluster' scenarios, where the size of the apartments can admit more likely a single exposure –as usually happens in a serviced apartment scheme– the role played by the structure becomes predominant. The loadbearing wall structures from the 1920s show significant limitations confronting them to the ones in concrete framework because they admit mostly a mono-axial modification of the partition walls. On the other hand, the frame structures are more flexible to shifts of partition walls and circulation spaces. In both cases, the second restrictive variable is the width of the body of the building. For example, the building of via Garibaldi in Turin (1950)¹⁶⁷, for an unusually thick body with a reduced lightwell at the

¹⁶⁶ As the plan of the Turin's 'outside-corridor type' in the catalogue of the *Existenzminimum* (Internationale Kongresse für Neues Bauen und Städtisches 1930).

¹⁶⁷ Pages 234-35

core of the building, difficultly allows replacing the dark service areas into reduced size living units.

The central spine longitudinal axis also defines the circulation patterns in the intensification scenarios. As shown in Figure 96, most of the cases initially devoted a limited amount of space to horizontal circulation areas outside the unit. In order to add partitions to provide more living units, in almost all the cases, the employed device is the one of the long central corridors. In the micro-unit scenario, usually, a single corridor serves the floor for all its length opening in strategic points of the plan on collective areas. Few other cases as the one of Ruggiero Lauria in Milan (1963) or Risorgimento in Turin (1954), having a limited width of the building employ a 'split' strategy in the case of the micro-unit scenario, meaning that the collective areas coincide with the circulation occupying the half of the floor, while the other half is composed by reduced size living units.

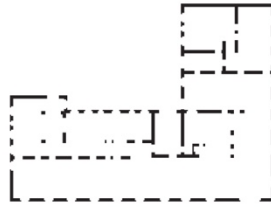
In all the mentioned cases, the conversion of the existing in other residential units does not imply any modification of the façade or the structural elements, coherently with the methodological aims of this kind of research trajectory.

Looking at the ground floor space of all the analyzed cases, it emerges how the predominance of car boxes conflicts with the needs of a contemporary rental housing building. Most of the car garages are rented independently from the housing leases by Reale Mutua. The courtyard of most of the buildings was initially designed as a valuable 'leftover' of the property. In all the analyzed cases, the courtyard is not employed as a proper collective space for the occupants of the building, instead of an extension of circulation space and the projection on the floor of the space required to light the inner facades. Therefore, the designers usually optimized this kind of space with car space, both for the regulations on housing standards¹⁶⁸ and financial reasons (Figure 97). These courtyards –in direct connection with the 'urban floor'– can offer a more extensive array of opportunities spanning from alternative residential typologies to productive and commercial spaces. Plus, coherently with post-war Italian design culture, the landscape design of these courtyards is left in most cases to a mixed surface of asphalt and mineral paving, with few decorative plants. With the exception of the case of Ruggiero Lauria in Milan (1963), which has a large area covered by a lawn, the other cases miss the opportunity to use the courtyard as a garden also to face climatic challenges as rainwater drainage and natural heat cooling.

¹⁶⁸ The DM 1444/68 introduced the standards for the surfaces to dedicate to parking spaces in the cases of new construction. The law was later updated in 1989 with local variations operated by any single Italian region.



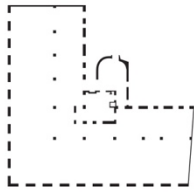
1.
1928_TO_Cavour
Loadbearing walls



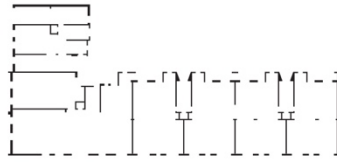
2.
1929_TO_Umberto
Loadbearing walls



3.
1936_TO_Arcivescovado
Concrete frame



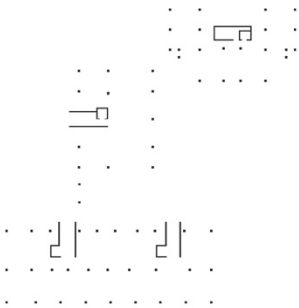
4.
1950_TO_Garibaldi
Concrete frame



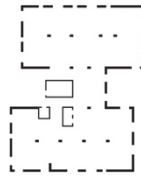
5.
1954_TO_Risorgimento
Mixed



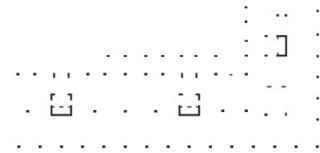
6.
1962_TO_Giulio_Cesare
Concrete frame



7.
1963_MI_Ruggiero_Lauria
Concrete frame



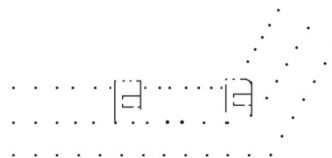
8.
1964_MI_Tolstoi
Concrete frame



9.
1968_TO_Vittorio
Concrete frame



10.
1969_MI_Elba
Concrete frame



11.
1969_MI_Ferrucci
Concrete frame



12.
1970_MI_Sempione
Concrete frame

Figure 95 Structural analysis of the selected cases. Drawing by the author

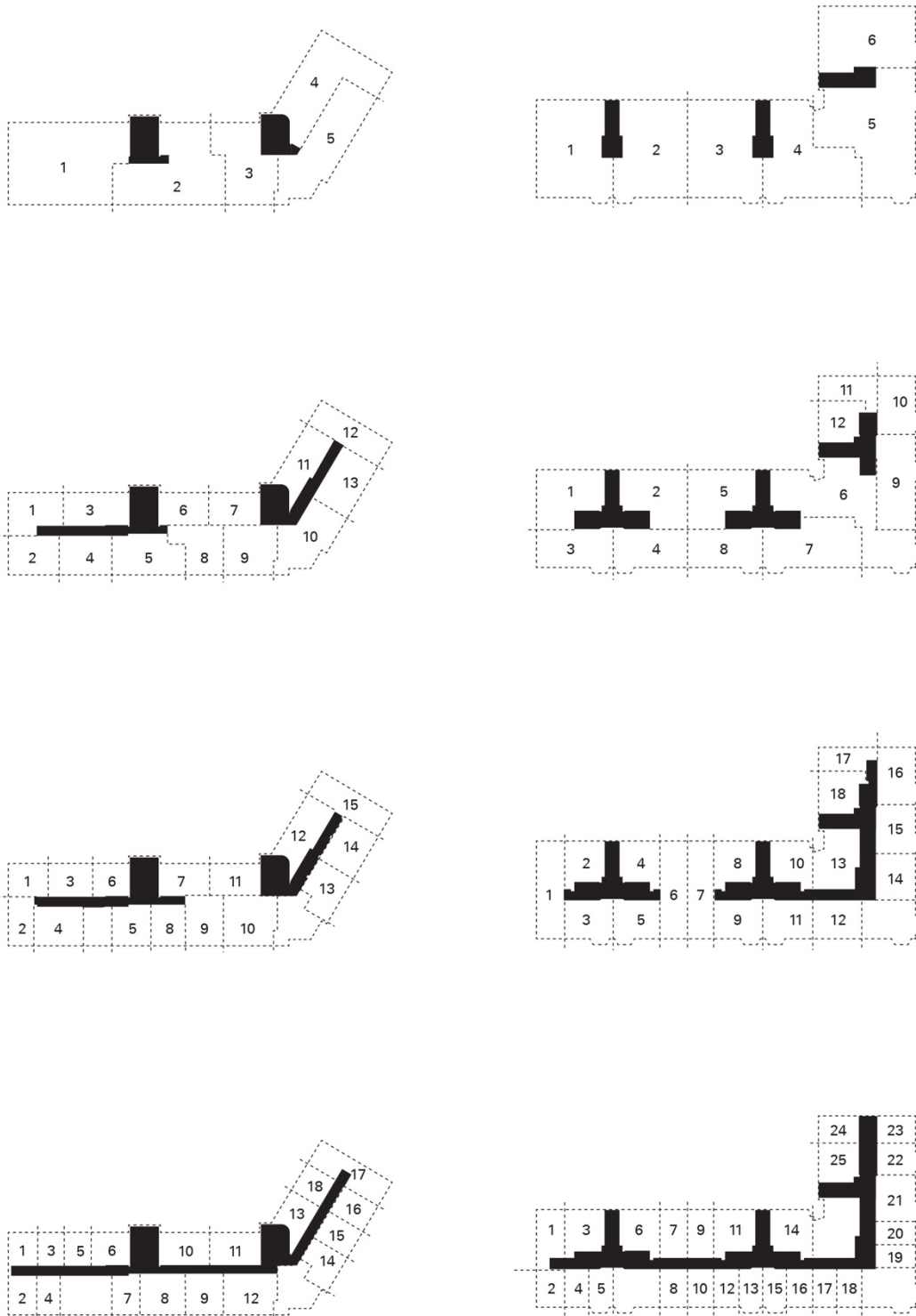
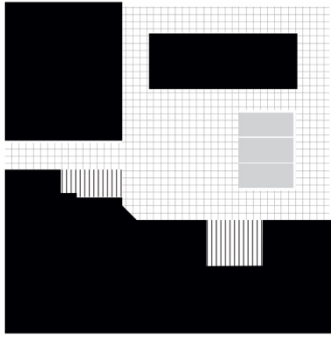
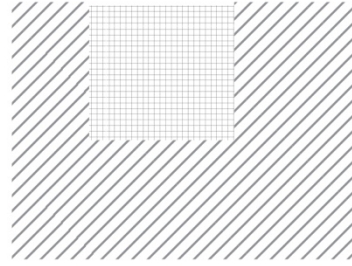


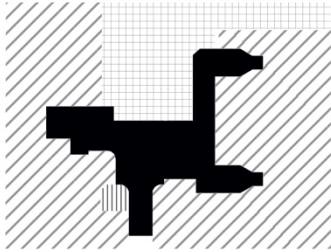
Figure 96 Circulation patterns in the different intensification stages, with the living units numbered progressively. On the left 1969_MI_Ferrucci, on the right 1968_TO_Vittorio. Drawing by the author



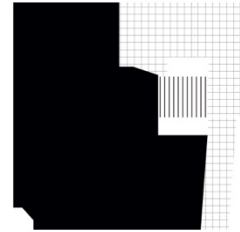
1928_TO_Cavour
 Plot= 1477 m²
 Covered= 1059 m²



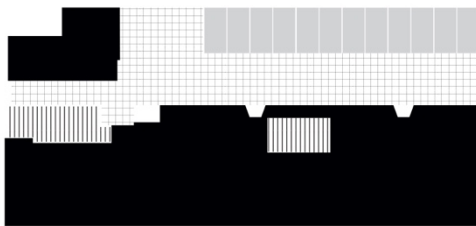
1929_TO_Umberto
 Plot= 1200 m²
 Covered= 929 m²



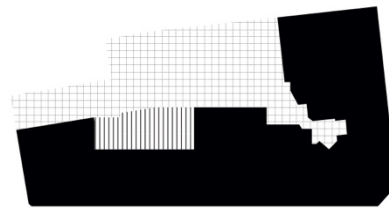
1936_TO_Arcivescovado
 Plot= 1273 m²
 Covered= 911 m²



1950_TO_Garibaldi
 Plot= 700 m²
 Covered= 557 m²

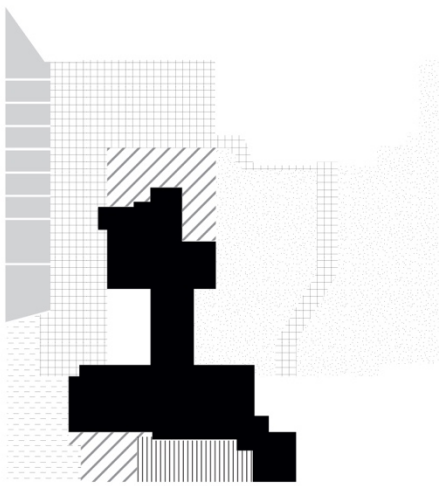


1954_TO_Risorgimento
 Plot= 1405 m²
 Covered= 1076 m²

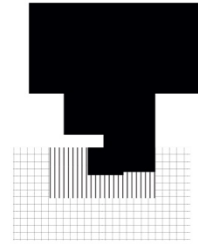


1962_TO_Giulio_Cesare
 Plot= 894 m²
 Covered= 646 m²

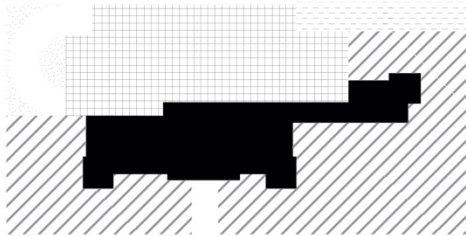
● Residential // Commercial ● Parking ||| Guardian # Paved ⊖ Car circulation ○ Green space



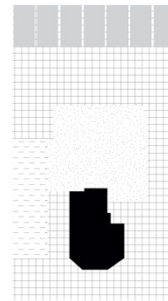
1963_MI_Ruggiero_Lauria
 Plot= 2368 m²
 Covered= 1536 m²



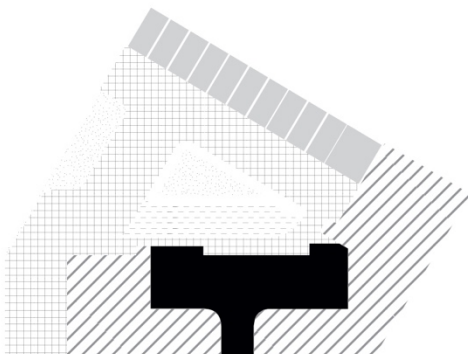
1964_MI_Tolstoi
 Plot= 30000 m²
 Covered= 3222 m²



1968_TO_Vittorio
 Plot= 1500 m²
 Covered= 1009 m²



1969_MI_Elba
 Plot= 678 m²
 Covered= 221 m²



1969_MI_Ferrucci
 Plot= 1495 m²
 Covered= 883 m²



1970_MI_Sempione
 Plot= 1346 m²
 Covered= 747 m²

Figure 97 Ground floor program and surfaces of the selected cases. Drawing by the author

Affordability. For whom?

If the quest for private space in the city for individual dwellers is an issue present from the times of Serlio, the form of the dwelling becomes crucial beyond the price per square meter. Once understood the gap between the average market product and the ‘affordable surface’ (Chapter 4.2), it is possible to envision possible intensification scenarios through spatial modification. As a widespread ‘micro-unit’ scenario would look convenient both for landlords and tenants, a close analysis of the existing urban fabric shows that this might be relatively true.

Albeit the risk of following in economic oversimplifications, the economic evaluations of the different scenarios of this chapter show intuitive results. On the one hand, the ‘micro-unit’ scenario results show a steady increase in profitability for the landlord. On the other hand, the accessibility for the tenants in lower market locations is questionable.

Observing the figures, the profitability for the landlord from the current situation to a micro-unit scenario can vary between thirty percent and seventy percent. Furthermore, even with a sheer amount of shared space per occupant, the net profitability of a ‘micro’ scenario against an ordinary one is evident –on average, the rent per square meter doubles from the ‘actual stage’ to the ‘micro-units’ scenario (Table 7). On the demand side, the price of a furnished room plus collective spaces would always be higher in terms of rent per square meter. At the same time, it might allow residents to access areas of the city otherwise inaccessible because of the larger formats of dwellings available.

As demonstrated in Chapter 3, co-living –and by extension micro-living– in its current form, is far from being affordable in an absolute sense. The research by design highlighted even a worsening trend for critical areas, meaning that if for hypothesis a landlord as Reale Mutua decides to convert its whole real estate in a co-living, this would increase the land values of the area at a higher rate than other externalities would.

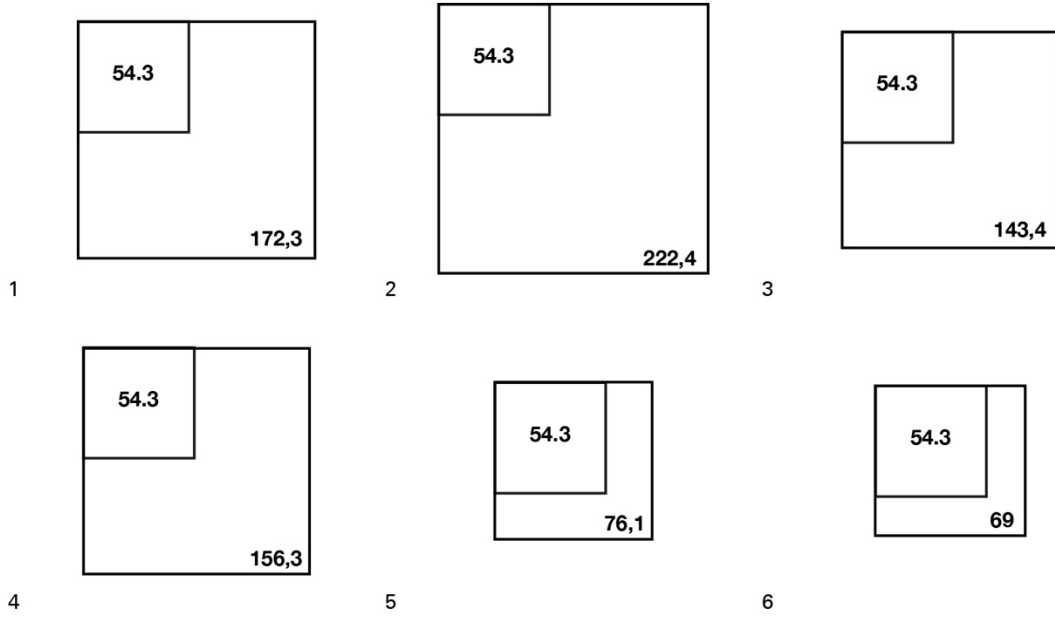
The empirical data emerging from both the ‘cluster’ and the ‘micro-unit’ scenarios reveal the quantitative amounts of shared space per occupant that a floorplan would have in the different cases. Observing the figures, in most cases –even if the living unit shrinks of also ten times the original flooring– the per capita shared space remains almost constant, and never higher than twenty square meters (Figure 98). On the other hand, the per capita collective space of the ‘micro-unit’ scenario has to be intended as an

extension of the private domestic room, where some of the basic functions are externalized. In this light, the combined surface of the living unit and the collective space always fits the ‘affordable surface’ area of the location. This means that regardless of the specific final design, from a financial point of view, the combination of a private room and connected services could be feasible both for the demand and the offer. Nevertheless, market factors as the higher cost for smaller furnished rooms would impact this kind of configurations, requiring a critical mass of units following the formulas of commercial hospitality. Finally, these simple observations on the resulting surfaces from the scenarios suggest possible reconfigurations of the considered real estate, where the role of collective space becomes of the same quantitative and qualitative value of the private domestic spaces, with the opportunity to be open to the surrounding city.

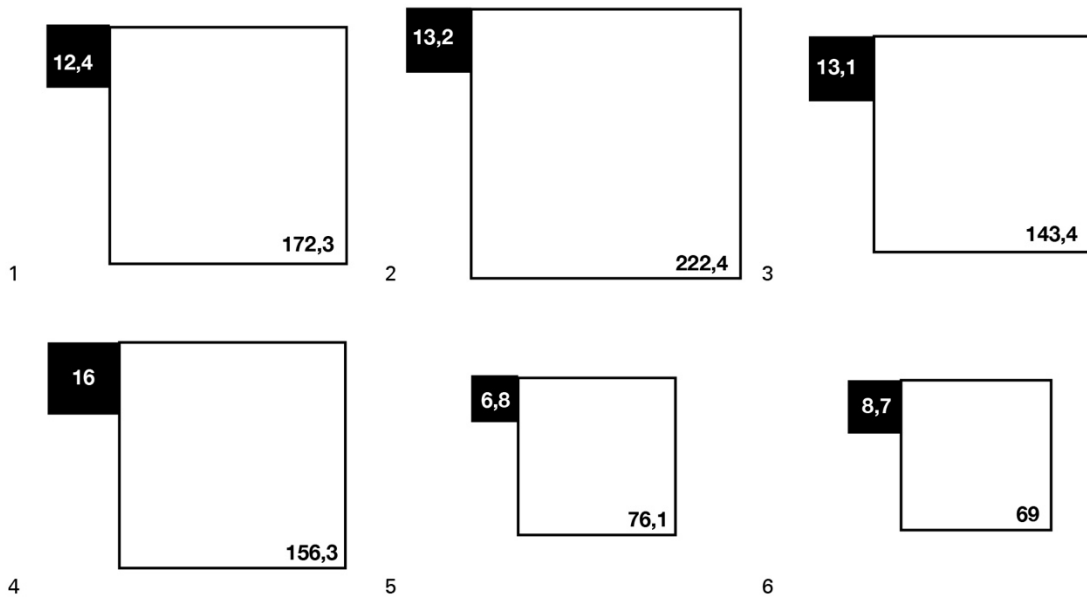
Case	0. Actual stage			1. Regular flats			2. Cluster units			3. Micro-units		
	units	€/m ²	Total rent	units	€/m ²	Total rent	units	€/m ²	Total rent	units	€/m ²	Total rent
1.	4	11.2	7719	10	11.2	6596	14	13.1	6300	19	25.6	9500
2.	3	11.2	7472	6	11.2	5819	14	11	7000	18	18.6	9000
3.	5	11.2	8018	11	11.2	7182	17	13	7650	21	24.3	10500
4.	3	11.2	5252	5	11.2	4793	9	8.7	4050	18	29.4	9000
5.	9	8.2	5619	17	8.2	5325	20	13.8	7000	17	21.6	6800
6.	9	19	14117	16	19	13376	17	20	12750	22	43	17600
7.	7	8	3864	11	8	3752	14	14.1	4900	18	21	7200
8.	4	16	6448	8	16	6016	13	24.4	7800	11	29.9	7700
9.	6	11.2	8478	12	11.2	7806	18	13.2	8100	25	24.7	12500
10.	2	22	4215	4	22	3784	7	33.3	5250	8	50.9	6400
11.	5	19	10678	13	19	9766	15	22.9	11250	23	43.2	18400
12.	2	19	5219	4	19	5219	9	42.2	5400	9	40.5	6750

Table 7 Floorplan economic data of the 12 case studies analyzed in Chapter 5. The table shows the number of units for each scenario, the correspondent price per square meter (€/sq m), the total rent (€)

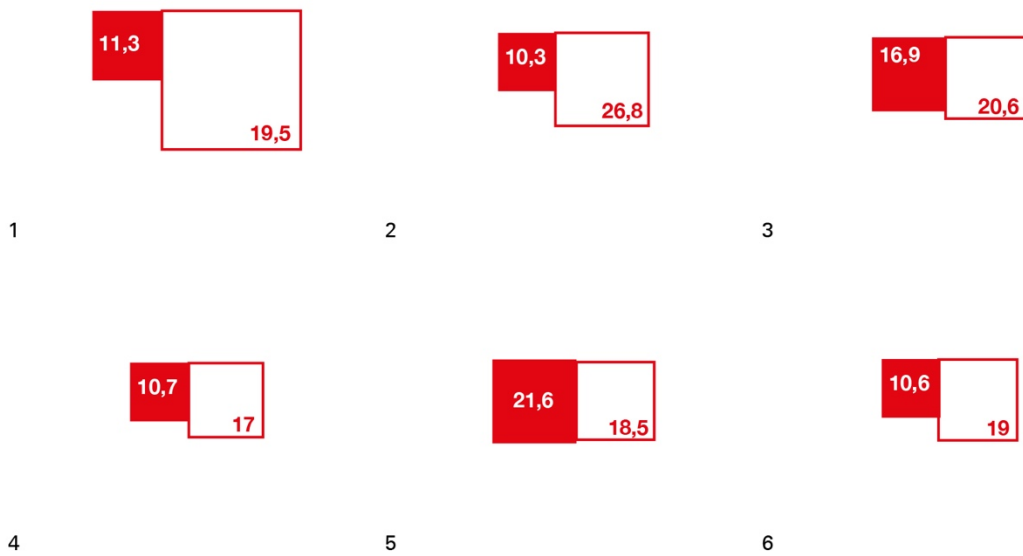
Affordable surface / average unit [0.]



Average unit + collective space per unit [0.]



Average unit + collective space per unit [4.]



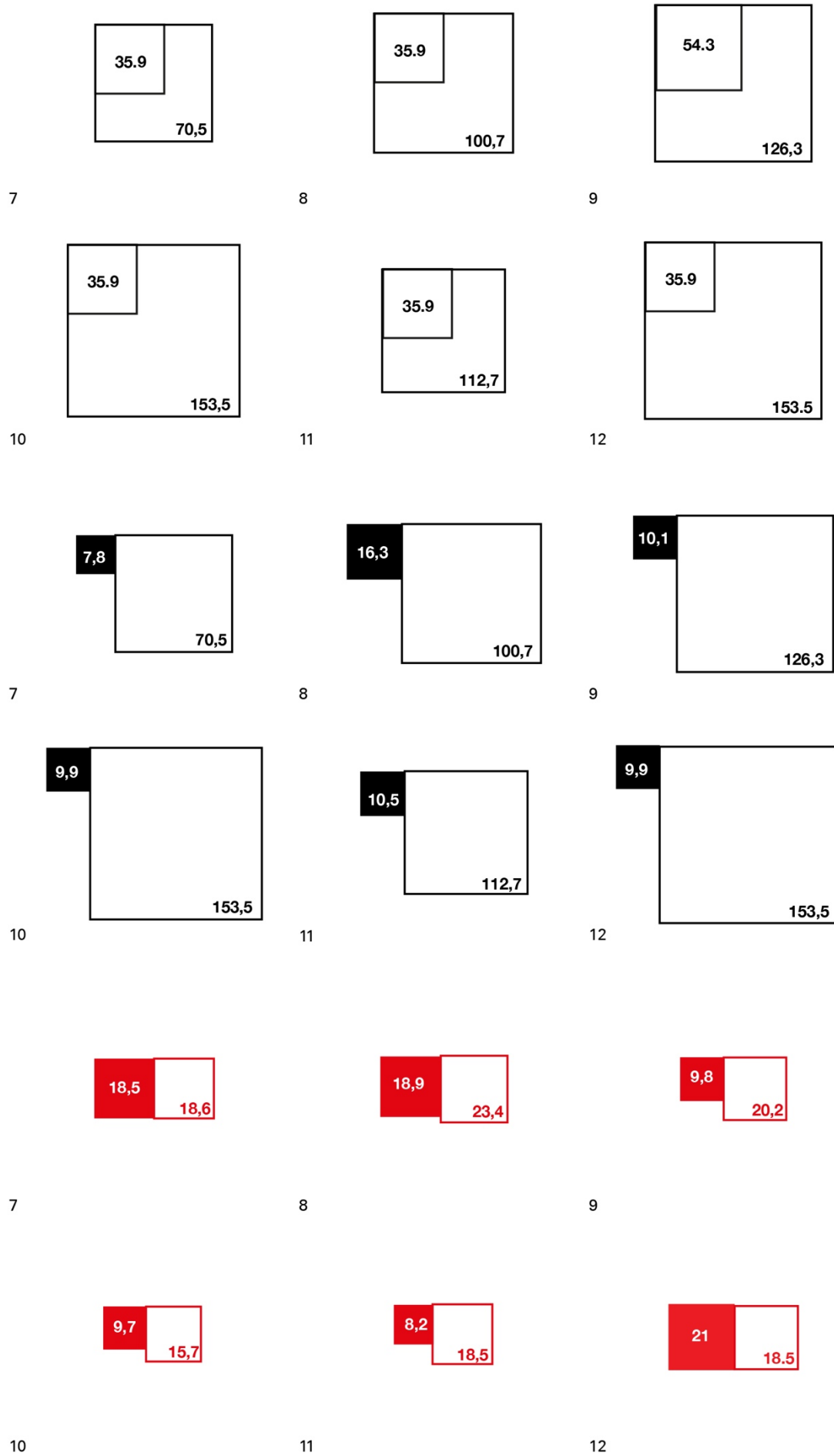


Figure 98 Diagrams showing the relationship between the affordable surface and the average area of the units of the twelve cases. The average unit area and its correspondent amount of collective space in the scenarios 0 and 4. Drawing by the author.

Shared space, or the inconveniences of convenience

When Moisei Ginzburg was arguing against the hypertropia of the ‘oversized’ canteens and communal spaces of some Soviet proposals, he was highlighting the crucial difference between a *commercial* and a *domestic* collective space (Ginzburg [1934] 2017). In his opinion, the socialist citizen had to have at disposition an adequately sized community to interact with. Otherwise, the experience of space would be assimilable to the one of commercial space –as would happen in the representative dining halls of the palatial hotels in New York in the early twentieth century (Sandoval-Strausz 2007).

Observing the evolution of the American hotel, it is possible to note how addressing the main entrance hall as lobby¹⁶⁹ contains a significant degree of *publicness* from a private apartment building hall. The fears of Ginzburg in providing oversized shared spaces in the communal houses for the Soviets also derived by the capitalist counterpart embodied in the hotel.

In co-living projects, this issue is still at the core of the discussion, as the claims by the companies to provide ‘community’ space (see Chapter 3.1) is suspended between the quality of the collective space of commercial hospitality and one of the more informal collective arrangements as student dormitories. In both cases, the main issue is the degree of necessity to access that particular space, giving to a room the different attribute of a more necessary or accessory character, e.g., a laundry room and a cinema room. The shared space of co-living could be expressed as a gradient from the public areas of the city to privacy, with an intermediate buffer of domestic collective spaces as shared kitchens and living rooms (Figure 46).

Shared space is the core data emerging from the analysis of the present chapter. Connecting existing and new circulation patterns to common rooms, this system of shared spaces gives evidence of the different quality that an old apartment building acquires with new layouts. Together with the economic observations drafted in the previous paragraph, it is worth to note that the qualitative aspects of collective domestic space are where the *new* standards of contemporary middle-class housing unfold mostly. The

¹⁶⁹ “Cloister, covered walk, from *Medieval Latin laubia, lobia* ‘covered walk in a monastery,’ from a *Germanic source* (compare *Old High German louba* “hall, roof; see *lodge* (n.)).

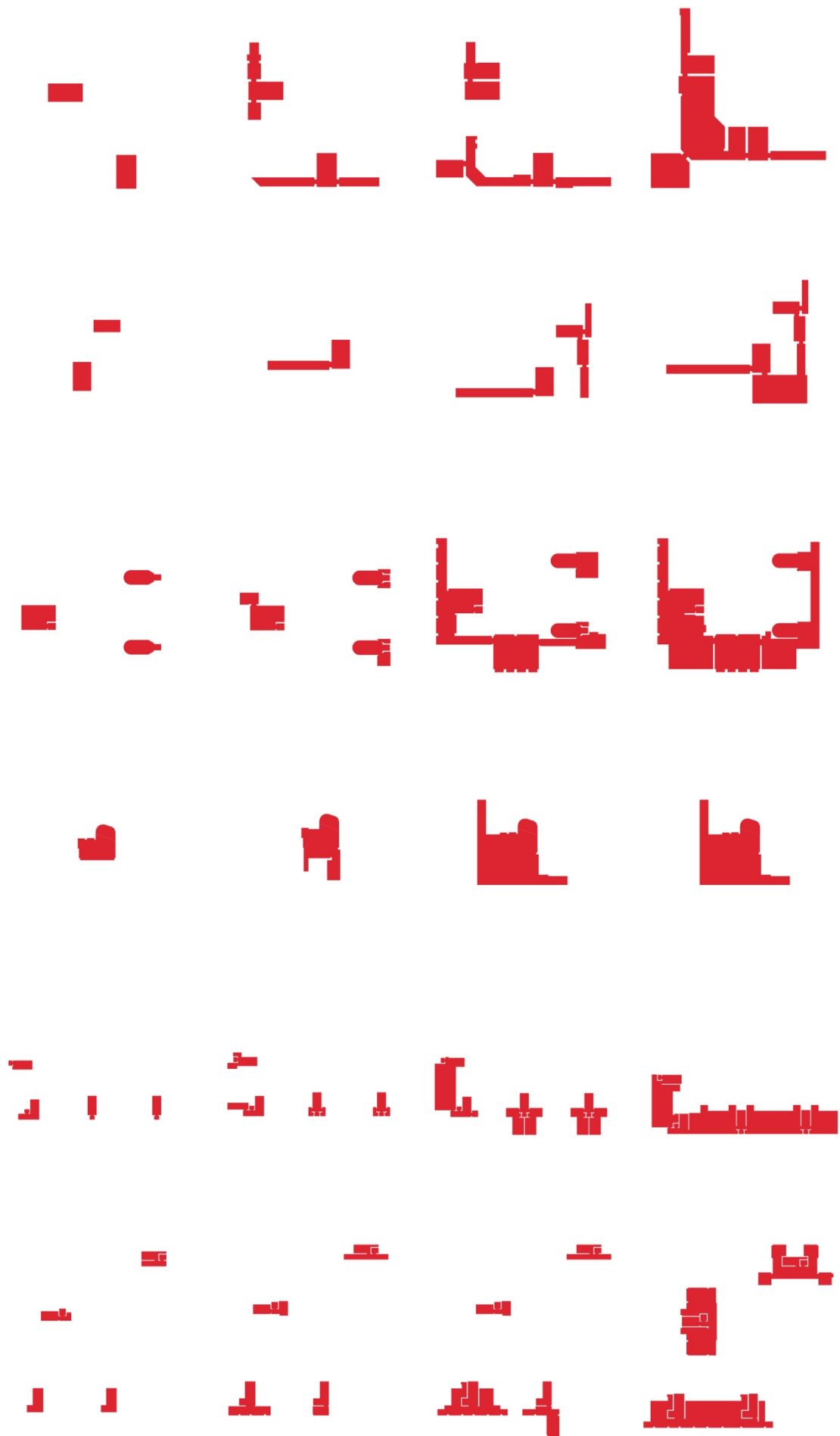
Meaning ‘large entrance hall in a public building’ is from 1590s; in reference to the *House of Commons* from 1630s. *Political sense* of “those who seek to influence legislation” is attested by 1790s in *American English*, in reference to the custom of influence-seekers gathering in the large entrance-halls outside legislative chambers.” Source: <https://www.etymonline.com/word/lobby>. Accessed January 20, 2020.

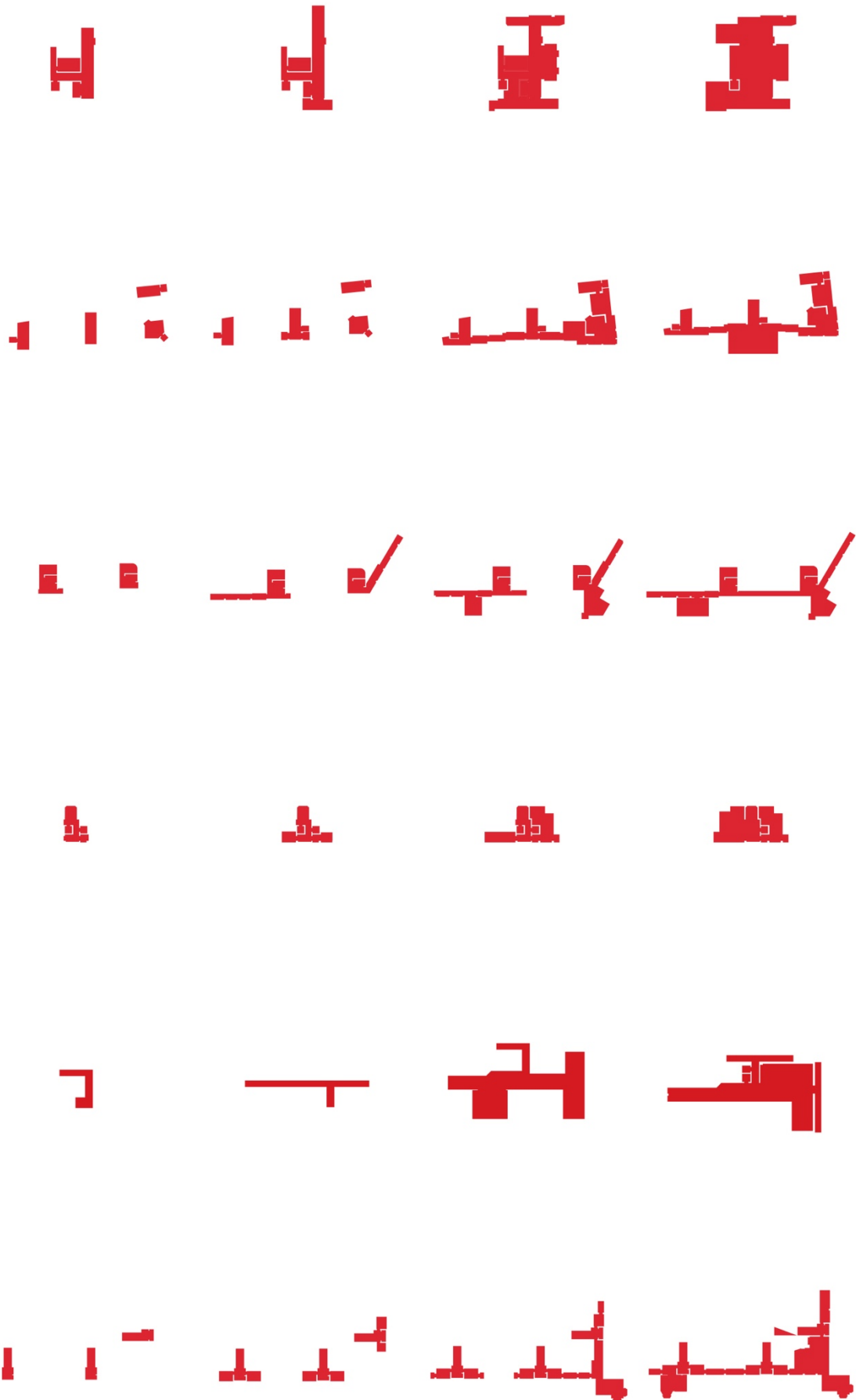
domestic units of the Casa Albergo by Luigi Moretti (1949) are not so different from the ones of The Collective at Old Oak (2015), both in terms of spatial layout and functional equipment. What differs most is the inclusion of new kinds of shared spaces, where the functional uses overlap in a varied landscape of different furniture objects.

The issue of *publicness* often related to the hotel is what characterizes more collective space. The paradox lies in the fact that the more a shared space is *public*, the more it is subject to be surveilled. The case study analysis revealed that in some cases, the collective space of ‘cluster’ scenarios could be even higher than in the ‘micro-unit’ ones due to the spatiality of the building. Opening the question over the actual advantages of extreme specialization of housing against its reorganization.

According to Niklas Maak, one of the fundamental characteristics of the co-living-like housing formats should be that a resident can have the opportunity to reach its living unit both independently with a lift, or passing through collective space (Maak 2015, 144). In fact, in the built examples of co-living this is impossible, as the personnel always oversees the lobby space. Plus, except for the private rooms, the whole buildings as The Collective Old Oak or Ollie are surveilled with CCTV cameras (Chapter 3.2).

Figure 99 (Next page) Evolution of shared space in the four scenarios for each of the twelve case studies. Drawing by the author





Chapter 6

Conclusions

In the introduction to the catalogue of the *New Domestic Landscape* exhibition, Emilio Ambasz envisioned a twofold approach to design. The problem-solving one and counterdesign (Ambasz and The Museum of Modern Art 1972, 137). According to Ambasz, this distinction was less categorical of how the actors of the time presented themselves:

“the oscillations of designers between these two attitudes reflects the contradictions and paradoxes that result from simultaneously doubting the benefits of our consumer society, and at the same time enacting the role of voyeurs of the technological dream” (Ambasz and The Museum of Modern Art 1972, 19).

Both the approaches led to a critical tension setting the new standards and imaginaries of the domestic interior –and beyond– for the second part of the last century. Currently, the digital revolution reformulated the premises of the previous generation of architects, while the critical content of the contemporary domestic project seems dissolved in a plurality of approaches. In this framework, trying to understand the whole complexity of the contemporary domestic *rentscape* is an almost impossible issue. Nevertheless, most of the core issues of the 1970s persist, and some are made obsolete by the introduction of the digital, shifting the attention from the *new* to the *adapted*. The hypothesis is that the current *rentscape* is at the same time accumulation of styles and symbols from the far and recent past, plus an ‘invisible’ novel infrastructure reshaping the ‘rituals’ and ‘ceremonies’ described by Ambasz (Ambasz and The Museum of Modern Art 1972, 137) –think about the working or leisure time activities allowed from a laptop and a bed (Self, Bose, and Williams 2016). This space of action reframes the classical roles of the designer and user in more complex interactions that are still open to modification.

The second part of this dissertation served to operate a stress test on a specific context raising different case-study-related questions. Moreover, the *ordinariness* of the selected case study allows for a more straightforward generalization. As seen in Chapter 4, the development of the ordinary city for the middle-classes was often paralleled by exceptional cases turned into

icons of the Italian housing heritage, e.g., the Torre Velasca in Milan by BBPR (1957). Furthermore, even the post-war Italian *città pubblica* was often a hybrid of negotiated private-public interests with unconventional outcomes. While the selection operated on the portfolio of Reale Mutua was aimed at ordinary buildings, even in the cases designed by notorious authors as Armando Melis and Nino Rosani, the projects share the basics of professional standards of the time dictated by manuals and praxis.

In this context, it would be a misinterpretation to read the actions on the real estate of institutional landlords as a one-size-fits-all approach to the housing crisis. The issues that emerge from this research by design are related to specific spaces, quantities, and domestic qualities attached to a single context. However, the questions emerged by this case study investigation address the general framework.

In particular, as the housing question in its original formulation by Engels remains unsolved, its premises seem reshaped by the political and technological context of the contemporary. Looking at the history of *modernization* as the history of *privatization*, private rent turns out as an endangered housing tenure –at least in its traditional form¹⁷⁰. During the last century, the property-owning democracy as a concept spread all over the rich world, and inequalities rose accordingly.

In terms of the built environment, the ‘automatic pilot’ of urbanization nourished by conservative politics has never ceased to worsen or undermine the condition of private rent and the scarcity of housing as one of the most precious commodities to trade in the city.

The corresponding architectural solutions developed during the last two centuries provided different organizational layouts to face the housing crisis employing collectivization. Moisei Ginzburg and the OSA researches on the communal house of the late 1920s are probably the most elaborate attempts to combine egalitarian policy with a scientific approach at the domestic scale. Even if several projects were built, from the inception of the *Dom Kommuna* (1929), the debate on the appropriate amount of private and collective space failed to provide a unique model. Finally, the initial impetus fostering quantity and quality, dissolved in large plans of prefabrication and demanded the technical solutions to engineering rather than to architecture (Meuser et al. 2016), abandoning the initial aim to empower the population with both individual dignity and shared responsibilities within collective housing schemes.

¹⁷⁰ In Chapter 1 a variety of mixed rent-ownership and alternative financial schemes as the ‘Naked House’ show how the three traditional tenures –private rent, homeownership, and reduced rent– can mix in some cases.

On the capitalist side, the three-century history of the hotel served as an incubator of modern domestic life. Together with the technical innovations introduced in the first American palace hotels, the format of commercial hospitality extended to large portions of the population offered an alternative model to the permanent owner-occupied home¹⁷¹. However, post-war politics and social trends denied hotel-life as a stable condition for the middle-classes, promoting homeownership both as a social stabilizer and a status symbol. The early century collectivized models as the central kitchen house –*Einküchehäuser* in the German-speaking world– often failed to offer a more convenient alternative to traditional rental housing.

The ‘collective experiment’ has not failed in absolute terms; it mostly unfolded in a plural array of different solutions, some innovating some persisting in their original form. According to Anna Puigjaner, the *Kitchen-less City* never existed in the form of a whole city, instead of in organized social clusters under any political regime –spanning from the socialist to the capitalist (Puigjaner 2017).

The architecture of rent increasingly became the architecture of *small*. Differently from the *minimum* addressed by Teige (Teige 2002) –when the size is not related to the general urban planning level– the minimum dwelling becomes a synonym of unaffordability for lower incomes.

Conscious of this condition, several investors aimed recently to profit by the maximum exploit of the micro-unit. Co-living rises from the ashes of the communal experiments of the 1920s, in a renovated commercial context lubricated by the digital economy rhetoric. In terms of social content, the target user of co-living is the descendant of the urban middle-class populations of individuals described by the German sociologists as Georg Simmel (Simmel 1971). Today, the urban middle-classes include a growing number of *solo* dwellers of the city (Klinenberg 2012), spanning from freelance knowledge workers to what Srnicek defines the *cognitariat* (Srnicek and De Sutter 2016). Co-living companies target these social groups proposing all-inclusive plans of material and immaterial services combined with traditional room rent. Even if promoted as convenient, an empirical analysis of the offered prices of several companies proved co-living to be unaffordable, and incapable to serve as an alternative to social housing to face the housing crisis (Table 4).

On the other hand, the organizational layout of co-living projects raises various questions. It triggers design interventions in housing buildings, altering the traditional proportions between private space of the living units and collective spaces. Plus, the inclusion of services devoted to the whole

¹⁷¹ Paul Groth estimates that in the 1910s in San Francisco more than 10 percent of the population was living in a hotel permanently (Groth 1999)

urban community –as co-working spaces and commercial activities– leads to rethink the traditional concept of the ‘mixed-use’ building.

The Italian context is aligned with most of the socio-demographic trends affecting the rich West. Shrinking households in larger and larger homes, a growing gap between salaries and rents, reduced youth working mobility, and increasing unaffordability for the aging elderly population. However, the physical composition of the Italian urban fabric and its corresponding regulatory infrastructure is less receptive to new housing models. The reasons behind the general inflexibility of the Italian urban fabric are mostly due to the social production of housing demanded primarily to families (Baldini and Poggio 2014).

The ordinary private city, built mostly during the post-war years of the economic boom, reflects the values of a conservative middle-class aiming for comfortable flats in the city center, or in suburban compounds. The active role of institutional landlords as banks and insurers finds space in strategic areas of the city, taking responsibility for housing thousands of households at market-rate prices. Nowadays, these actors are among the few in the city owning entire buildings for rent and not transferred to the private property market.

Reale Mutua Assicurazioni showed regular continuity in consolidating its rental housing stock during the last century and a half without selling off its asset portfolio, as many public and private companies did during the mid-2000s. To face the shrinking economic capacity and numbers of the demand, the company transformed part of its units in prime locations in office spaces. At the same time, the rest of its stock remains for residential rent at market price.

The difficulties –and opportunities– that this kind of real estate can reflect the present condition of more substantial portions of the Italian housing stock. For this reason, testing its flexibility spatially to absorb reduced living units and larger collective spaces can be later confronted with other similar cases from other stocks. The blueprint of co-living serves to verify mostly the interlock between spatial quality and economic consequences both for the landlords and the prospective tenants, once the living unit is stressed at its maximum.

Finally, densification appears a design matter rather than a quantitative one, as it implies socio-technical choices by the landlords and the tenants. Collective space can become a *surveilled* space or a *free* space depending on the nature of the housing format, as major shrinks in terms of unit reduction imply a ‘forced’ sharing of common space by the residents.

Further research

The present dissertation focuses mostly on a European perspective on the ordinary private city. Starting from the methodology proposed in the current work, broader contexts could be analyzed and envisioned under the lenses of intensification and flexibility assessment.

In Italy, it made sense to analyze the ordinary private city as a real space of operability due to a significant lack of large-scale landlords in an often-inflexible urban fabric. In other contexts, the subjects of investigation may vary, including housing associations, charities, property managers, or corporate housing stocks. In particular, the quest for intensification of the private realm is shared much by public housing managers around the world.

A vast scholarship investigated projects and strategies to renovate public housing –focusing mainly on holistic interventions (Druot, Lacaton, and Vassal 2007; Ruby et al. 2012; Petzet and Heilmeyer 2012; Quinzii and Terna 2012). The present dissertation proposes to drop the standards imposed by norms to compare different stages of intensification critically. Challenging research would be the one to test co-living as a blueprint for social housing. Not as a revival of the nineteenth century utopian and communitarian social experiments, rather an adaption of the standards offered by the human dimension in place of obsolete laws and norms.

Furthermore, the assessment of flexibility can be extended to extra residential functions to test new typologies of ‘mixed-use’ buildings, combining living-working schemes in existing buildings. Several contemporary projects are working in this direction, as a sports center with living units in Paris¹⁷², co-living complexes aimed to students¹⁷³, or the living-working SoHo models¹⁷⁴.

The legacy of both classical works backed the current dissertation by the pre-war modern thinkers as Hilberseimer, Ginzburg, Le Corbusier, and Teige (Hilberseimer 2012; Ginzburg [1934] 2017; Le Corbusier 1923; Teige 2002), and the contemporary literature on collective housing by Aureli and

¹⁷² See the Logements et Sport, Mazas. Paris. 2017. By NP2F architects, designed in occasion of the ‘Reinveinter la Seine’ competition. Source: <http://www.np2f.com/projet/reinveinter-la-seine/>. Accessed January 20, 2020.

¹⁷³ The Student Hotel is a Dutch company founded in 2006. It currently has more than fifteen co-living spaces open in Lisbon, Paris, Barcelona, Porto, Florence, and other European cities. It’s planning to reach twenty-three locations in 2022. Source: <https://www.thestudenthotel.com/about/>. Accessed January 20, 2020.

¹⁷⁴ See the work by Japanese architect Riken Yamamoto in Beijing in the Jian Wai SOHO. A hybrid residential-office space adaptable complex. Source: http://www.riken-yamamoto.co.jp/index.html?page=ry_proj_detail&id=72&lng=_Eng. Accessed January 20, 2020.

Tattara, Puigjaner, Sandoval-Strausz, and Cromley (Aureli, Tattara, and Dogma 2019; Puigjaner 2014; Sandoval-Strausz 2007; Cromley 1999). As this corpus is expanding, providing a quarry for policymakers and professionals to borrow from, it would be of great use for scholars to have a contemporary guide to co-living and other hybrid contemporary forms of collective housing to widen the spectrum of ideas.

Finally, the attempt of the first part of this dissertation –starting back from Engels’ *Wohnungsfrage* premises– was the one to present the status quo of private rent in its critical condition. The various cooperative and collaborative movements aiming to break the traditional relationship between tenants and landlords represent a vast field of study for further research. The combination of economic considerations applied to given housing formats could contribute to the plurality of models required to face the current housing crisis.

Epilogue: housing as a service or housing as *housing*?

A speculative reading of the Engels vs. Proudhon argument on the housing question could lead to identify two possible provisional outcomes. On the one hand, in an engelsian understanding of rent as an economic transition –a service–, housing formats as co-living and micro-units will start to represent a more extensive share of the stock in cities, absorbing a demand of individual perpetual cash renters fostering better working conditions. On the other hand, recognizing housing as a fundamental right and homeownership as its manifestation, one could imagine that the ‘property shares’ that Proudhon allocated in cooperative homeownership could be converted in shares through renovated financial infrastructures as the blockchain (Nasarre-Aznar 2018).

In both cases, the destiny for ‘generation rent’ remains suspended between increasingly unaffordable rents for smaller units in dense urban areas, and an array of alternative housing formats allowing for rent reductions through collectivization and associationism.

The differentiated dwelling of the ~~middle-~~ ruling class

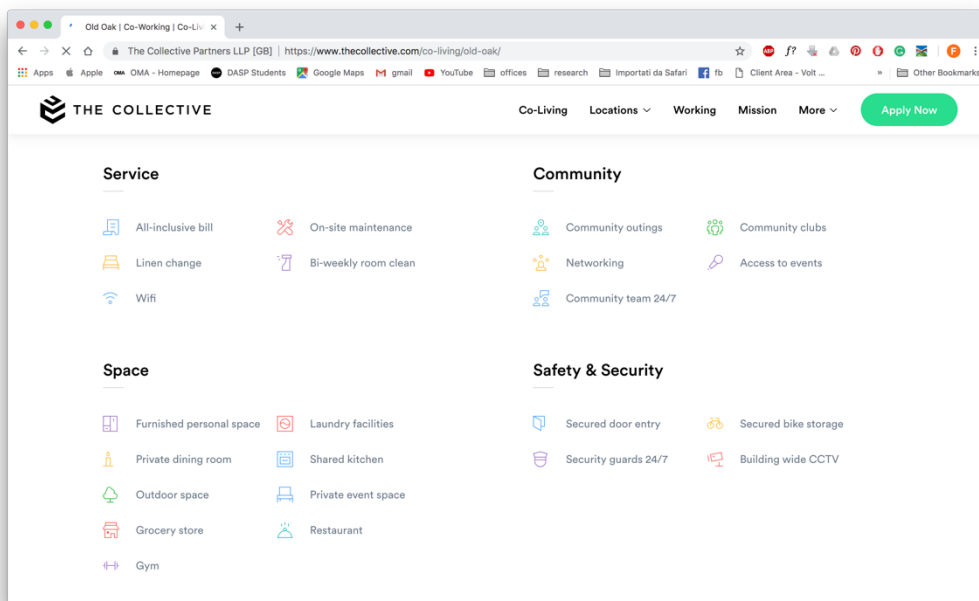
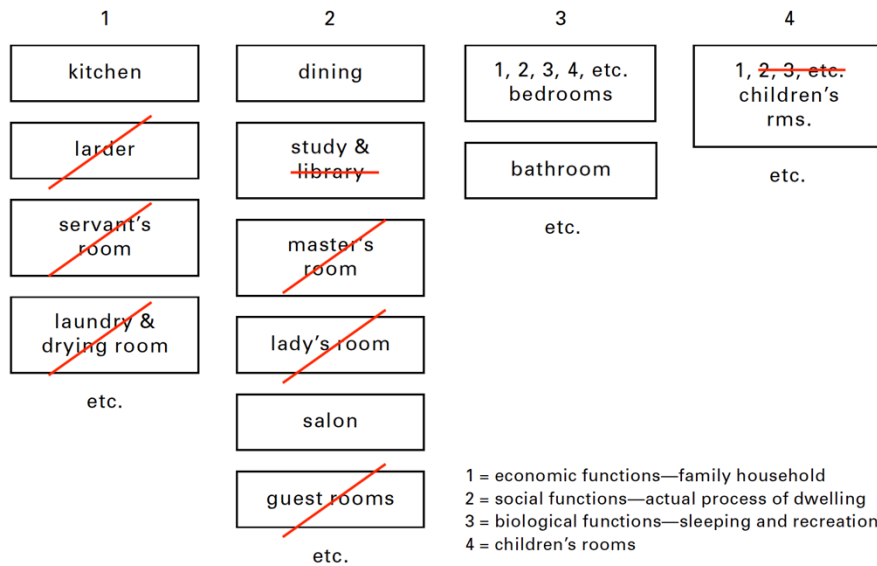


Figure 100 Functional breakdown of the house for the 'ruling class' by Karel Teige, actualized to current standards. Drawing by the author on Teige's diagram. Source: Teige 2002

Figure 101 Material and immaterial services included in The Collective co-living all-inclusive plan. Source: The Collective LLP

The focus of many authors since the 1960s on the empowerment of bottom-up inhabitant communities conflicts with a fundamental issue already highlighted by Engels. That is, the possibility and freedom for the workforce to move and not root in a specific context –avoiding permanent control by power structures (Engels [1872] 1970).

The state played and still plays a fundamental role in this framework. Since the market cannot solve by itself its inequalities, housing policy acts as a countermeasure to total deregulation and the consequent inequalities. As seen in Chapter 1, the current global economic framework is receding the state to a referee for the financial market. Lower interest rates to buy housing mortgages are absorbing the public roles of welfare and subsidized housing, growing the number of homeowners, and reducing the responsibility of the state.

As already stated by Colin Ward, income redistribution, and the resolution of wealth inequalities are issues far behind the architectural possibilities of intervention (Ward 1985). However, architecture can interrogate itself on what has been produced since now and what it can produce informed by the present housing crisis.

As seen in Chapter 4.2, ‘small is beautiful’ has become ‘small is necessary’ (Nelson 2018), sharing the ambiguity to be a call for reducing the footprint of the human habitat and, at the same time, an imperative of the market. Conservative liberal policies tend to promote downsizing and compact living as a win-win solution for producers and consumers while its fallouts in the city are often questionable.

Moreover, individualization of society and the relationship of individuals with the city and society at large —the distinction of the public and private sphere— occurs at least from five centuries, according to Tosi (Tosi 1994). In spatial terms, this means the rise of living-kitchen units and the studio flat often of sub-standard sizes.

It is not surprising that the design proposals by leading companies of the housing industry focus on anti-urban isolated housing models¹⁷⁵. Finally, also for higher incomes, the promotion of cabins and huts to inhabit hyperconnected territories stimulates a new reflection on the *minimum*, usually associated with the dense urban context. As the space for this kind of research field would be too vast to investigate in this context, it is worth addressing the concept of *standard* in relation to the one of *minimum*.

¹⁷⁵Airbnb co-founder Joe Gebbia launched the company’s design branch ‘Samara’ in 2016. The aim is to design housing a propose actual projects as the Cedar House by Go Hasegawa designed in 2018. Currently Samara is developing the project ‘Backyard’ to promote isolated houses and micro-additions in low density contests. Source: <https://samara.com/>. Accessed January 20, 2020.

Recalling Teige's materialistic critique to the house of the 'ruling class', it is possible to note that a complete reformulation of the status quo of the middle-class house would have to be operated to actualize his diagram (Figure 100). Over a century of standardization of the bourgeoisie house transferred in the middle-class reduced and optimized version, left one room for each of the four functional sub-categories that Teige envisioned (economic functions, social functions, biological functions, and children's rooms) (Teige 2002). Meaning that the market average standard two-bedroom house can no longer be atomized and recomposed to envision the updated version of the collective house.

Therefore, following Teige's collectivization of the first two categories of the subdivided 'ruling class' house –the economic and the social– into shared domestic spaces shifts the attention from the minimum standards on the unit to this kind of spaces. This happens because the spatial qualities of a contemporary minimum individual room –confronted to the ones investigated during the 1920s– may not vary significantly if not for some technological devices. Shared space is actually where the expectations of comfort and the new domestic standards unfold.

Contemporary co-living projects give evidence of how it is possible today to incorporate in a single building a set of commercial and domestic collective spaces (Figure 101). The nature of this space is an overlap of different furniture and devices, often marked by claims and slogans (Figure 102) –highlighting how the rhetoric of living is taking over the realities of housing in these cases.

If housing becomes a service, it means that the city and the public (surveilled) domain penetrates the house to the limit of the individual room front door. In this scenario, the quest for privacy will coincide with the one for a set of Faraday rooms as living units.



Figure 102 The Student Hotel Eindhoven. Source: The Student Hotel

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Appendix

Archival sources

The case studies presented in Chapter 4 and Chapter 5 are the result of an archival research conducted between 2018 and 2019 in the Archivio Storico Reale Mutua in Turin. The archive is the only historic Italian insurance company archive and museum of its kind.

Together with all the administrative documents of the company, the archive collects thousands of architectural drawings of the past and present company real estate portfolio.

In the following list the archival folders consulted (the complete list is available at the archive's website, <https://www.realemutua.it/Shared%20Documents/Archivio%20storico%20reale%20mutua%20-%20schema%20di%20ordinamento.pdf>):

59.q-15FF

59.b-1FF/3FF/4

59.q-9FF

59.l-1FF/5S

59.h-5s

59.i-2FF/3S

59.c-1FF

59.d-1/2S

59.m-2

59.n-1/(5)

59.q-8FF

59.q-10FF

59.o-1

59.q-7FF

59.e-4

90.d-2
90.f-1FF/4
90.g-1FF/2FF
90.h-1FF/2
90.b-1FF/3/6/9s
100.n-11FF/13FF/17*/26*/44
100.j-1FF
100.n-42*/21FF*/9/10/12FF
100.e-1/2FF/3FF
100.s-1FF/2s
100.o-
100.i.-1FF
100.r-2FF/3/5s
100.u-10FF
100.d-1
100.g-1/4/5/12s/13s/14FF/16/20s/21s/22
100.b-1/2/3
100.n-19/25/27
100.m-1
100.h-5/8s
100.h-2FF/7s/
106.a-1
110.a-1FF/2s

Thematic bibliography

The following bibliography serves to describe the fundamental conceptual structure behind the present dissertation. The references have been divided into six categories following the main thematic areas covered in the five chapters of the dissertation. This selection does not represent the definitive bibliography of the selected thematic areas, instead it serves to the reader to navigate in a vast literary field as the one regarding collective housing.

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