

THE ARCHITECTURE OF THE SUPERBLOCK

Type, Urban Form, and Politics

Michelle Hedemann Løvstad Mortensen

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Candidate: Michelle Hedemann Løvstad Mortensen

Professor Theoretical Statement: Pier Vittorio Aureli

Pedagogical director: Paola Viganò

Supervisor: Marson Korbi

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INTRODUCTION

1 Alan Colquhoun and Kenneth Frampton, *Collected Essays in Architectural Criticism* (London: Black Dog publishing, 2009), 64.

“If one looks at any modern city, one cannot help being struck by the fact that much of it consists of large pieces of real estate, each of which is financed and organized as a single entity”¹.

The urban fabric due to many influential and powerful factors is continuously evolving. The production of monumentally large blocks has existed for centuries and can be traced back to the monastic evolution. However, the frequent presence of these building typologies within the urban fabric became standardized in the twentieth century, with the beginning of mass housing shortages. The housing shortages in densely populated areas began with the Industrial Revolution, which saw a mass migration of workers into factory towns. This period also marked the start of slumification, where workers were forced to live in poor conditions. These shortages were further worsened by the destruction of homes due to World War I and World War II, as well as the changing standards of acceptable living. This initiated the welfare state, a governmental initiative that ensures a minimum quality of life for inhabitants of a country. It does this through subsidizing or providing essential needs such as healthcare, education, pensions, and housing. With the governmental initiatives to provide housing for the vulnerable population, the rise of large housing blocks came into cities, changing their urban fabric. These monumentally large housing blocks is what this paper refers to as superblocks.

2 Carlos Martí Arís, *Variations of identity: type in architecture* (Marseille: Éditions Cosa mentale, 2021), 29–30.

3 Ibid, 30.

4 Ibid.

5 Philippe Panerai, ed., *Urban Forms: Death and Life of the Urban Block*, 1. publ (Oxford: Architectural Press, 2004), x.

Before exploring the topic, it is essential to define the key terms in the title and clarify their intended interpretation. The term ‘type’, in non-specialist language means “general form of a set of properties common to a certain number, family, genre etc. [...] The architectural object’s formal structure is the analytical key that restores the nature of architecture most universally and profoundly”². According to Arís the definition of architectural type, expressed in the simplest terms, is a “concept that describes a formal structure”³. This definition entails three important points: type is a concept, not an object, type entails a description through which the objects that constitute it may be recognised, and type refers to a formal structure⁴. The term urban form refers to the physical characteristics that make up urban areas, but it is not an absolute autonomy. “It does not exclude either the economics or cultural determinants, which have their significance in the production of the city and of architecture, nor the pressure of social conditions in the life of the city’s inhabitants”⁵.

This paper will look at defining the superblock and understanding its architecture through analyzing it as a type as well as understanding the political implications that led to its existence. It will look back through history analyzing case studies of different periods. It will start by tracing it back to the monastic development and the ideal monastery

plan of St Gall. Proceeding to the analysis of different socialist visions on how to approach housing. Following this, it will analyze five case studies separated into two moments in history: post-World War I and post-World War II. Within these two moments it will analyze the effect that the socialist government and the rise of the welfare state had on the development of the superblock. Finally, it will put forward a definition of the superblock from the analyzed case studies and look at the potential future of the superblock.

THE MONASTIC DEVELOPMENT AND THE SUPERBLOCK

The Monastic Superblock

6 Wolfgang Braunfels,
Monasteries of Western Europe: The Architecture of the Orders
(Princeton, N.J: Princeton Univ. Press, 1972), 9.

As noted by Wolfgang Braunfels, the monastic ideal represents one of humanity's truly imposing designs for living⁶. The origins of monastic evolution can be traced to the fifth-fourth century BCE and originated in India with Buddhist Monks. The idea of the monk was to reach solitude by transitioning from living in a home to the life of homelessness. It was a way to attempt escaping from society by eliminating social relations in order to practice the act of worship.

7 Pier Vittorio Aureli, 'The Origins of Modern Domestic Space' (EPFL, 23 September 2023).

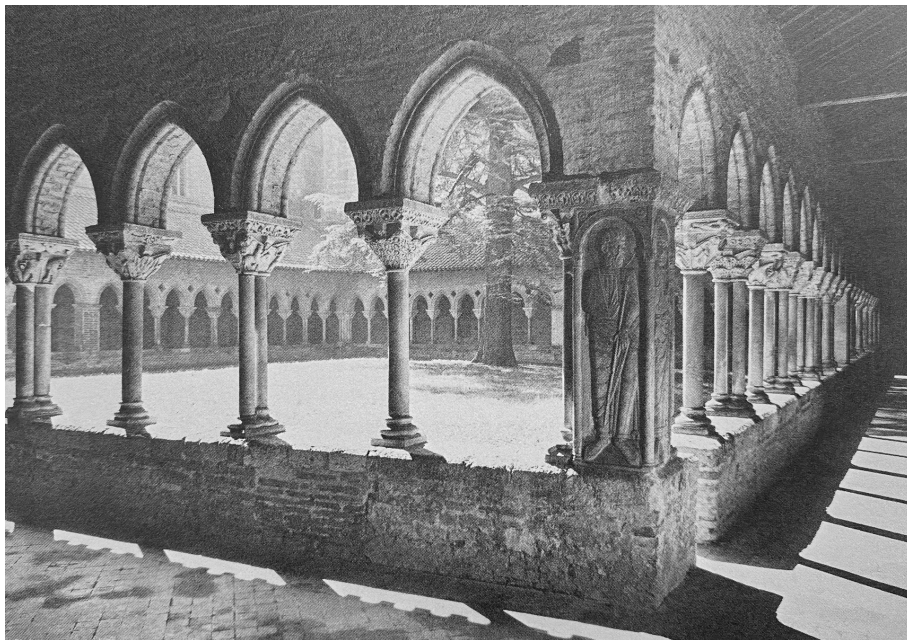
For the purpose of this research, the focus will be on Christian Monasticism and the evolution of the monastic lifestyle during the Medieval Ages in the West. During this time, the influence of monasticism was at its highest and saw a significant evolution of the architectural typology. Western monasticism arose in the fourth century Egypt and Syria, occurring in parallel with the institutionalization of Christianity. Christianity was particularly practiced by the richer and more influential members of society which helped spread the religion, both prior to and following its institutionalization⁷. With the development of monasticism came the tensions between living in solitude and living in a community, a question that lies at the center of how monasteries were spatially constructed.

8 Thomas Coomans, *Life inside the Cloister: Understanding Monastic Architecture: Tradition, Reformation, Adaptive Reuse*, (Leuven: Leuven University Press, 2018), 36.

The typological evolution of housing for Benedictine monks led to the development of large communal structures, with a central point, around which activities and other structures were organized. This is referred to as the cloister. The cloister is a large empty space surrounded by loggias or porticoes and includes a well and a garden. The cloister functions as the passageway between the essential functions, including the church, the dormitory, the chapter house and other functions, depending on the monastery and its size. It functions as the monks' gathering point within their life of solitude⁸ and plays a central role in establishing a community. Around the cloister are arches, often found with sculptural elements and decorations to frame its importance. The monks would gather in the arms of the cloister on benches to read the Rule. The scale of the cloister depended on the size of the church and of the monastery itself. The growing of cities and increasing civilization meant that monasteries were looking for ways in which they could maintain their independence and solitude, without the need to exit the monastery. This led to the development of the St Gall plan. A proposal that both in terms of function and form has similarities with the superblock.

The St Gall plan, developed by Hatto (763-836), who was inspired to divide the monastery in terms of functions, divided it into four main areas. The first of the areas was the claustrum, or the monastic enclosure, which consisted of a dormitory, a refectory and a cellar. This area was only accessible through one space, a monk's parlour, following the strict Benedictine Rule. The buildings around the cloister form the monastery

10



The Arms of the Moissac cloister. From Wolfgang Braunfels, *Monasteries of Western Europe* (Princeton: Princeton University Press, 1972), 64.

within a monastery, the enclosure. Located on the exterior of the enclosure, were the functions required to keep the internal monastery running. Such functions would include a large kitchen, brewery, bakery, baths, animal stables, barns, places for guests to be and many more functions. These functions were within the enclosure, but not within the internal monastery which was intended for the most valued monks. This allowed the monks of the internal monastery to have no direct contact with the civilization around them, enabling their complete focus on worshipping⁹. The precise organization of functions, living areas and a central communitarian space is later reflected in the superblocks. The St Gall utopia explores how it is possible to live together in an efficient society.

9 Braunfels, *Monasteries of Western Europe*, 36-41.

Socialist Utopia

When analyzing the typological language of the monastery, it reoccurs in different forms throughout history, one of which was initiated by Robert Owen. In 1799, Robert Owen (1771-1858), bought the New Lanark cotton mills from his father-in-law, David Dale, a Welsh philanthropist. Owen was a textile manufacturer, a philanthropist and a social reformer that played a central role in shaping the socialist movements and ideologies. He was born into a poor family and received minimal education until the age of 10, when he was apprenticed to be a draper and continued this line of work until the age of 18 when he decided to move to Manchester. Manchester was at the heart of the Industrial Revolution and was home to the 'spinning jenny'. Owen worked in a few different mills in different positions, helping to shape his understanding of the workers and the problems they faced. When he joined New Lanark cotton mills, five hundred of the two thousand workers were children, at this time it was normal for children to be working long hours doing dangerous jobs in bad conditions with minimal food and clothing. However, despite employing children, David Dale was aware of their well-being, ensuring that they received an education along with practical skills, had decent clothing, a place to sleep and were well fed. His philanthropic efforts inspired Owen to continue and expand on these. This is the start of Owen's social welfare experiments, also known as Owenism¹⁰, which "aimed its message at the world; but it saw the right way not as apocalyptic revolution but as a gradual, tentative incremental exploration of new forms of community living. Its great example was not, as with the Marxists, the French Revolution but more the early Christian communities that sought to offer exemplary models of alternative ways of life in the hope of converting their heathen neighbors"¹¹. Owen was inspired by the collective communities that monasteries had built.

10 *The Reformer Who Dreamed Of A Utopia* | Robert Owen, 2022, <https://www.youtube.com/watch?v=VmDDCsdQNAY>.

11 Krishan Kumar, 'Utopian Thought and Communal Practice: Robert Owen and the Owenite Communities', *Theory and Society* 19, no. 1 (1990): 1-35, 20.

Owenism was Robert Owens' utopian vision of a reformed equalitarian society based on communal living, fair employment, and full-time schooling for children. Although utopian, it did not start with a social ideal, rather from his own experience in New Lanark and Manchester and it worked within an already existing tradition of co-operative and communal practice¹². According to Owen, the Industrial Revolution would have the potential to create a situation within society where wealth

12 Ibid, 11-12.

could be spread more evenly if the right approaches were taken. He slowly adopted his vision to New Lanark, implementing a form of collective health care and ensuring children under the age of 10 received obligatory education. Although he was implementing social welfare and wished to create a communitarian society, the typology of the town ended up not being much different from other cotton milling towns. Unattainable in New Lanark, he took his ideas to America, creating the utopian society of New Harmony, fulfilling his socialist ideals.

In 1825, Robert Owen travelled to New Harmony and overtook a large piece of land from a religious community with the intent to build his ideal community. The building itself should reflect collective living and equalitarian status. It should be designed to include all the functions required for the inhabitants and should be in solitude from surrounding societies. Essentially, the society should function as an independent, self-sufficient entity. The idea of the society is to ensure the wellbeing of everyone through measures, such as supplying healthcare, valuing mental and manual labor equally, the abolition of the family and providing education to the children¹³. For Owen it was about creating self-sustaining communities that saw an improvement in human well-being.

13 Ibid, 18.

Owens' vision would see the project take the form of a quadrangular structure, with extensions of the building coming in towards the center of the courtyard. The buildings in the center would hold functions such as schools and workshops. Through them pointing towards the center, typologically, a hierarchy is placed on this space, almost imitating the influence of the cloister. New Harmony came to an end in June 1827 with Owens' departure. It was plagued by internal arguments and differing visions on society¹⁴. This was argued to be due to a bad selection of families for the experiment. It can however be argued that the experiment was not a complete failure, because it taught him something about the act of living together, and how society can be restructured to improve living conditions. According to Aldous Huxley, the most difficult and important of all arts is the art of living together in harmony with benefits for all concerned¹⁵.

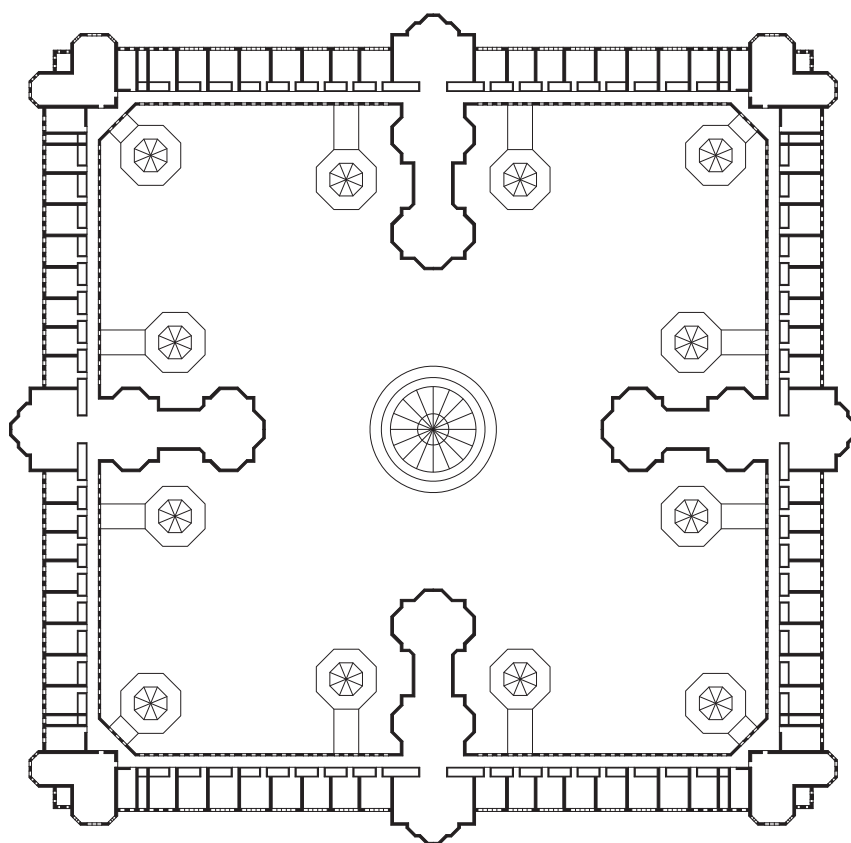
14 Ibid, 18.

15 Ibid, 20.

Upon Owens' return to the UK, he became an influential figure as a working-class unionist, pushing for socialist reforms that saw free education, better working conditions, and improved living conditions in worker villages and large industrial cities. This would lay out a model for a more equalitarian society¹⁶. These were ideals of a new communal order following the Industrial Revolution.

16 *The Reformer Who Dreamed Of A Utopia* | Robert Owen.

Due to the mass influx of workers caused by industrialization, living conditions worsened in cities leading to the development of workers slums. This led problems such as the rapid spread of illnesses, for instance cholera (1846-1860), affecting the workforce. In 1872, Frederick Engels (1820-1895), a German philosopher, published his solution to the worsening living conditions of the workers population, titled 'The Housing Question'. In it, Engels defines the root of the housing crisis as being a combination of the sudden rush of population into big towns, increasing



New Harmony. Drawn by the author, adapted from Marson Korbi, “Nuove forme dell’abitare: Abitare collettivo dentro e oltre la città del capitalismo cognitivo,” PhD diss., (Polytechnic University of Bari, 2020), 99.

17 'The Housing Question', accessed 31 October 2024, <https://www.marxists.org/archive/marx/works/1872/housing-question/ch01.htm>.

rent, and the exploitation and oppression of the working class by the ruling class that exists within a capitalist society¹⁷. Engels proceeds to criticize Proudhonism established by Pierre-Joseph Proudhon, a socialist thinker who believed the problem could be solved through working class families paying instalments towards home ownership rather than paying rent. However, according to Engels, this approach failed to address the underlying issue of exploitation of the working class by the bourgeoisie. Engels position, although very radical, was important.

18 Ibid.

Engels addresses housing shortages through a vision rooted in socialist principles that sees the collective ownership of resources, including housing. He places an emphasis on the need for a complete restructuring of the way society works, which he advocates would happen through a gradual economic adjustment of supply and demand. According to Engels, there is in fact not a housing shortage. If the existing houses were to be redistributed rationally, this would see the bourgeoisie having to sacrifice their living space for the working class and the houses would be redistributed based on needs rather than on economic status¹⁸.

19 Irina Davidovici, 'The Depth of the Street: H. A. Darbishire and the London Peabody Model, 1865-85', *AA Files*, no. 70 (2015): 103–23, 105.

During the time of Engels' housing question, there was a rise in philanthropic initiatives, with the wealthier bourgeoisie providing support to the working-class population in need. In the United Kingdom, more specifically London, living conditions were poor, with many slums, raising the question on how to eliminate them and improve quality of life for residents. The initiatives to do so were dependent on the donations and goodwill of the individual people and not the government. One philanthropist, who had an important influence on the efforts to provide adequate housing for the working-class population is George Peabody (1795-1869). Peabody was born into a poor American family in Massachusetts. In 1837 he moved to London to work in banking. He founded the Peabody Trust, which aimed to give to the poor working-class families. By 1856, the trust was completely dedicated to the provision of dwellings¹⁹.

20 Franklin Parker, *George Peabody, A Biography* (La Vergne: Vanderbilt University Press, 2020), 39.

21 Davidovici, 'The Depth of the Street', 105.

22 Ibid, 104.

The dwellings constructed by the Peabody Trust were designed by Henry Astley Darbishire (1825-1899). Peabody was not inspired by artistic objects, literature meant nothing to him, and neither did art²⁰. This minimal appreciation is also visible in the architecture of the Peabody estates, which "are mostly plain and repetitive, often awkward in planning, ostensibly seeking the most efficient way of providing salubrious shelter for uneducated, poor and transient working-class families."²¹ However, they retain the typological style of the London homes, sharing "a familiar air, simultaneously typical of London and distinct from it. The yellow-grey brick, the heavy facades, lightened up by tiled brick courses and terracotta details, the casual topographical and typological adjustments blend unobtrusively with the Georgian, Victorian and 1930s residential fabric"²². They are systematic and embrace repetition. They should be seen as a philanthropic gesture and a capitalist investment. The dwellings built ensured proper building ventilation, drainage and water supply, ensuring the inhabitants would have access to bathrooms. This increased hygiene was part of improving the overall health for the population of

London.

Peabody enforced strict rules regarding who would be given priority to acquire an apartment. “He stipulated three conditions: first, the donation was to benefit Londoners ‘by birth or residence’; second, no religious or political agenda should influence the administration of the gift; third, beneficiaries should display a combination of poverty with ‘moral character, and good conduct as a member of society’”²³. Peabody did not want unemployed workers or badly behaved residents in the dwellings to keep a reputable outward image. However, this excludes the most vulnerable and sick members of society²⁴. Peabody’s solution to the housing problem works within the frame of the capitalist society, relying on the wealthier population to donate and take initiatives to improve the housing conditions for the working-class.

23 Ibid, 105.

24 Ibid.

As pressures increased to improve housing conditions for the working class and to eradicate slums, governmental and municipal initiatives began. The initiatives grew as the demand for social housing became more urgent and visible in the rapidly urbanizing cities. The rise of such initiatives is part of what, overtime has led to the possibilities of the construction of superblocks.

THE WELFARE STATE AND THE BIG SCALE

From the early stages of the Industrial Revolution, Europe saw an increasing demand for urban housing driven by migrating populations. After World War I, the mass destruction of housing and increased migration intensified this need. The general picture of Europe was characterized by the rising power of socialist parties driven by a collective mindset focused on aiding those impacted by the war, including loss of housing, families, and livelihoods. There was also increasing consensus on the role a welfare state could play in reconstructing societies.

Hornbækhuset, 1923 – Kay Fisker

25 Andrew Clancy and Colm Moore, *Kay Fisker: Danish Functionalism and Block-Based Housing* (London: Lund Humphries, 2022), 28.

26 Ibid, 18.

27 Kay Fisker and Peter Bredsdorff, *Københavnske Boligtyper : En Oversigt* (København: Arkitekten, 1936), 30.

28 Clancy and Moore, *Kay Fisker*, 28.

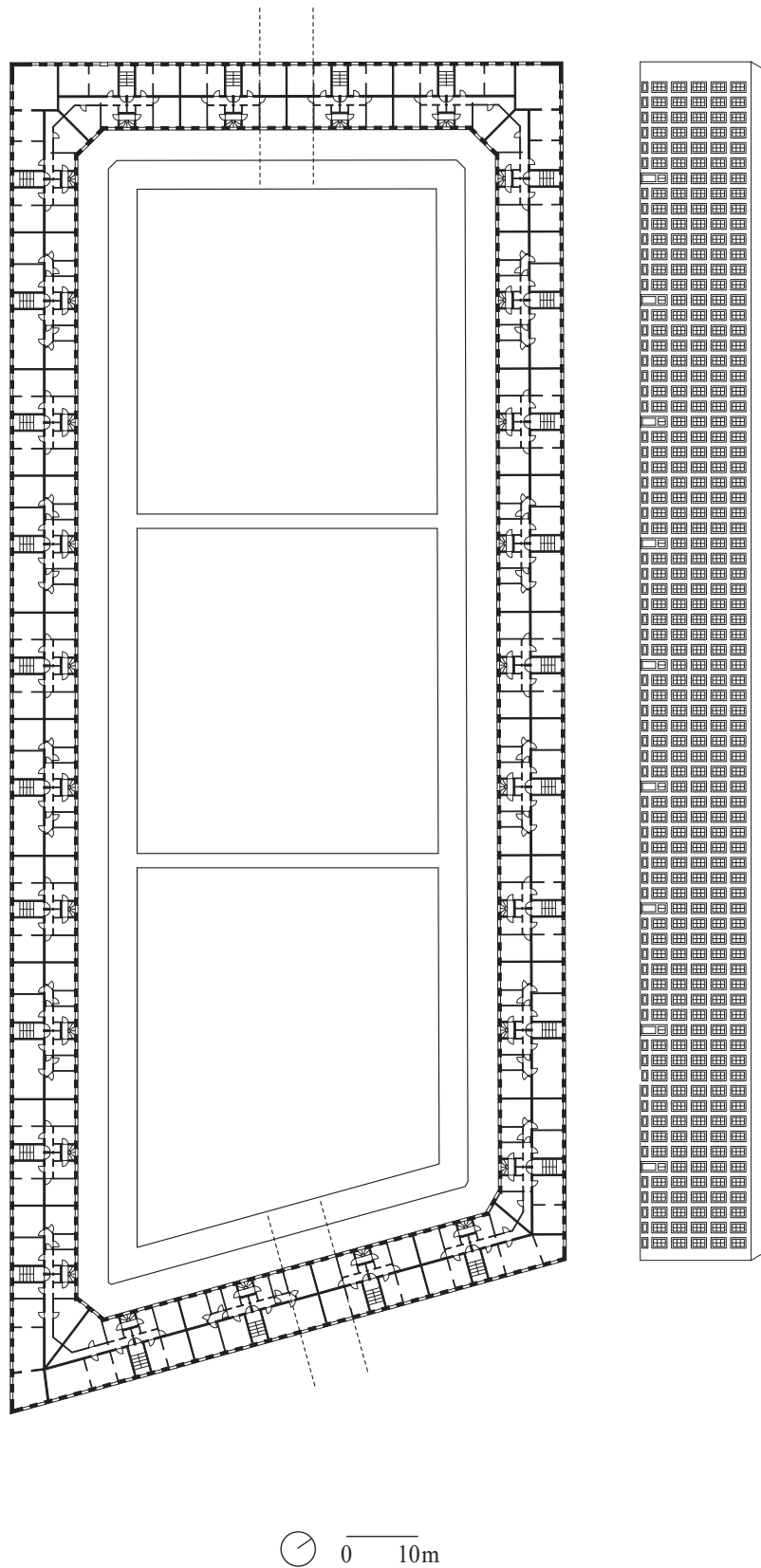
29 Danmarks Nationalleksikon Online, s.v. “andelsbolig”, accessed 20 December 2024, <https://lex.dk/andelsbolig>.

30 Fisker and Bredsdorff, *Københavnske Boligtyper : En Oversigt*, 48.

31 Ibid, 30-32.

During World War I, a significant wave of migration into Denmark led to a sharp rise in demand for housing, intensifying an already existing shortage following the industrialization of cities. This was worsened by the ban on building outside the city walls until 1853, resulting in a slow progression of building²⁵. In 1917, a law was passed that aimed at financially supporting the housing construction²⁶. In 1918 *statsboligfonden* (state housing fund) was created, which saw the government subsidizing housing. The subsidies received were often 10% from the state and 10% from the commune, however as much as 40% was given²⁷. The housing was never completely undertaken by the state, but rather by workers organizations that saw collective ownership of the properties, creating what is referred to as *andelsbolig*²⁸. An *andelsbolig* is a housing property owned by an *andelsbolig* association. The term is also used to refer to the individual unit. It is characterized by the fact that the shareholder acquires a share certificate. This provides a share of the association's assets (equity) along with the right to use one of the apartments in the *andelsbolig* association. At the same time, the shareholder pays ongoing rent, called a housing fee, to the association²⁹. In some cases, communes would intervene and build complexes. In the period from 1916-1931, 12.000 buildings were constructed by the communes and 29.000 by collectives³⁰. The architectural typology of *statsboligfondsperioden* (state housing fund period), was that of a large, closed block that encompassed a central, communal courtyard. This typology is referred to as a *karré*. They were typically built as 5 story buildings. Every *karré*, like the older Copenhagen complexes, should have the living rooms towards the street and the kitchen, bedroom, bathroom and secondary staircase towards the courtyard. The courtyard should house the necessary functions such as bicycle sheds, laundry and spaces for community gathering. In traditional older Copenhagen complexes, it was proclaimed that the inside façade, the one of the courtyard, was the ‘ugly’ one. This was quite natural due to its narrowness and darkness. However, with the rise of the *karré*, there was an increased value placed on the courtyard and the light, hence the space gained importance and became an integral part of the architectural politics that was imposed on the expansion plans from the state³¹.

One of the large questions surrounding the ability to build is the availability and affordability of land. Through the years and up until 1920,



Hornbækhus building plan. Drawn by the author, adapted from Andrew Clancy and Colm Moore, *Kay Fisker: Danish Functionalism and block-based housing* (London: Lund Humphries, 2022), 47.

32 Tobias Faber et al., *Kay Fisker*, (København: Arkitektens Forlag, 1995), 26.

the Danish state had bought land on what was considered the outskirts of Copenhagen. These plots of land were to be reserved for the construction of social housing projects. There were not many requirements for the usage of the plots other than social housing, however, there was a strict plan for the aesthetic development and building standards. This happened in parallel with the creation of *statsboligfonden*³². The early buying of land, in the late nineteenth century to the start of the twentieth century prior to the peak of the housing crisis allowed the state buy the land cheaply.

33 Ibid., 9.

34 Clancy and Moore, *Kay Fisker*, 22.

35 Ibid, 124.

36 Clancy and Moore, *Kay Fisker*, 130.

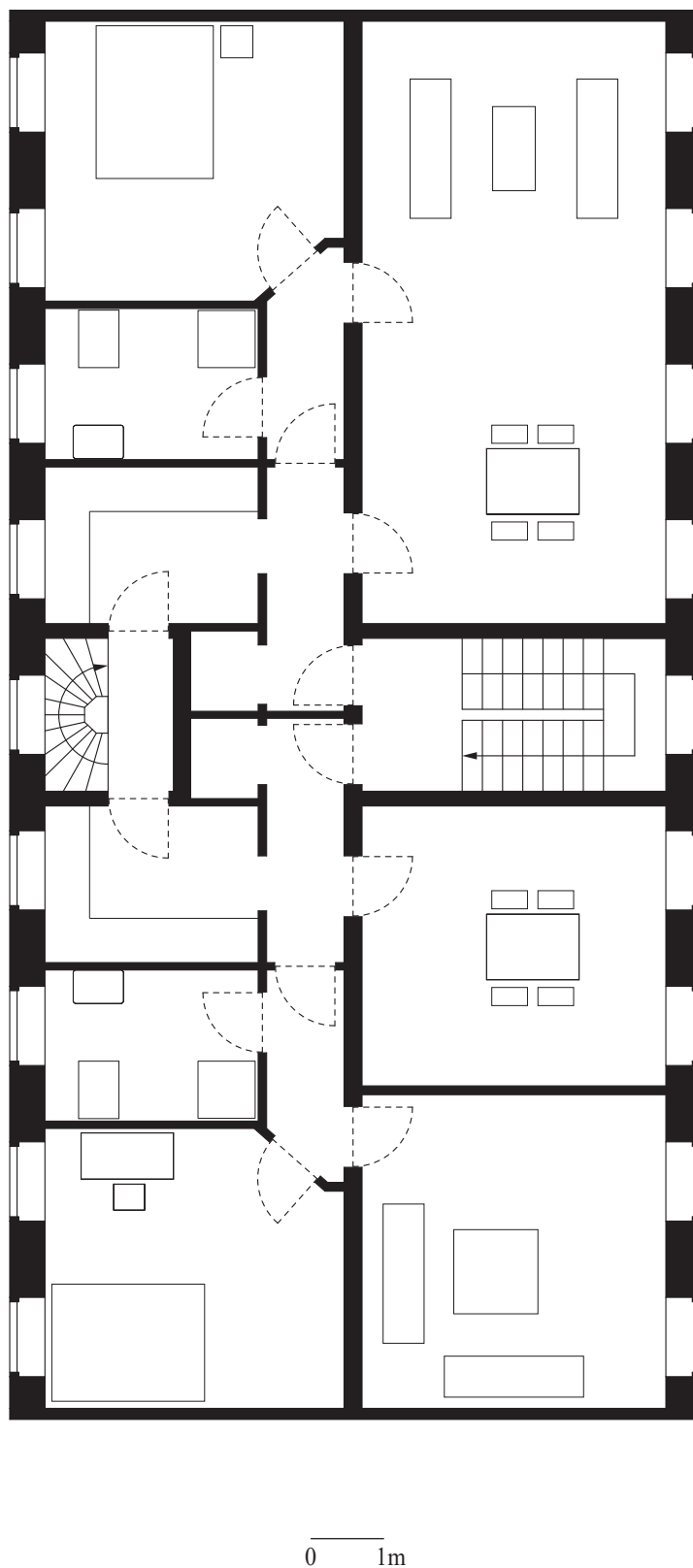
37 Tobias Faber et al., *Kay Fisker*, 92, 173.

38 Clancy and Moore, *Kay Fisker*, 120.

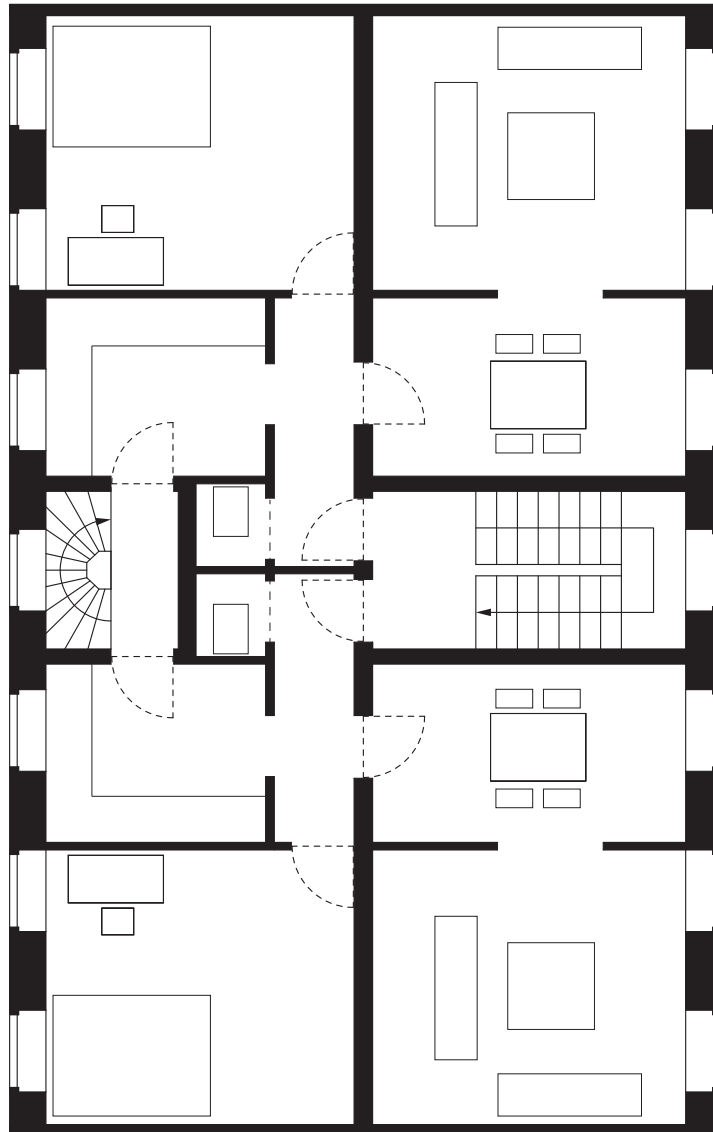
Kay Fisker (1893-1965) was an influential figure within Danish architecture due to his visibility within the urban fabric. This was furthered by his role as the head of Copenhagen's school of architecture, where he was shaping future architects³³. He believed in shaping high quality average architects and did not believe in monumental architecture that occurred on 'few' occasions. "He points to the architect's obligation to subordinate themselves and their artistic will to the needs of the human beings rather than attempting to create the spectacular. 'We must remember that those architects who order our cityscapes and out landscapes, and who manage to create a human environment with decent housing as the setting for a good way of life, are worth sensational works of art'"³⁴. Fisker was in touch with social reality and understood the Danish ideology and society³⁵. His career coincided with demographic shifts in Denmark, marked by population growth and displacement from technological changes, war, and economic migration, resulting in a housing crisis³⁶. He expressed his architecture in a national romantic style and was a strong believer in functionalism³⁷. The national romantic style of Denmark places emphasis on the use of local materials and a manual approach to building. To him, "functionalism was a cleansing agent which swept over nations like a storm, liberating and stimulating, [...] symmetry and monumentality were not necessary, but architecture must have a rhythm of orderly arrangement, corresponding to the joints of the body, the acts of drama, the movements of a symphony or the chapter of a book"³⁸.

Hornbækhuset was one of the first and largest scale social housing karré projects constructed in Denmark on a state-owned plot during *statsboligfondsperioden*. It is located in Copenhagen and was completed in 1923. It encompasses 290 apartments and measures 200 by 80 meters. Each entrance leads to a stairway, which has two apartments on each floor. The entrance does not give direct access to the courtyard, there are two separate entrances for this. There is also direct access to the courtyard from within each apartment through the back stairs that is imposed as a secondary exit way for fire safety.

The form of the karré is determined by the pre-existing plot guided by surrounding road system. The depth of the building from the road to the courtyard is approximately 9.5 meters, determined by the spatial needs of each room, a typical measurement for the karré. The building's structure is composed entirely of clay brick. The bricks facing the streets are red, whereas the ones towards the courtyard are deep yellow. This is because

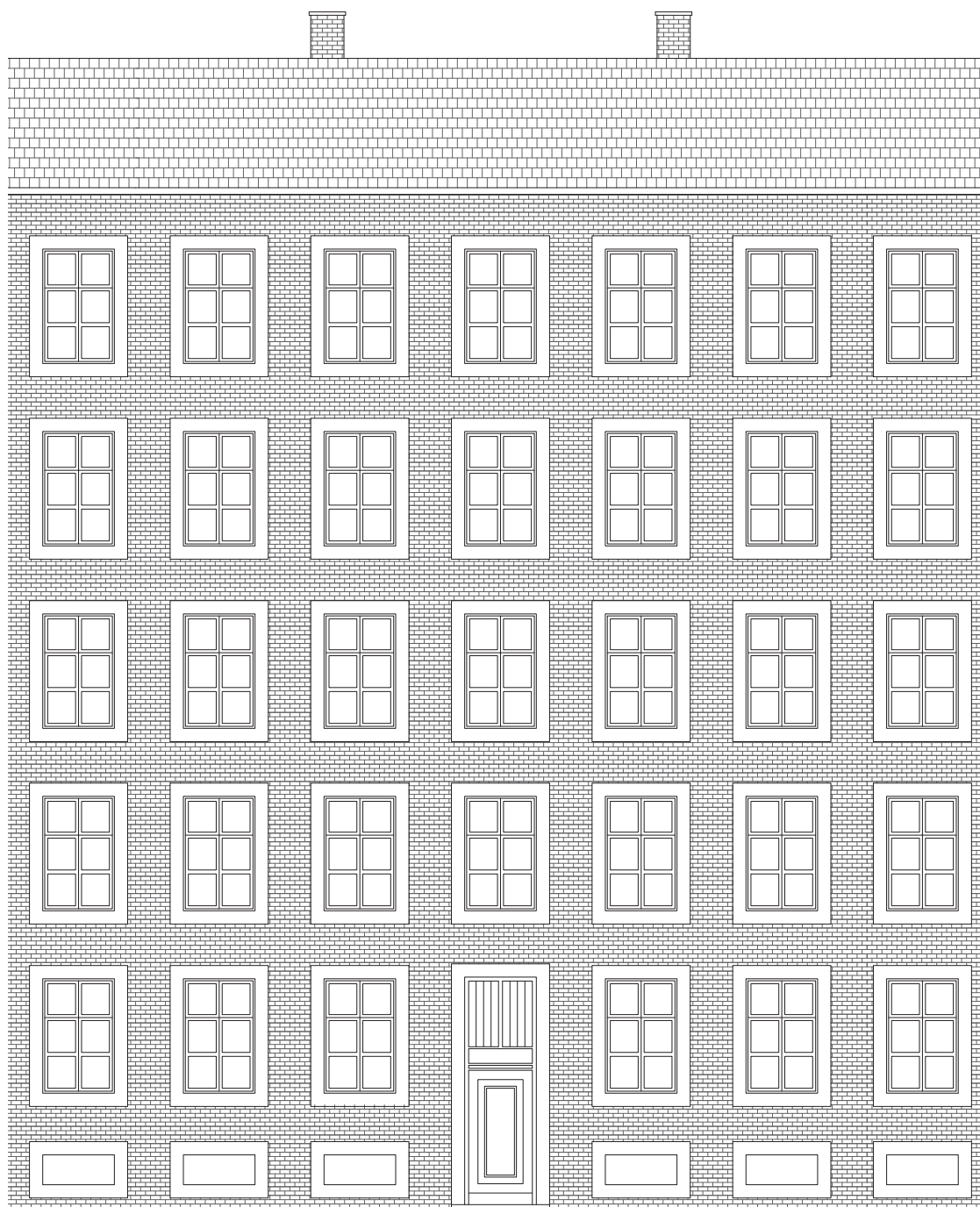


Hornbækhus apartment plan type 01. Drawn by the author, adapted from Andrew Clancy and Colm Moore, *Kay Fisker: Danish Functionalism and block-based housing* (London: Lund Humphries, 2022), 52.



0 1m

Hornbækhus apartment plan type 02. Drawn by the author, adapted from Andrew Clancy and Colm Moore, *Kay Fisker: Danish Functionalism and block-based housing* (London: Lund Humphries, 2022), 52



0 1m

Hornbækhus facade segment. Drawn by the author, adapted from Andrew Clancy and Colm Moore, *Kay Fisker: Danish Functionalism and block-based housing* (London: Lund Humphries, 2022), 55.

red brick is finer and more expensive and hence should face urban life. The block features a pitched roof, repeated openings, and chimneys, reflecting territorial architecture. Its materiality and form are inspired by traditional Danish homes, making the building approachable, tangible, normal and familiar, allowing the locals to reflect themselves within his work³⁹. Fisker believes that “there is, in this architecture, a natural, self-evident uniformity that, given the regional conditions, leads to the use of certain materials, constructions, and forms”⁴⁰. The repetition of the windows is a crucial element in the building’s expression of shape as it is a repetition that Fisker refuses to break, even for the offsetting of windows by the stairs to the correct height of the half floors. The internal rooms must fit in with this repeating pattern and hence the windows are not always located in the middle of the rooms. The hundreds of repeating windows is part of emphasizing the enormous size and monumentality of the block, binding together the horizontal lines⁴¹. The rigid structure is not only a façade element, but also a way of ensuring the cost of the project is kept low.

Hornbækhuset is a form of social housing, also referred to as *andelsbolig*; it received subsidies from the Danish state but is a collectively owned housing unit. This places it in a unique position, where collective opinion plays an important role, and the management is carried out democratically by the residents. Collective life and activities are centered around the courtyard where communal facilities are located. During *statsboligfondsperioden*, the state wanted to change the view on the courtyard into something that could be collective and used by the residents. The courtyard changed its purpose from a storage space to a place meant for activities. It housed a variety of activities ranging from playgrounds and barbeque areas to laundry lines and bicycle shed⁴². It was considered a central point within the building. However, during this time karré was to be closed, not considering it a public space, rather a semi-public space for the inhabitant⁴³. The building was not ornamental in its decorative form, however the attention to detail and the choice of high-quality materials is part of creating its image of good quality housing, giving the exterior façade the same quality as the homes of the bourgeoisie class. The building uses ornamentation in a very subtle form which allows for the large-scale block to be digestible in a beautiful way. This comes from Fiskers’ ability to make his design urban, creating genuine street architecture⁴⁴. He was very aware of the image that he wanted his buildings to give, prioritizing the well-being and comfort of the users, over his own need to express his artistic abilities. His choice of materials and composition of windows aligning with the doors is typical of a Danish villa, giving notions of belonging to a higher class, in a large scale building.

Karl Marx Hof, 1930 – Karl Ehn

Vienna is a city in northeastern Austria, which in 1921 was separated from Lower Austria becoming an independent state. This enabled it to make independent decisions from the remainder of Austria. Vienna

39 Ibid, 126.

40 Tobias Faber et al., *Kay Fisker*, 175.

41 Clancy and Moore, *Kay Fisker*, 128.

42 Trap Danmark, ‘Hornbækhus’, Danmarks Nationalleksikon, 12 December 2019, <https://trap.lex.dk/>

43 Fisker and Bredsdorff, *Københavnske Boligtyper : En Oversigt*, 30.

44 Clancy and Moore, *Kay Fisker*, 128.

suffered from housing shortages already before the start of World War I. However, until the last years of World War I, there was virtually no municipal or state intervention in the housing market. There were some sporadic philanthropic efforts made to alleviate the decreasing quality of living⁴⁵. The years of the war saw a decrease in new building initiatives, massive migration of labor force and a shortage of construction materials, making the reconstruction of damaged buildings difficult. This made the housing crisis worse. In 1917 and 1918, the government intervened through imposing strict limitations on landlord's rights to raise rent and to give notice. In 1919, the Social Democratic city council launched a radical program of municipal reforms aimed at transforming the social and economic infrastructure of Vienna aligning with socialist ideals⁴⁶. One of the main building typologies that played a part in the program was the *Gemeindebaute*, the typology that will be analyzed in this case study.

The *Gemeindebaute* became a staple in the Viennese urban fabric. By 1934 as many as 400 communal housing blocks were built, encompassing 64,000 dwellings and housing approximately 200,000 people (10% of the population of Vienna)⁴⁷. The formal prototype of the *Gemeindebaute* can be traced back to an architectural competition in 1896 to model the ideal workers' housing. The competition was won by Bach and Simony's design, which consisted of 26 blocks of family dwellings which were 5 stories high and enclosed a large courtyard. In principle the *Gemeindebaute* were to occupy a maximum of 50 percent of the plot but went as low as 30 percent. This provided ventilation, sun exposure, and the hygienic requirements for the housing⁴⁸. In addition to this, there are many communal facilities hosted by the courtyard such as laundries, showers and baths, vegetable gardens and an area for children to play in⁴⁹. The typology was derived from the *Hof-haus* or the perimeter block. They were very large, occupying entire city blocks and in some cases several blocks. To strengthen the communal possibilities, the entrance into the apartments was from the courtyard, reinterpreting it as a communal incubator, forcing the inhabitants to see the presence of the other inhabitants. The *Gemeindebaute* should be built as centrally as possible and be located close to public transportation, ensuring connectivity with the city⁵⁰. Most of the architects that designed the *Gemeindebaute* blocks had trained in Vienna before World War I under Otto Wagner⁵¹. Vienna was known for its extensive welfare programs which would later show itself within the design of Red Vienna and the *Gemeindebaute*.

After World War I, Vienna had no funds, relying solely on taxation for operation. However, to realize the Socialist Democrats' vision of building more social housing additional funding was needed. To avoid unpopularity from higher taxes and debt from borrowing, an alternative plan was needed. This led to the introduction of *Mieterschutz* (rent control) which sacrificed the landlord for the worker. The plan aimed to reduce workers' wages to boost competitiveness in the international industrial market. This was only possible if the cost of living for workers was lowered, which could be achieved by reducing allowable rent charges. The Rent Control Act would ensure that the landlords' income only corresponded to that which was required to cover the expenditure of the building⁵². It

45 Eve Blau, *The Architecture of Red Vienna*, (Cambridge: MIT Press, 1999), 79-80.

46 Ibid, 2.

47 Ibid, 6.

48 Alessandro Porotto, 'Utopia and Vision. Learning from Vienna and Frankfurt', *Joelho*, no. 7 (2016): 84–103, 93.

49 Blau, *The Architecture of Red Vienna*, 80-81.

50 Pier Vittorio Aureli, 'Domestic Space in the 20th Century' (University lecture, EPFL, 7 November 2024).

51 Blau, *The Architecture of Red Vienna*, 6.

52 Ibid, 138.

destroyed the potential gains that private building investments could have. As a result, private individuals and companies were no longer purchasing land for profit, which lowered land values and allowed the state to buy land at significantly reduced prices. In addition to this, the municipality used tax policies as a regulation tool, increasing tax on unbuilt urban land that is ready for development, depressing the value of the land. These two intervention methods made the open market favorable to the city. Already in 1918, the municipality owned 4690 hectares of its area, by 1928 the municipality owned 7920 hectares⁵³.

53 Ibid.

The architect in charge of the Karl Marx Hof was Karl Edmund Ehn (1884-1959) who completed the three-year master course of Otto Wagner in the early twentieth century. He joined the Stadtbaumeister in 1908, working for the municipality until his retirement in 1949. He had a large impact on the urban realm of Vienna, playing a central role in the building program of the Social Democrats, designing several *Gemeindebauten*⁵⁴. He is most known for his design of the Karl Marx Hof.

54 Ibid, 267.

“Karl Marx Hof, completed construction in 1930, is deservedly the central monument of Red Vienna”⁵⁵. It is located in the North of Vienna next to the Heiligenstadt station. It is the largest single building of Red Vienna, taking the size of a small town and encompassing the social facilities of one. The façade along Heiligenstädterstrasse is 1.2 kilometers long and houses over 1250 apartments.

55 Ibid, 320.

Most frequently the *Gemeindebaute* was built on a single city block plot, having the surrounding roads dictate the shape and size of the block. However, this was not the case for the Karl Marx Hof, which took up several city block plots, allowing it to integrate the road system into its design. The design of the Karl Marx Hof adjusts to its site, which lies between the Heiligenstadt station, Heiligenstädterstrasse and the city’s largest sports stadium. To ensure the continuation of the relationship between these sites, the Hof’s design opens several pedestrian access crossing points and four crossing paths for vehicles facilitating the connection between important points in the city⁵⁶. The Karl Marx Hof is built in brick, a local building material. The *Gemeindebauten* were always built in true materials and did not use concrete or prefabrication methods, except for the windows, doors and important detail, ensuring the value of the social housing dwellings in comparison to the bourgeoisie. This was also a means of creating employment for the population⁵⁷. Different apartment floorplans existed for the building, but each apartment should consist of at least two full-size rooms including living room/kitchen and should have adequate light and sunshine⁵⁸. Each type also had a bathroom. The courtyards were central to the design of the Karl Marx Hof, as their size made them more than just a typical courtyard. “Even large public squares in Vienna occupy only a fraction of the space covered by one of these courtyards”⁵⁹, as a result, they became public.

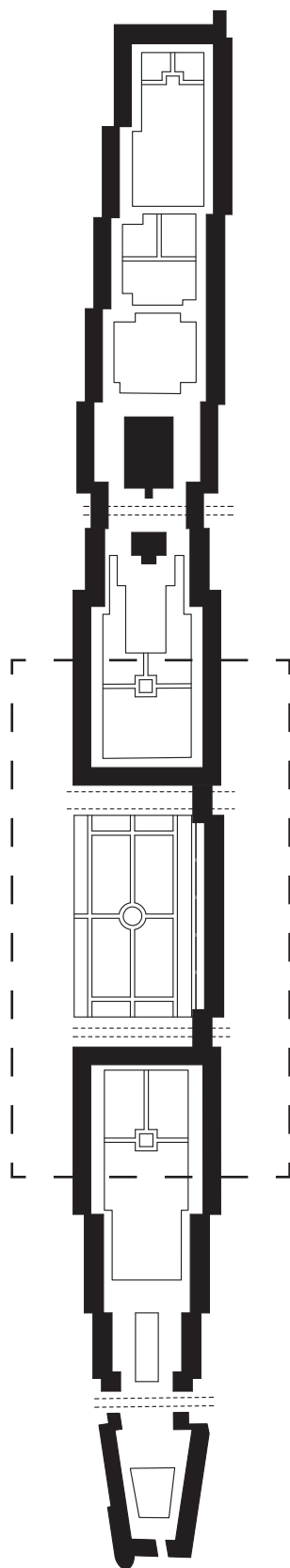
56 Ibid, 326.

57 Ibid, 7.

58 Ibid, 176.

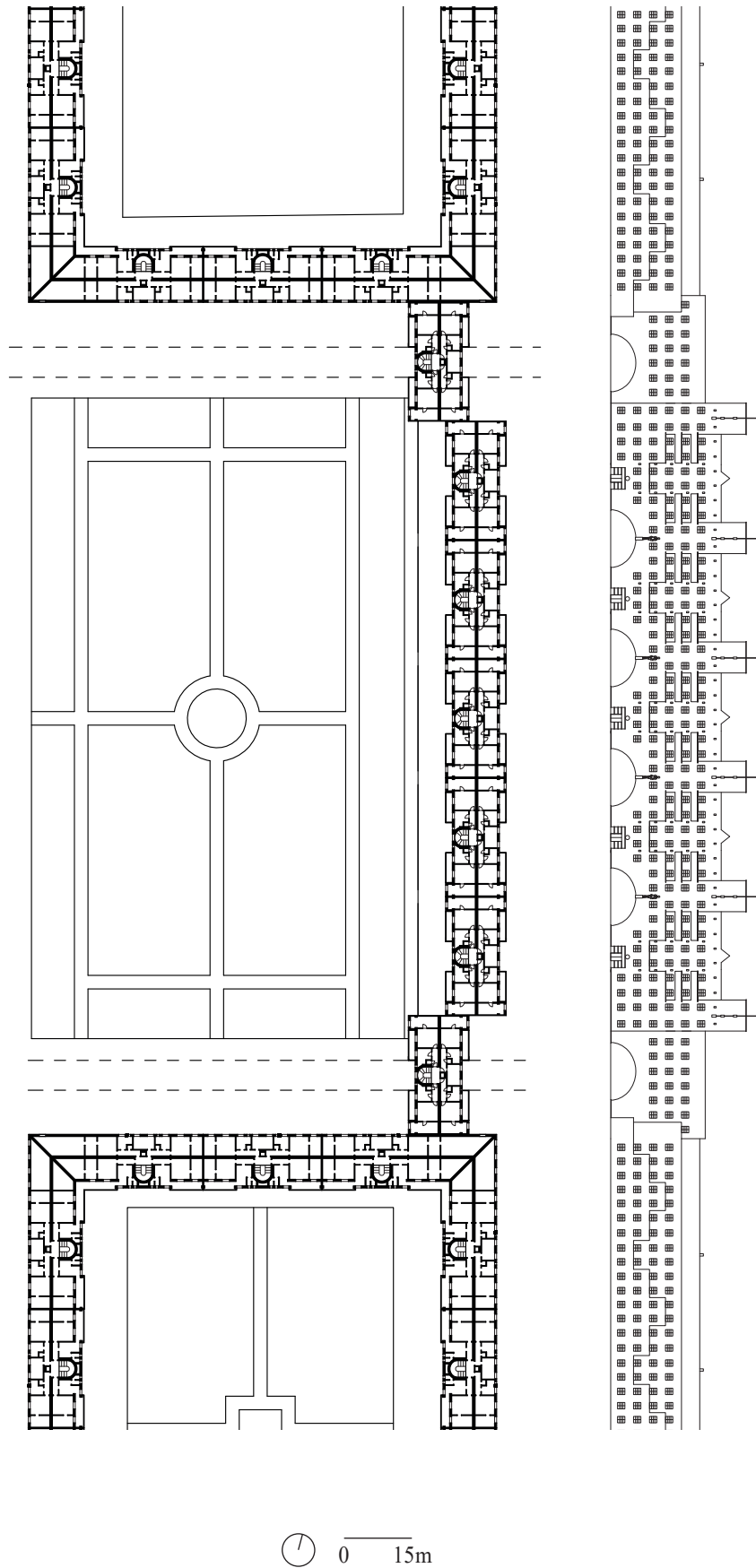
59 Ibid, 326.

Karl Marx Hof is a product of the Social Democrats’ visions for Red Vienna, embodying the idea of creating an equalitarian society. Despite its status of social housing, the building is monumental and exerts a

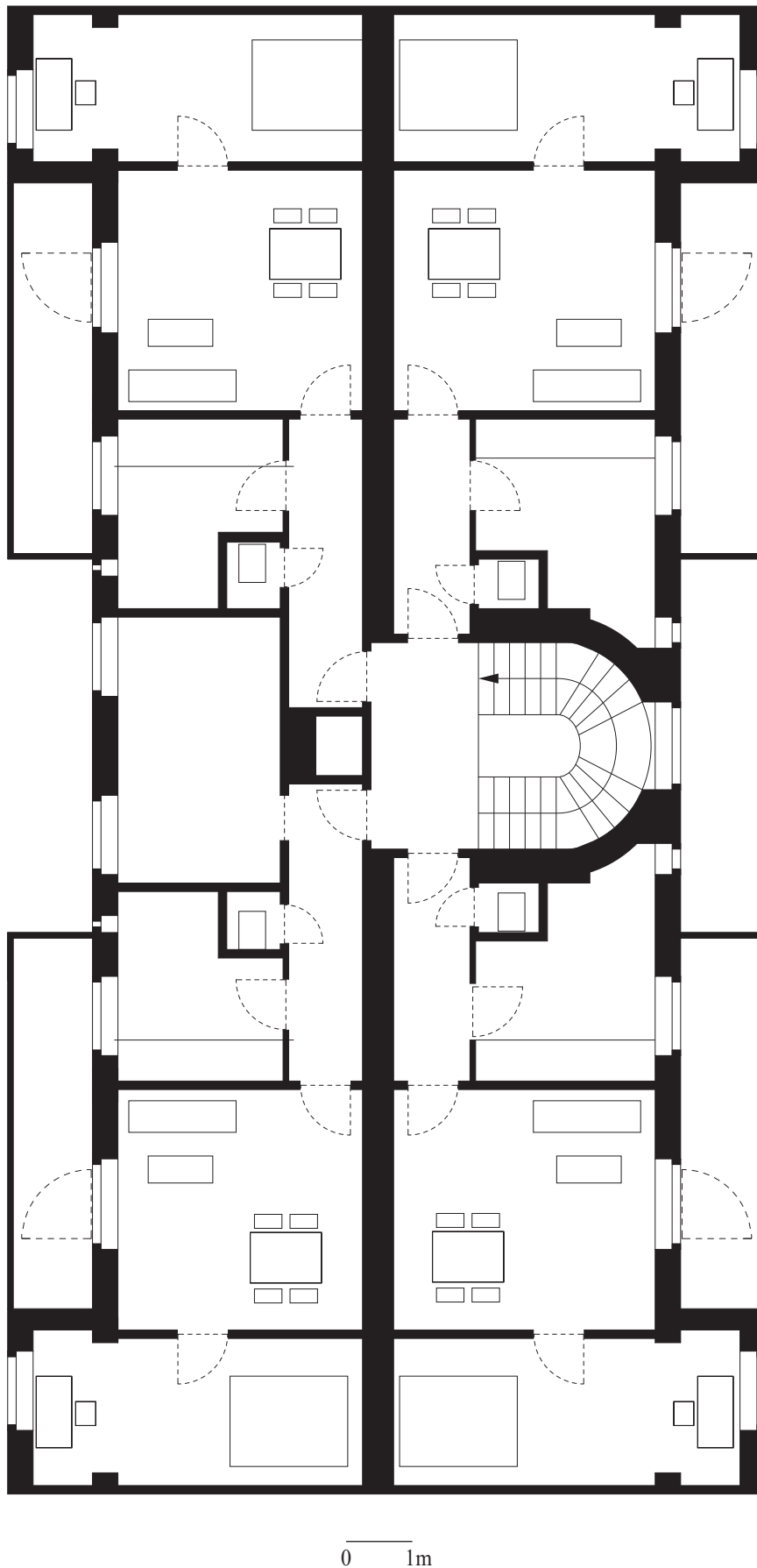


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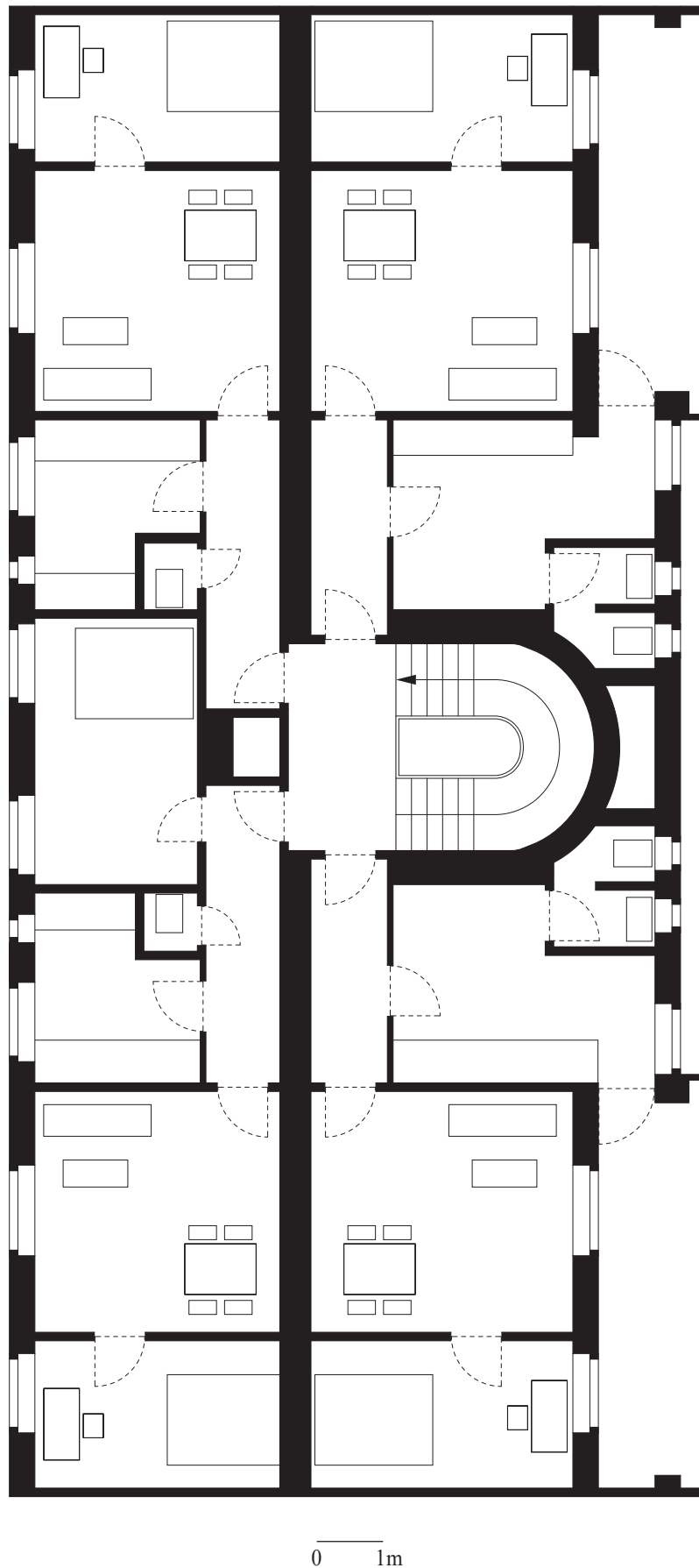
Karl Marx Hof reference for the building plan. Drawn by the author, adapted from the online Hidden Architecture Series *Never Modern*.



Karl Marx Hof building plan. Drawn by the author, adapted from the online Hidden Architecture Series *Never Modern*.



Karl Marx Hof apartment plan type 01. Drawn by the author, adapted from the online Hidden Architecture Series *Never Modern*.



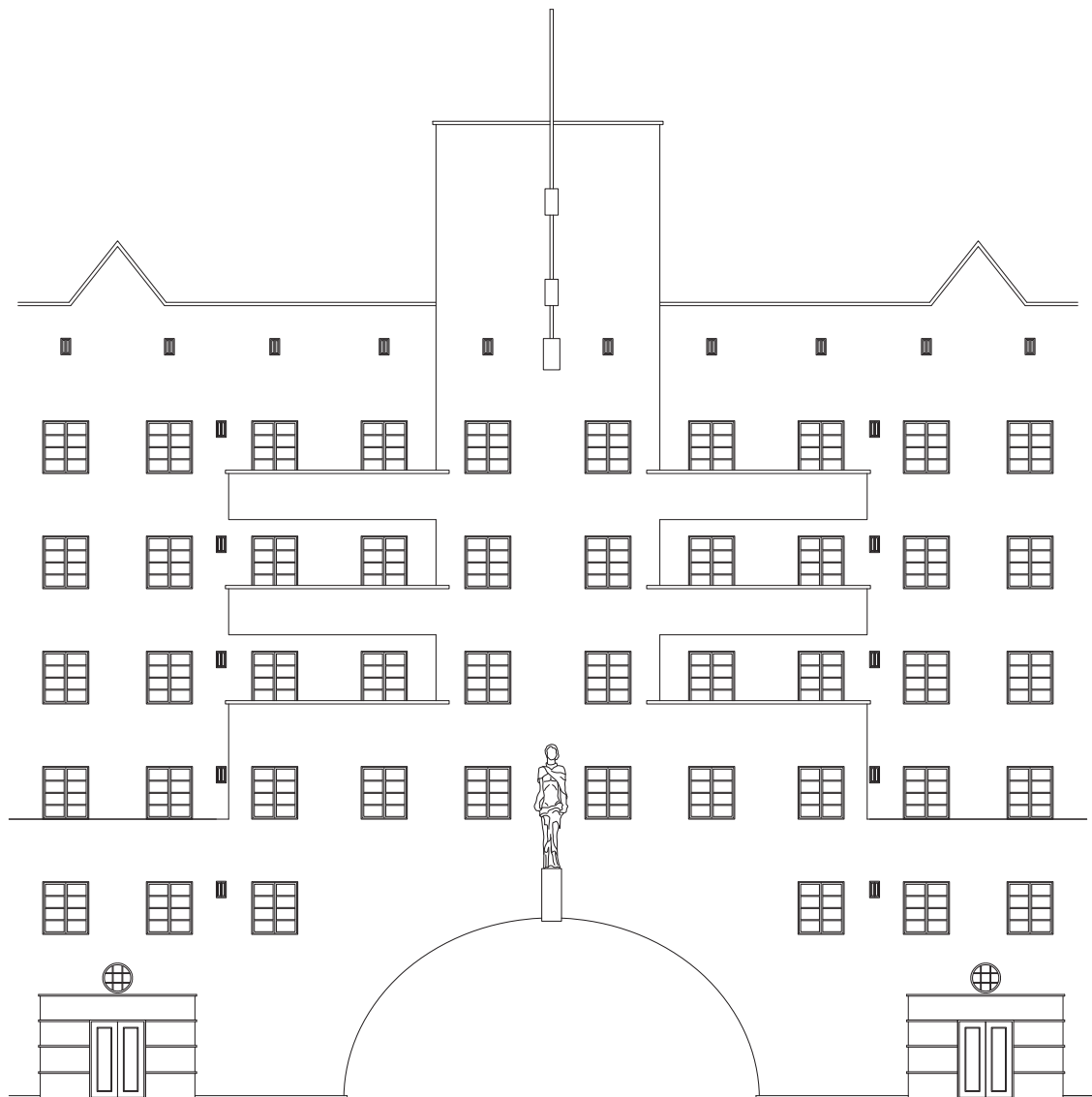
Karl Marx Hof apartment plan type 02. Drawn by the author, adapted from the online Hidden Architecture Series *Never Modern*.

powerful message on the urban fabric. The Hof's that were built from 1921-1934 were to house the members of society whose domestic status had been affected by the war and the housing crisis. However, the intention was to ensure that the dwellings they inhabited appeared neither poor nor insignificant. In the case of the Karl Marx Hof, this was done in several ways: the first being the use of arches on the ground floor both for the pedestrian and vehicular passages, giving the impression of passing through a ceremonial gate. In addition to this, there are small ornamental statues at the top of each arch, adding to the aesthetic value of the building, imitating the bourgeoisie class. Ornamental features were added throughout the building to further emphasize this. The courtyard layout and its decorative features enhance the building's significance. For example, the open courtyard, enclosed on three sides, features a central area with a monumental statue. This central point is further emphasized by the surrounding roads and landscaping, creating an almost palace entrance. The choice of materials is also important when looking at the value the building has when considering its social status. The buildings primary material is brick, which is local to Vienna and hence plays on the collective memory of the inhabitants. The Hofs had a goal of promoting communities and one way it did this was through collective facilities. The Karl Marx Hof was known for its large number of communal facilities encompassing two central laundries, two communal bathing facilities, a dental clinic, maternity clinic, a health insurance office, library, youth hostel, post office, a pharmacy and twenty-five other commercial premises and the large communal courtyards that allowed children to play and inhabitants to socialize⁶⁰. According to Allesandro Porotto, the intersection of these structures with the simple composition of the green areas confirms the main definition of 'collective space'. The public dimension gets mixed with the private one, linking the space to everyday life⁶¹. To further encourage the use of the courtyard and the crossover between inhabitants of the Hof, some entrances are placed on the interior of the courtyard. In many Hofs all entrances were placed on the interior of the courtyard, but in the case of the Karl Marx Hof, some were also placed on the outside⁶².

60 Ibid, 324.

61 Porotto, 'Utopia and Vision. Learning from Vienna and Frankfurt', 96.

62 Pier Vittorio Aureli, 'Domestic Space in the 20th Century'.



0 2m

Karl Marx Hof facade segment. Drawn by the author, adapted from the online Hidden Architecture Series *Never Modern*.

THE SUPERBLOCK AND THE CITY

Following World War I, Europe faced a severe housing shortage, which led to the rise of welfare initiatives encouraged by socialist parties, the force behind the initiatives gradually slowed. After World War II (1939-1945), the welfare state expanded, emphasizing the need for adequate housing for low-income families. At the same time, the understanding of what constituted acceptable housing evolved, particularly regarding standards and sanitation. Many existing dwellings were deemed inadequate, further worsening the housing shortage. This chapter examines three European case studies to explore the evolution of superblock housing in response to these shifting social and political dynamics.

The Barbican Estate, 1982 – Chamberlin, Powell & Bon

England's housing crisis suffered detrimental effects from World War II, with 700 thousand homes lost and entire areas of London's urban fabric flattened. Additionally, since 1939, no new properties were built to accommodate the rising population and no resources were available to undertake repair work on existing homes⁶³. Following this there was a need to rebuild England as a cohesive nation and win the post-war as a coherent society⁶⁴. This was to be done whilst also reinventing itself architecturally and defining a language. There was a "need to establish guidelines for the reconstruction of bombed cities [...] with the ambition of regaining an avant-garde position in international debates"⁶⁵. The new style should respect Modern architecture but use low-cost materials and root its principles in the New Brutalist movement in England, whilst valuing traditional arts and crafts combined with new artistic desires⁶⁶. Materials should stay true to themselves and expose their purpose within the building, and this honesty should form the aesthetic of the building. According to the Smithsons, it should be ethic and not aesthetic. The new style initially took inspiration from the traditional housing material of England, the brick, but slowly started shifting towards the brut style of Le Corbusier⁶⁷. Prior to World War II England was run by a conservative government, however, following the war, this changed to the labor party for a period of six years from 1945-1951. During this period a lot of welfare initiatives, especially within the housing sector, were initiated by the government. A bill was introduced in 1945 known as the Building Materials and Housing Bill, which was to provide centralized initiatives to overcome housing shortages. It provided a fund of one hundred million pounds⁶⁸. In 1949, the share of housing production by local authorities reached 79 percent⁶⁹. Until 1979, there was a frequent change of parties in government, with the housing production falling to 42,2 percent by 1960. In 1979, Margaret Thatcher, a conservative member, became prime minister. She introduced the 'Right to Buy' scheme which was passed in the Housing act of 1980. The scheme should encourage the residents of social housing estates to buy properties at reduced prices varying from 33 to 50 percent depending on the duration they lived in the property⁷⁰. This scheme saw a rapid increase in house sales, peaking in 1982, with upwards of 200,000 homes being sold through the scheme⁷¹.

63 Lawrence R. Murphy, 'Rebuilding Britain: The Government's Role in Housing and Town Planning, 1945-57', *The Historian* 32, no. 3 (1970): 410.

64 *Utopia London*, directed by Tom Cordell (2010), 11:20-12:40, <https://vimeo.com/ondemand/utopialondon>.

65 Mark Swenarton et al., *Cook's Camden: The Making of Modern Housing* (London: Lund Humphries, 2017), 25.

66 Silvia Groaz, *New Brutalism: The Invention of a Style*, First edition, Treatise on Concrete (Lausanne, Switzerland: EPFL Press, 2023), 65.

67 Ibid, 68.

68 Murphy, 'Rebuilding Britain: The Government's Role in Housing and Town Planning, 1945-57', 416.

69 Paul F. Wendt, 'Post World-War-II Housing Policies in Italy', *Land Economics* 38, no. 2 (1962): 122.

70 Wendy Wilson, 'The Right to Buy' (Social Policy Section, 30 March 1999), 7.

71 Ibid, 9.

72 Murphy, 'Rebuilding Britain: The Government's Role in Housing and Town Planning, 1945-57', 412.

73 Ibid, 418.

74 Elain Harwood, *Chamberlin, Powell and Bon: The Barbican and Beyond*, Twentieth Century Architects (London: RIBA, 2011), 14-17.

75 Ibid, 19.

76 Ibid, 102.

77 Ibid, 99.

78 Nicholas Kenyon, *Building Utopia: The Barbican Centre* (Minneapolis: Pavilion Books, 2022), 30.

79 Ibid, 32.

80 Ibid, 30.

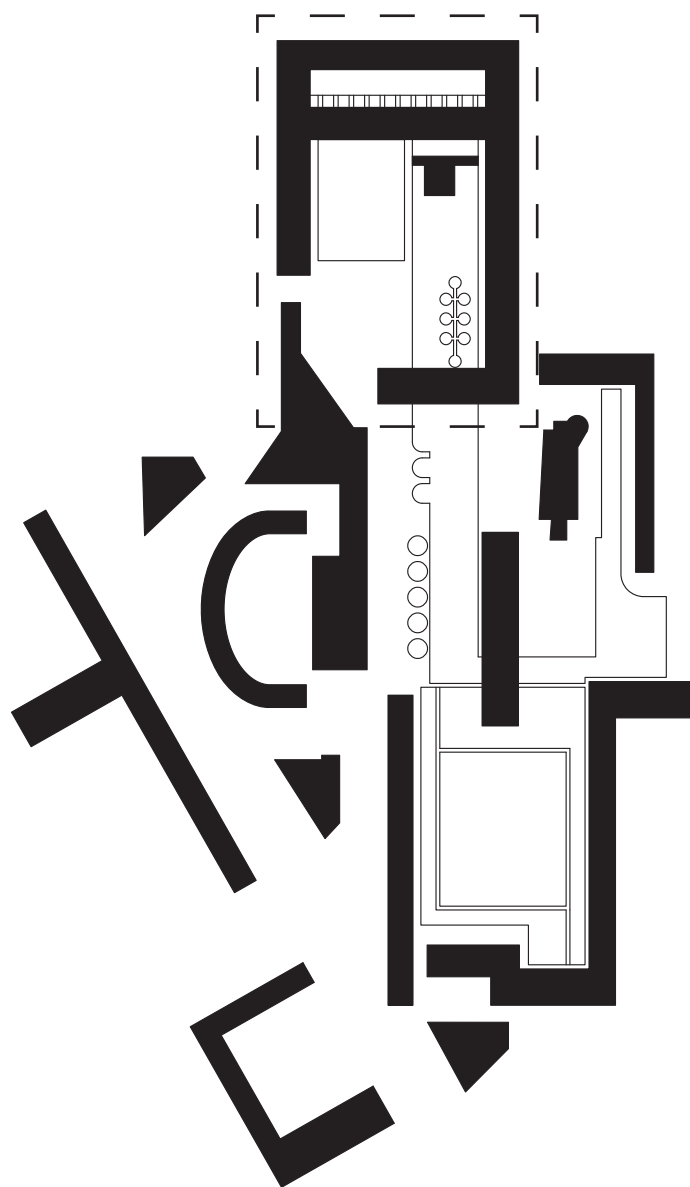
81 Harwood, *Chamberlin, Powell and Bon*, 99.

82 Ibid, 108.

In 1944, a governmental program was passed allowing local authorities to buy land at pre-war prices with financial assistance from exchequer⁷². In 1947 the government proposed to nationalize development rights. Anyone who owned a property which they thought would gain value if the use was altered could submit a claim for his rights. The claims were reviewed by an impartial board. If at some point the use of the land changed, the council could collect a betterment fee from a collective fund of three hundred million pounds. In addition to this, the council would only pay the price of the land prior to the alteration of use⁷³. These bills ensured that the government was able to access cheaper land than otherwise, enabling further development of social housing.

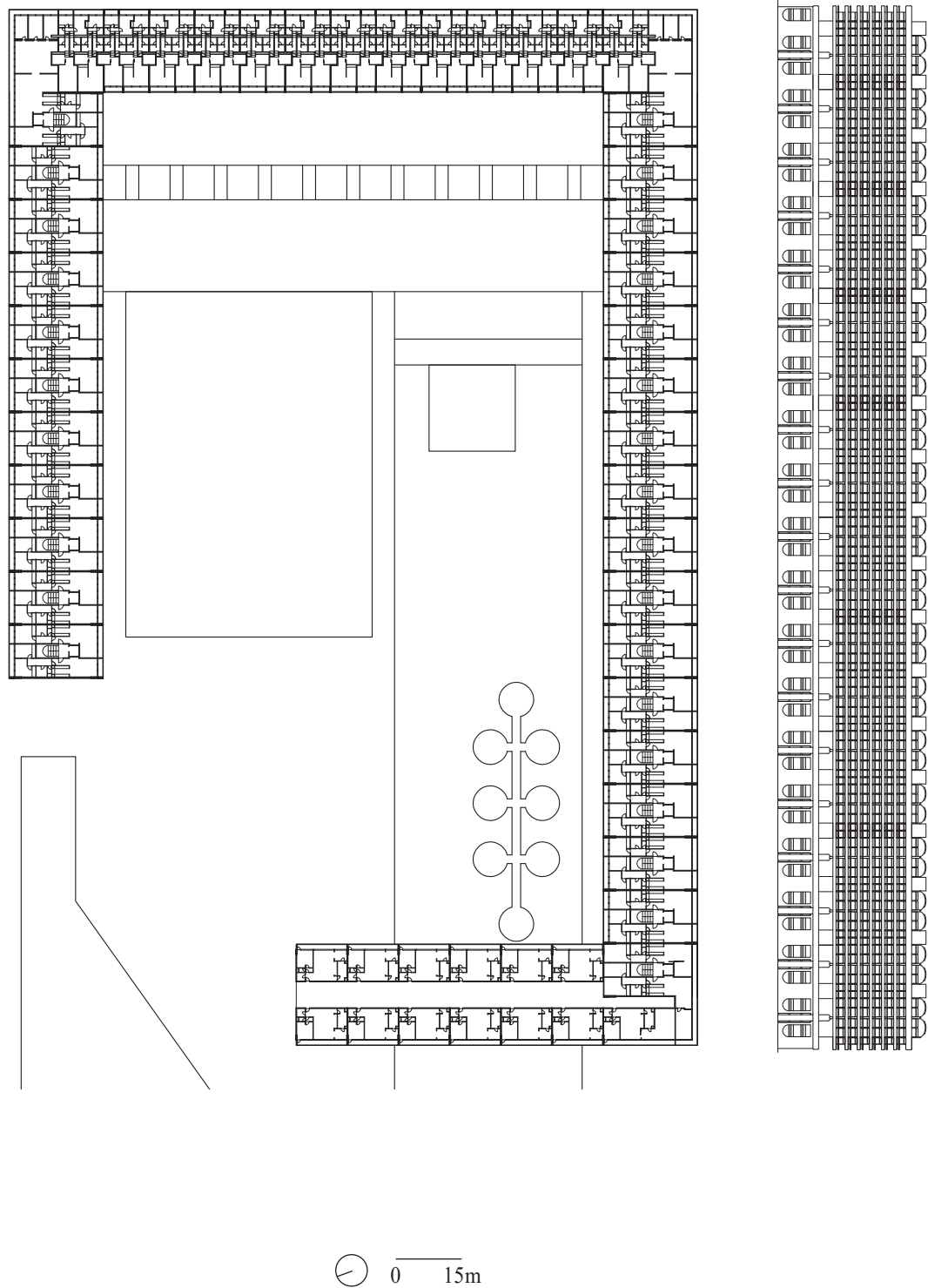
Peter Chamberlin (1919-1978), Geoffery Powell (1920-1999) and Christoph Bon (1921-1999) founded their architectural practice in 1952 named Chamberlin, Powell & Bon (CP&B). The three architects each brought their own areas of expertise, allowing them to collaborate on complex projects such as the Barbican. Chamberlin had a capacity for large and logical thinking, but at the same time, he was interested in joinery and materials, showing a high level of attention to detail. He also possessed a strong passion for the arts⁷⁴. Bon was focused on materiality and the making of things, giving him a strong focus on the detailing and functionality of design. Powell was a skillful landscape gardener and had a strong knowledge on plants⁷⁵.

The Barbican located in the City of London was completed in 1982. It stands as a monumental architectural project, spanning approximately 400 by 500 meters, containing 2000 apartments. Its contrasting architectural image to its surrounding architecture marks its presence within the city. The planning of the Barbican began in the 1950's, however with different schemes, the final scheme was designed by CP&B in 1956 and redeveloped until the final proposal of 1959. Their scheme was recommended by the Ministry of Housing and Local Government⁷⁶. Following the mass destruction of the City of London's urban fabric, one of the more severely damaged areas within London, questions on how to rebuild it arose. Such questions involved whether to build within the existing street plan or to propose a much more radical project, and what functions should be built on the site: cultural, corporate or residential. The question of function was partly dictated by the high land values and development costs of the project⁷⁷ and the need for the finished project to generate financial returns. The final decision was to imagine a utopian way of living with the arts⁷⁸ and the project should include schools, shops, open spaces and other amenities⁷⁹. Unlike the other case studies analyzed, the Barbican was built to provide more than solely housing and functions for residents, "it was created from the devastation of the blitz in order to ensure that the City Corporation had a future"⁸⁰. From 1851 to 1951, the City of London's population had shrunk from 100,000 to 5324⁸¹. This represented the immense need for initiatives in order to ensure its survival, both requiring housing, but also corporate and cultural incentives. Additionally, the housing to be provided was not intended as social housing, but rather luxury housing⁸² intended for the younger middle to upper-class population. Chamberlin made the argument that



0 50m

The Barbican Center reference for the building plan. Drawn by the author, adapted from online archive *Barbican Living*.



The Barbican Center building plan. Drawn by the author, adapted from online archive *Barbican Living*.

the flats should not be large, but small to accommodate the younger population of London⁸³. Upon its completion in 1982, flats began being sold on the open market or to tenants at a discount, following the Right to Buy scheme⁸⁴.

The Barbican center represents a new world of post-war architecture in England, no decoration, no Victorian or Edwardian, it is about Bauhaus and clean lines⁸⁵. It was built in a brutalist style, with Powell acknowledging a great inspiration coming from Le Corbusier and the Unité d'habitation in Marseille⁸⁶. The Barbican is composed of many buildings ranging from large mid-rise blocks to slim high-rise blocks with many of the art facilities such as concert halls being placed partially or completely underground. It was built on what is now a large plot, but it originally consisted of many smaller plots that were cleared of buildings after the bombings, creating an opportunity to construct something monumental. The City had bought up half of the derelict land between route 11, which follows the line of London Wall and Beech Street⁸⁷. When analyzing the project in plan it is not apparent that the building follows the borders of the plot, with larger blocks and towers spread, as what seems to be sporadically across the plot. However, most of the buildings rest on a base that aligns with the plot's boundaries. The Barbican is constructed using primarily concrete, but also steel, brick and wood. CP&B believed that as modernists there was a need to understand the qualities of the materials that were being used. They studied the concrete used in the Barbican thoroughly, testing different aggregates to have it express materiality⁸⁸. This speaks to a new focus decorating a building through subtle ornamental features and close attention to details. The building uses steel when necessary for structural purposes, exposing the moments in the building where the concrete is not sufficient as a structural material. This approach reflects a key aspect of the modern mindset of showcasing materials for their true purpose. The wood was primarily used for the window frames. The heavy and massive connotation associated with the concrete enables the building to mark its presence within the urban fabric of the city, despite it mostly being surrounded by high-rise buildings. The base of the mid-rise blocks are typically constructed using brick, a traditional and local building element, allowing the building to feel familiar and more intimate to its users. The red brick was chosen to mediate between the natural earth and the manmade concrete⁸⁹. During the time of construction, the New Brutalist era of England was still relatively new, taking inspiration from the traditional brick whilst being in the transition phase of switching to the more concrete style of Le Corbusier. The varying buildings on site, both in height, but also in dimension have a strong unity through their materiality and repeating structures that create strong lines both horizontally and vertically when approaching the site. The horizontal lines are emphasized from the balconies and the vertical lines from the structural building core.

The Barbican Center was designed during a time of significant uncertainty about the City of London's survival. With the conservative party running government in 1951, an increased focus was placed on commercial abilities, especially within the City⁹⁰ which plays an essential

83 Ibid, 110.

84 Ibid, 121.

85 Kenyon, *Building Utopia: The Barbican Centre*, 65.

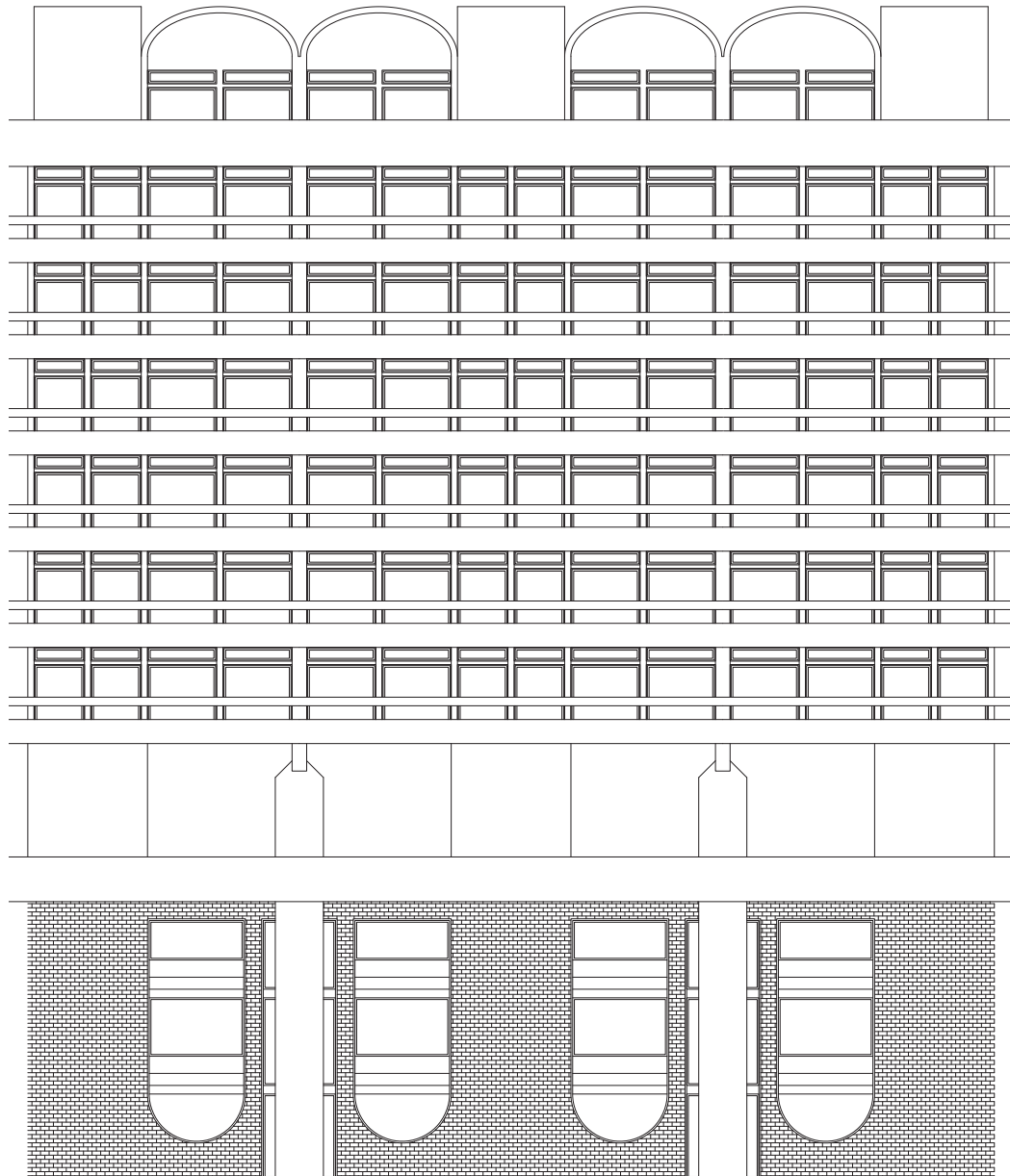
86 Harwood, *Chamberlin, Powell and Bon*, 55.

87 Ibid, 99.

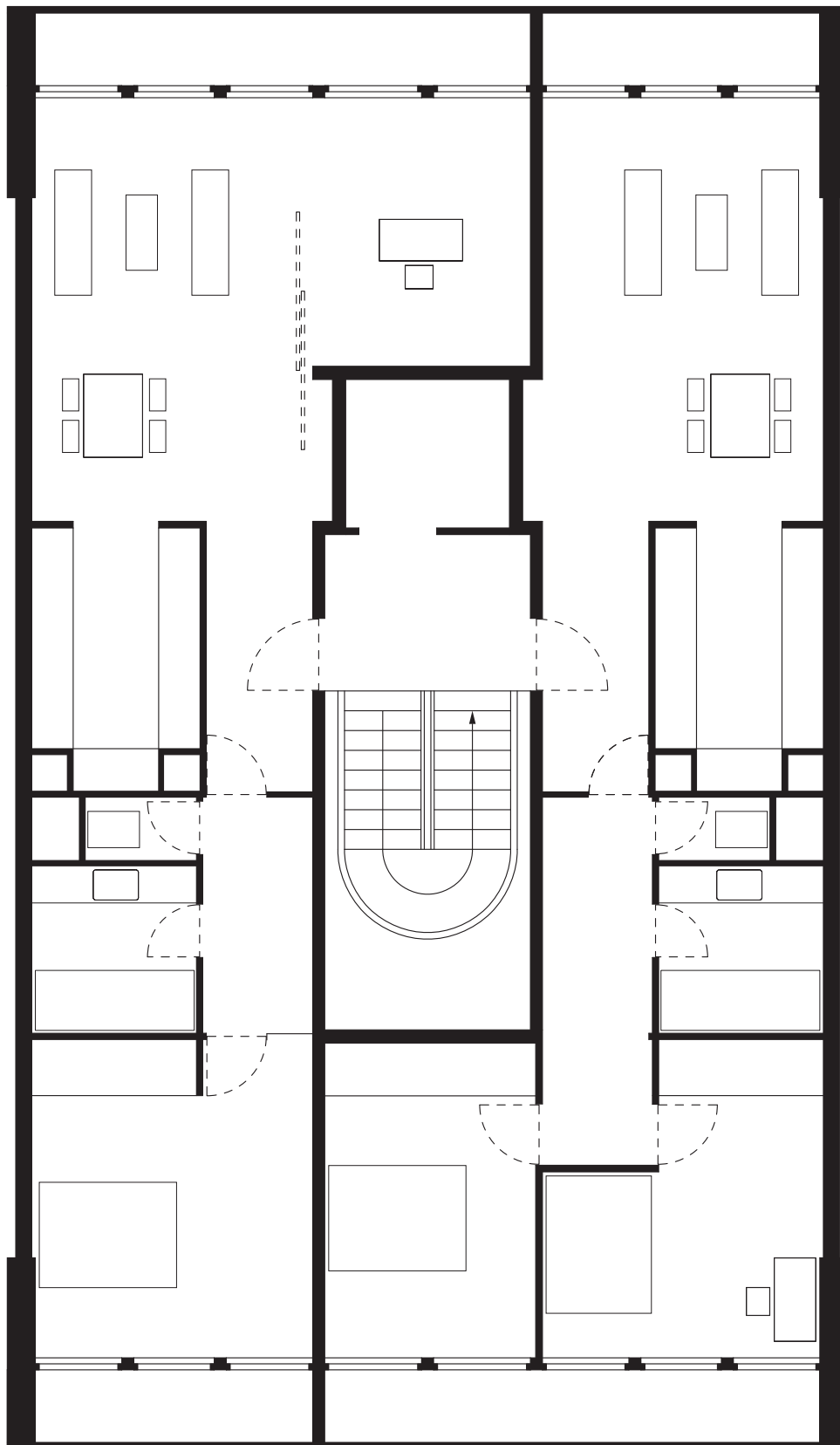
88 Kenyon, *Building Utopia: The Barbican Centre*, 65.

89 Harwood, *Chamberlin, Powell and Bon*, 122.

90 Ibid, 1.

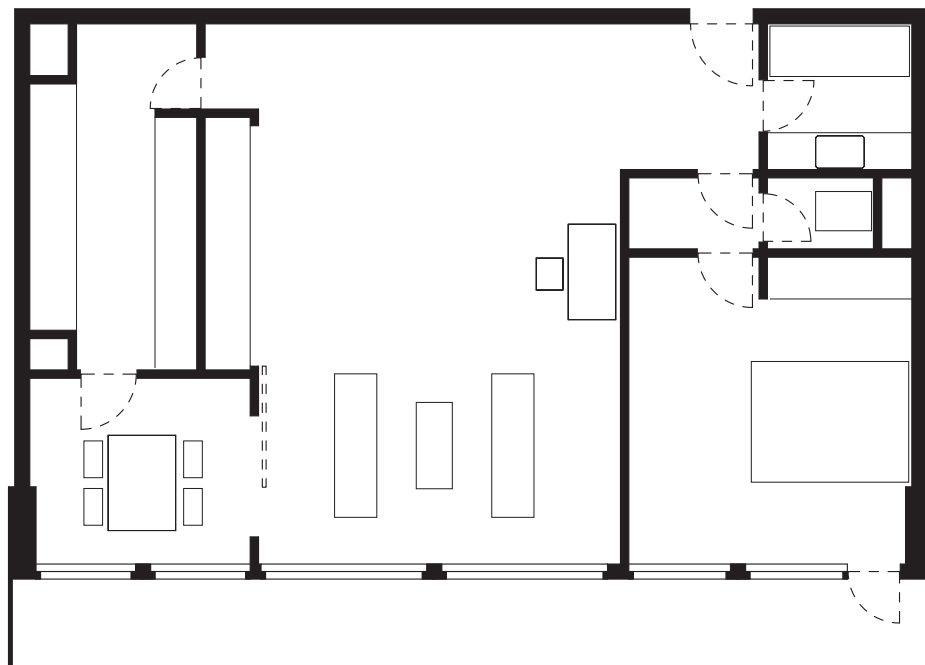


0 2m



0 1m

The Barbican Center plan type 20&21. Drawn by the author, adapted from online archive *Barbican Living*.



0 1m

role in the exchange of goods and the market. Initially, the site of the Barbican was not planned for housing, only commercial use. However, opposition arose as influential personalities believed the City should not entirely become commerce. An atypical stance with many city centers handed over for speculative development⁹¹. The project's location challenges the residential user that has otherwise been seen in the other case studies. Located in the City of London, it targets the middle to upper-class population who would typically work in the corporate or financial district. The initial design principle of CP&B, which remained constant throughout the entire process, was luxury housing with a mixture of towers and courtyards whilst incorporating cultural facilities⁹². The designing of more luxurious dwellings is not only visible in the more spacious apartments, but also in the designing of the courtyard. The courtyard is public with some areas only accessible to the residents. The space is uninterrupted by traffic, only allowing pedestrian access, providing freedom of movement for residents and users. The courtyard space being designed by a landscape gardener, is produced of great quality, lawns, trees flowers, and ornamental lakes, creating an oasis like break from the city⁹³. The vistas between the blocks, the landscaped gardens and the public walkways make up 23 acres of space, connecting the most important public elements such as the school, arts center, shops and the church, St Giles Cripplegate. Buildings such as the church or the arts serve a secondary purpose of acting as icons to establish key points and help wayfinding. Despite the fact that the project has a large courtyard, the space does not promote communitarian relations. There are no common household facilities, and it is more oriented towards the public and the City than to the residents. The arts center undertakes part of the communitarian role through its acting as a space for place-making⁹⁴, offering members of the community a space for local involvement and interactions. The individual apartments, range in size from studios to 3+ bedroom apartments. They are luxurious and illustrate strong elements of experimentation with the New Brutalist style, featuring a sophisticated focus on materiality and attention to detail. "The tactility of the pick-hammered concrete and of the polish of the handrails and of the end grain of the wood block flooring are all examples of this materiality — an enjoyment and celebration of their innate qualities"⁹⁵. The apartments typically feature two completely open façades, allowing natural light and ventilation into the rooms. They are designed with bedrooms and living rooms positioned at the ends, while the bathroom, kitchen, and entrance are centrally located.

91 Ibid., 99.

92 Ibid, 108.

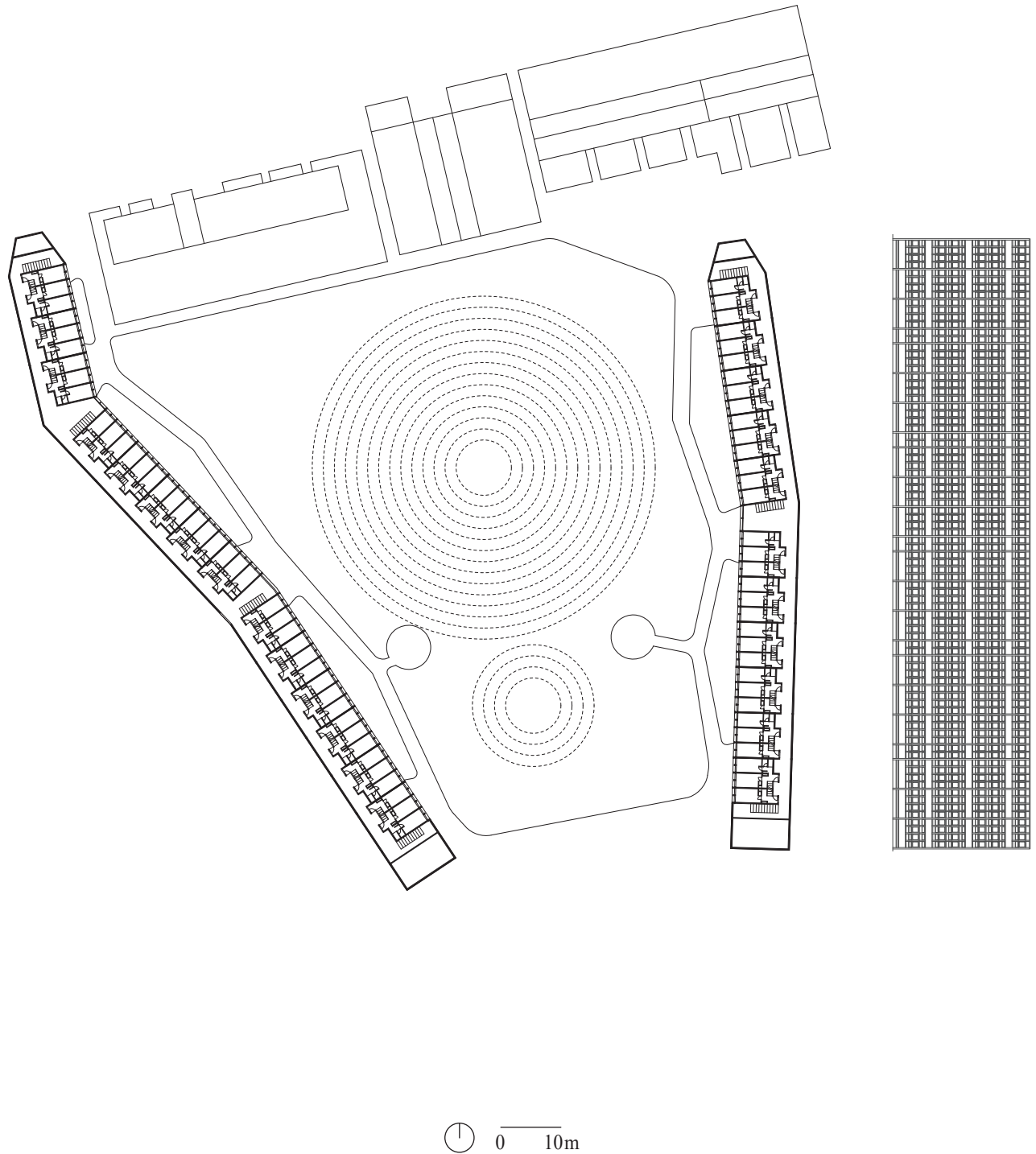
93 Ibid, 112.

94 Kenyon, *Building Utopia: The Barbican Centre*, 65.

95 Ibid.

Robin Hood Gardens, 1972 – Alison and Peter Smithson

The political and economic situation during the design and construction of Robin Hood Gardens was similar to that of the Barbican, as both were located in London, England. The initial phase of the Robin Hood Gardens was initiated by the socialist party, although it completed construction under a conservative party.



Robin Hood Gardens building plan. Drawn by the author, adapted from Nicholas Thoburn, *Brutalism as found: housing, form, and crisis at Robin Hood Gardens*, (Cambridge: Goldsmiths Press, 2022), 7.

Alison (1928-1993) and Peter (1923-2003) Smithson were two leading British architects, especially renowned for their contribution to social housing and the New Brutalist movement. They were, however, more renowned for their written work as opposed to their physical work. They were part of establishing Team 10 (Team X), in 1953. It was a team that originated from within the *Congrès Internationaux d'Architecture Moderne* (CIAM) as a group with an opposing view to the other members on the approach on urbanism. The architects would come together and discuss their ideas. In 1959, when CIAM dissolved, Team X took on a central role in shaping the future of architecture. The Smithsons were learning from the failures of existing social housing projects and of the CIAM, understanding how they could provide better housing. The Smithsons had four key terms which expressed their approach: "Association, by which was meant different degrees of human relationship between the scale of the house, the street, the district and town as a whole; Identity: that every place should be specific and located, relating to the human needs of its inhabitants; Cluster: their proposed urban form which would create, in a random form, a new urban landscape; and Fix: urban identifying points which might be certain buildings either modern or historical, or the dominant form of an urban motorway"⁹⁶. In their proposal for the Golden Lane Housing Competition, they developed a concept that became known as 'streets in the sky'. They were decks that were incorporated on every three floors. They had the power of bringing the traditional street as seen in terraced houses up into the apartment blocks, creating a common space in direct relation with the apartment. This gives the inhabitants a place to express their presence. The streets in the sky were a response to the post-war high-rise housing typology⁹⁷.

Robin Hood Gardens was designed as a social housing project. The design phase started in the late 1960s, and it finished construction in 1972. It is located in Poplar, London. During the time of construction, this was considered as London's periphery, an industrial area and one of the city's most economically deprived communities⁹⁸. Today, the area has undergone gentrification and is a common area for dwellings. The block encompasses 214 apartments, all of two stories. In 2015, the site received approval for demolition to further gentrify the area. One of the two sides has been demolished.

Robin Hood Gardens was built at a time when the Smithsons were developing certain design principles, focusing on the shape of the building and its ability to interact with residents to improve their standard of living. The complex was built on an existing plot, with roads defining its shape. It is positioned between major traffic networks, with the blocks acting as noise barriers against traffic⁹⁹. The building respects the plot shape, following the curvature of the road to adapt to the current territory. This creates cohesion between the urban and the building, and as a result they are respecting the urban identity point. The proposal reflects the development of the new architectural language, New Brutalism, through its material choices and keeping them true to their structural abilities, exposing them for purpose within the building. The primary construction material of the complex is concrete, which through exposure is revealing

96 Andrew Higgott, 'Alison and Peter Smithson', in *Key Modern Architects: 50 Short Histories of Modern Architecture* (United Kingdom: Bloomsbury Publishing Plc, 2018), 171–75, 173.

97 Nicholas Thoburn, 'Concrete and Council Housing', *City 22*, no. 5–6 (2 November 2018): 612–32, 621.

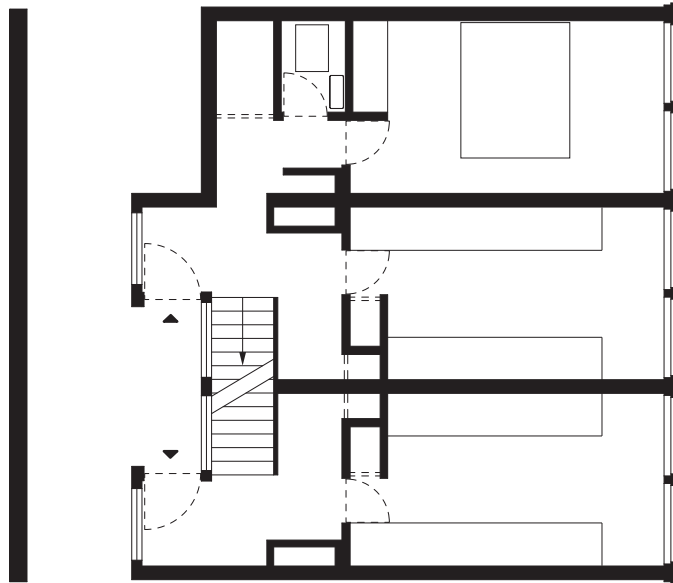
98 Ibid, 612.

99 Aranzazu Melon, 'Robin Hood Gardens and the Rehabilitation of Post-War Mass Housing in London', *DOCOMOMO Journal*, no. 51 (2014): 17.

THE SUPERBLOCK AND THE CITY



Upper level



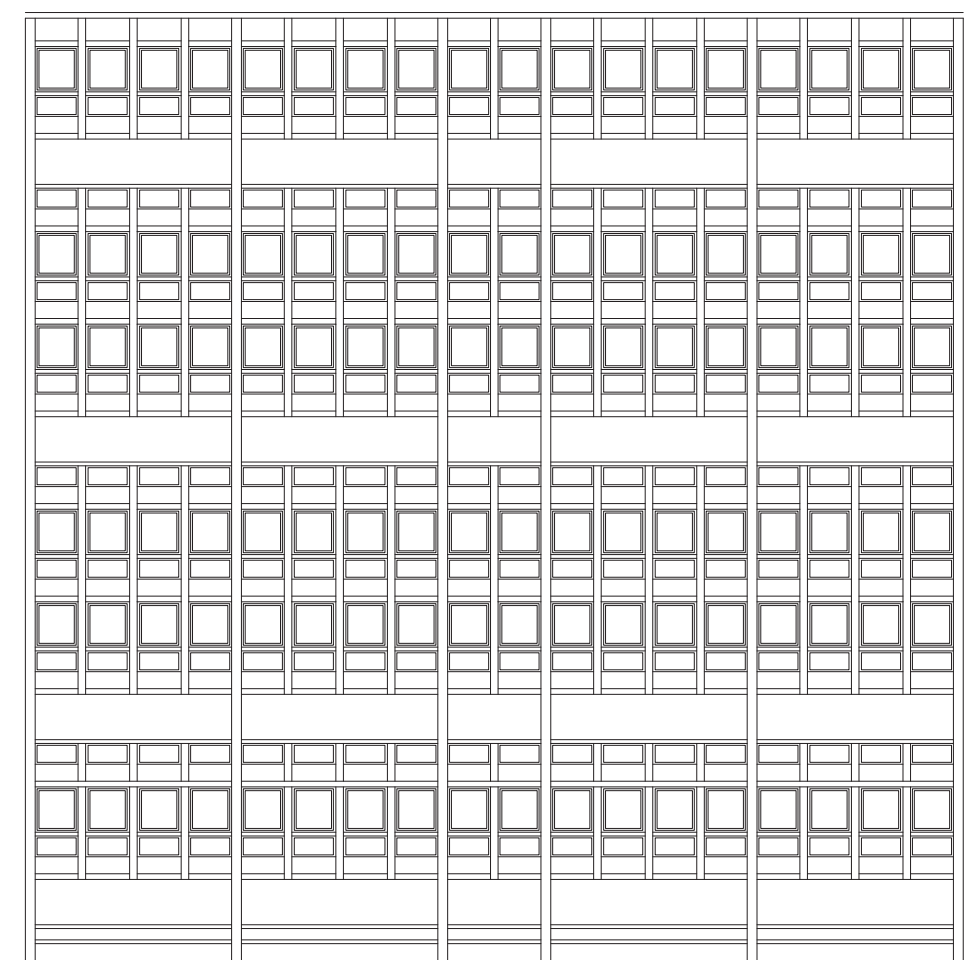
Deck level



Lower level

0 1m

Robin Hood Gardens apartment plan. Drawn by the author, adapted from Nicholas Thoburn, *Brutalism as found: housing, form, and crisis at Robin Hood Gardens*, (Cambridge: Goldsmiths Press, 2022), 7.



0 2m

Robin Hood Gardens facade segment. Drawn by the author, adapted from Nicholas Thoburn, *Brutalism as found: housing, form, and crisis at Robin Hood Gardens*, (Cambridge: Goldsmiths Press, 2022), 155.

its function as the structural element. The building follows a repeating rhythm. There are horizontal slabs and apartments that are evenly spaced along the vertical axis. Each window has the same dimension. Every two to six openings, a vertical element in the form of a concrete pillar interrupts the façade. However, the structural materials used on the façade are the same, and the act of breaking up the structure does not create an aggressive break in the repeating array of windows. The use of a repeating structure and concrete as the main construction material results in a project that's both cost-effective and time-efficient, an essential factor for social housing. Standardizing the window sizes further enhances the project's cost efficiency. There is no form of visible ornamentation on the building's façade. This is not something the Smithsons believed in, as the building should be ethic not aesthetic, and the aesthetic of the building should be achieved through the true expression of the building's materials. The concrete is poured in-situ, exposing the wooden formwork into which it is poured¹⁰⁰.

100 Ibid, 618.

The Smithsons believed in designing spaces that prioritized and adapted to the needs of residents, ensuring a good quality of life. Robin Hood Gardens takes on a form that promotes connectivity. This was essential in designing the complex due to its remoteness of from London. The community and interactions of the residents would have to come from within the block. They designed the courtyard as a collective space where all inhabitants would have the ability to gather. The courtyard facilitated collectiveness with the implementation of facilities such as a playground. It was a green area with many trees and an open field. It became a small escape from the built-up surroundings with no other space to go as a break from the city. The apartments establish a direct connection with the courtyard by placing the most private rooms towards it, such as the kitchen and bedrooms. This encourages the use of the courtyard by people, but furthermore it enables the children of the residents to activate the space without direct supervision as they can be watched from the apartments¹⁰¹. The courtyard has a grass mound in the center, which is approximately two stories high. It had a strong visual connection to the apartments and people were often out playing it¹⁰². The mound also has a secondary purpose, to adapt the project to a human scale to avoid the overwhelming size of the modern high-rise blocks. The introduction of this makes the building more approachable from a distance. To further the sense of collectivity, the project adopts the concept of the street in the sky, taken from the Golden Lane competition. The street in the sky design choice offers a continuation of the connective activities of the courtyards into the vertical direction, bringing a shared space to the apartments. The decks were designed to be wide enough that two women with prams can stop and talk to one another, and there still be enough space for the milkman to bring his cart along¹⁰³. This speaks to the Smithsons consideration of designing for the inhabitants of the space, considering basic needs that in the long run can foster a collective community.

101 Alan Powers, ed., *Robin Hood Gardens Re-Visions, Twentieth Century Building Studies 1* (London: The Twentieth Century Society, 2010), 63.

102 Ibid, 35-37.

103 Ibid, 65-66.

Rozzol Melara, 1981 – Studio Celli Tognon

The aftermath of World War II severely impacted Italy. It faced a critical housing shortage following the loss of more than a million dwellings due to demolition, obsolescence, cessation, increase in marriage rates, and rapid expansion of the urban population. In addition to this, the population rose approximately 11 percent from the years 1937 to 1952. However, during this period, the construction of new dwellings was negligible¹⁰⁴. This resulted in the density per room averaging 1,27 persons, a higher number in comparison to most other Western European countries. In addition to this, the sanitation standards were also lower when comparing it to Western Europe. In 1951, only 45,2 percent had access to running water, a considerably low number. This highlights the need for major intervention in both the provision of dwellings and improving their standards. In 1902, the Autonomous Council Housing Institute (ICAP, previously known as Icam) was founded under which different governmental policies developed with time and necessity¹⁰⁵. The government policies of the early twentieth century did not find it necessary to organize a single state body for planning and management of the development of social housing estates¹⁰⁶. Instead, it was dispersed among three governmental departments: the Ministry of Public Works, the Ministry of Labor and Social Welfare, and the Ministry of the Treasury¹⁰⁷. In 1949, the *Istituto Nazionale Assicurazioni Casa* (INA Casa) program was founded, under which the central government constructs houses. It was financed through a payroll tax. All workers who contribute to the program are eligible to apply, however, the program would prioritize families who were without housing of acceptable standard¹⁰⁸. The method of funding meant the program was only able to provide dwellings for employed people, excluding some of the most vulnerable people from the program in the post-war period¹⁰⁹. Despite this, according to Sergio Stenti, it is the only intervention that is carried out in full. It provided homes and improved standards of living for a large part of the population, reducing the persons per room from 1,27 percent to 1,08 percent from 1951 to 1961¹¹⁰. In 1962, the Law 167 was approved. It aimed to change the development of low-cost housing. It encourages communes to develop masterplans, avoiding the disconnect with the existing cities. It was known as *Gestione Case per Lavoratori* (Gescal). This plan was to be financed using the same system as the INA Casa program. The beginning of this plan saw the liquidation of the INA Casa program and the dwellings were sold at favorable prices either to the tenants or to Gescal. Gescal neighborhoods introduced the tower typology and industrialized construction techniques. In 1971 Gescal came to a definite finish and was liquidated¹¹¹.

To incentivize the development of housing, the government put an exemption on the taxation of nonluxury housing for a period of 25 years, extending to land, developments and a part of mortgage tax. This applied to dwellings assisted by the state and privately owned nonluxury housing. Additionally, there was an exemption on paying taxes on building materials¹¹². The housing programs from the INA Casa program, and Gescal were typically developed in the periphery, allowing cheaper land. One of the most radical and emblematic examples was the Rozzol Melara

104 Wendt, 'Post World-War-II Housing Policies in Italy', 113.

105 'Rozzol Melara Complex', Architectuul, accessed 18 December 2024, <https://architectuul.com/architecture/rozzol-melara-complex>.

106 Sergio Stenti, *Housing in Italia: dalle case popolari all'edilizia sociale privata, 1903-2015* (Napoli: CLEAN edizioni, 2023), 15.

107 Wendt, 'Post World-War-II Housing Policies in Italy', 117.

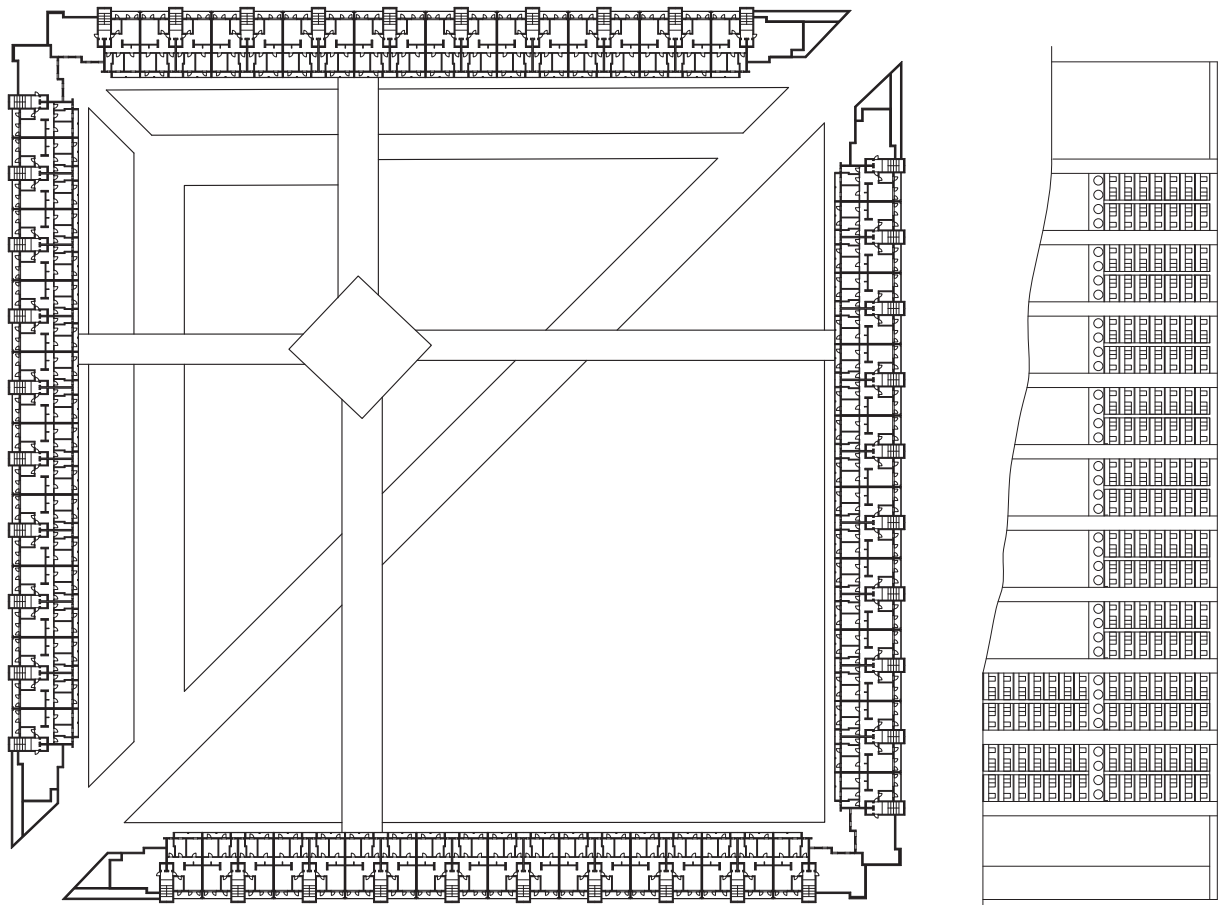
108 Ibid, 118.

109 Stenti, *Housing in Italia*, 16.

110 Wendt, 'Post World-War-II Housing Policies in Italy', 116.

111 Ibid, 59.

112 Wendt, 'Post World-War-II Housing Policies in Italy', 123.



0 15m

superblock.

Rozzol Melara completed construction in 1981 following drafting from 1968-1971 and design variations until 1974. It is located in the municipality of Trieste in the northeastern part of Italy. It was constructed under the 167 Law on the periphery, with a masterplan designed to integrate it with the existing urban fabric. The structure is monumentally large, situated on top of a hill, imposing its presence on the city. It is composed of 648 apartments, housing approximately 2500 residents¹¹³. It is one of the first large scale projects in the seventies designed as architecture on a territorial scale¹¹⁴. The project was made by Studio Celli Tognon, formed by Luciano Celli (1940-) and Dario Tognon (1936-2008) in 1963.

113 'Rozzol Melara Complex'.

114 Stenti, *Housing in Italia*, 169.

Rozzol Melara takes the shape of a large courtyard complex consisting of two L shaped buildings that are connected by walking bridges. Under the bridges a road runs diagonally. This road connects to two main roads, creating access to the city. This was an important design decision in the complex's ability to remain as an entity with the existing city and promote a functioning masterplan. The height of the two L shapes is dictated by the projects desire to imitate the terrain of the hill on which it is located¹¹⁵. Each block is 7 stories tall. The East side of the block sits higher in comparison to the West side. To enable the Eastern side to be elevated, it is placed on concrete pillars creating a passage underneath it. Concrete was a material that was becoming increasingly popular and saw a large spread across Europe during this time. The technological advancements that were made in the concrete industry allowed it to become readily available at a cheap price. This made it an ideal material for social housing initiatives. The materiality of the concrete limits the ornamental features that are on the building, creating a distinct separation between itself and traditional Italian architecture that has a history of dealing more with artistic and formal phenomena than with social and technical construction ones¹¹⁶. The complex was designed to have a repeating floor plan with a staircase providing access to two apartments per floor. Constructing a social housing dwelling with repeating structures is an additional method to lower construction costs, which due to an increase in labor wage had seen a rapid increase in price¹¹⁷. The individual apartments are relatively large, have balconies, a lot of natural light and ventilation, and access to running water and bathrooms. This indicates an increase in the minimum standard of living conditions.

115 'Rozzol Melara Complex'.

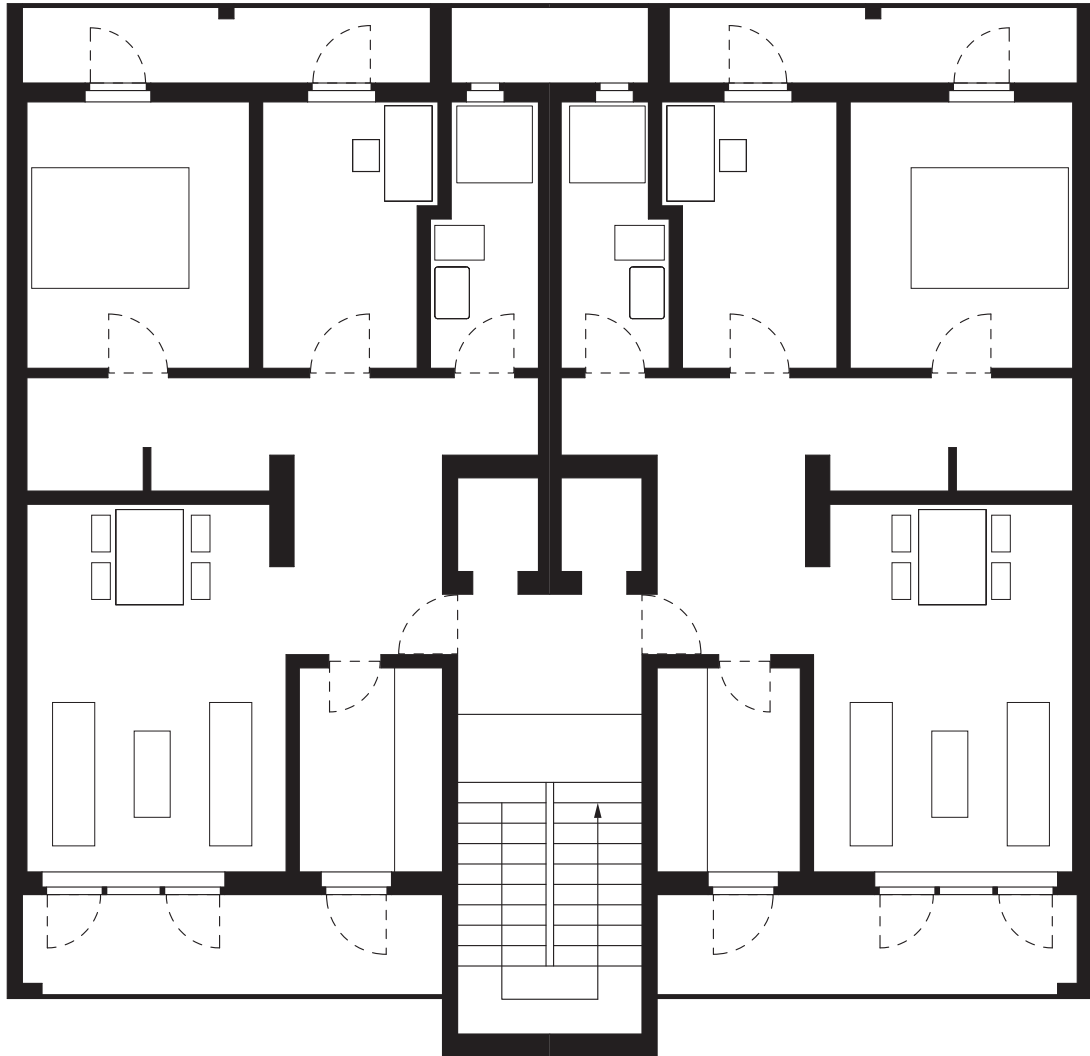
116 Stenti, *Housing in Italia*, 14.

117 Wendt, 'Post World-War-II Housing Policies in Italy', 126.

The housing complex is designed with the intent of housing the population in the municipality who are most in need. The building's typological design emphasizes its role as a social condenser. The large courtyard measuring 200 by 200 meters is part of this emphasis¹¹⁸. It places the communal facilities within it, creating a visual connection between the individual apartments and the courtyard. This becomes even more possible with the presence of balconies towards the courtyard. The courtyard attracts the residents of the building through its many communal facilities, such as a civic and social center, a health center, twenty shops, an elementary and a middle school, a parish center, a common garage and playgrounds¹¹⁹. Additionally, some areas are designed as unoccupied

118 Stenti, *Housing in Italia*, 170.

119 'Rozzol Melara Complex'.



0 1m

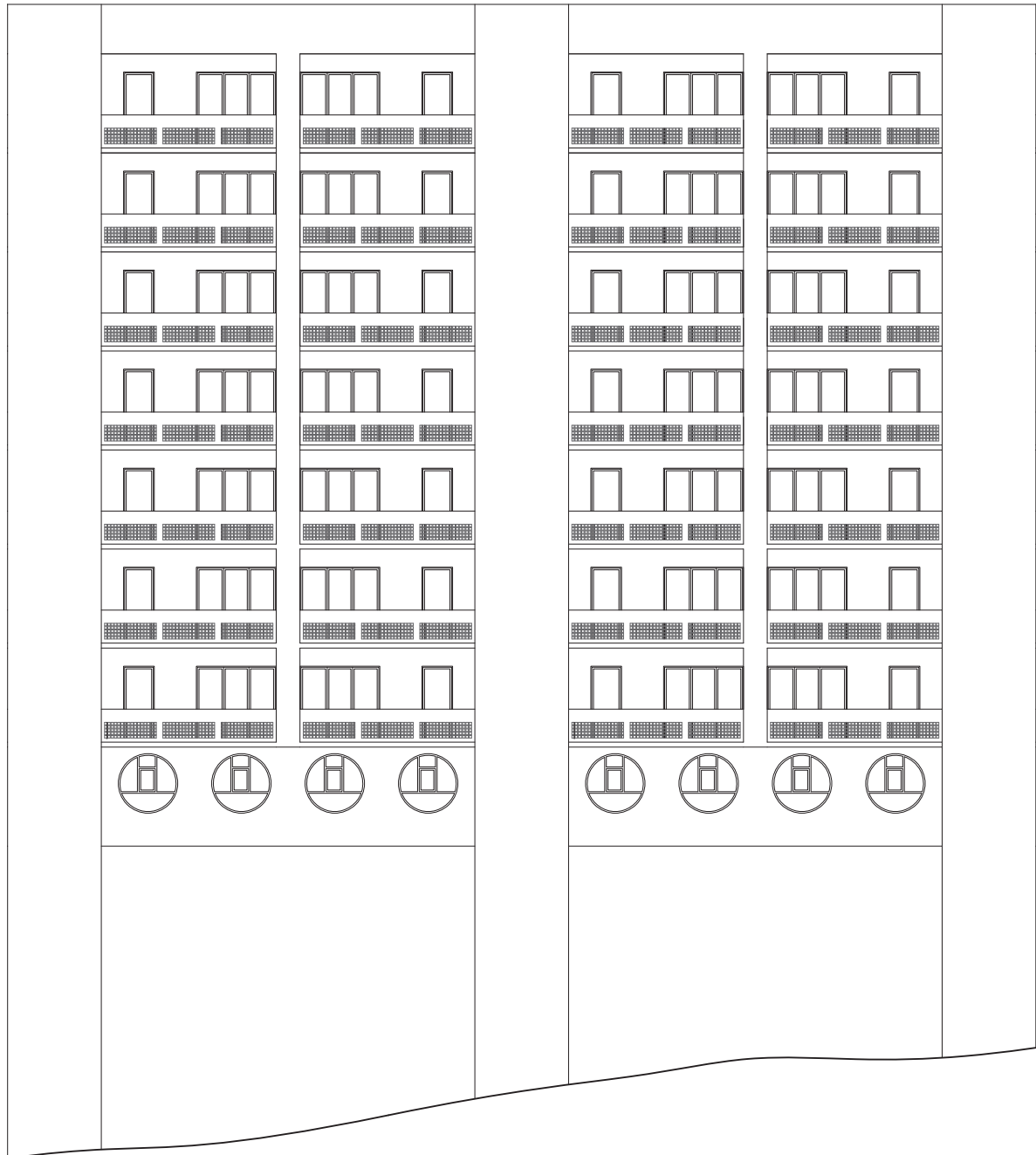
Rozzol Melara apartment plan. Drawn by the author, adapted from Sergio Stenti, *Housing in Italia: dalle case popolari all'edilizia sociale privata, 1903-2015*, (Napoli: CLEAN edizioni, 2023), 169.

spaces to enable inhabitants to arrange their own activities, encouraging participatory design. The aim of the courtyard was to provide facilities to every possible inhabitant within the complex, whether children, parents, teachers, elderly people or families. It wanted to provide a crossover space, with the power of fostering social interactions¹²⁰. The complex emphasized community spaces in more areas than only the courtyard and considered additional social fostering spaces throughout the building. It integrated common walkways, bridges connecting the different blocks, loggias and staircase lobbies into the design of communal spaces. There are four bridges that meet in the courtyard attached to each of the four sides of the complex. They meet at the civic center, bringing emphasis on its importance and encouraging the communitarian lifestyle¹²¹. The courtyard was also designed to function as an integrated space between residential and public space, aiming to create a sense of belonging for the inhabitants within the local community¹²². The courtyard remained open on the ground floor to enable the connection to the surrounding communities. This was achieved through raising certain parts of the building with the concrete pillars as previously mentioned.

120 Ibid.

121 Stenti, *Housing in Italia*, 170.

122 Ibid, 169.



0 2m

Rozzol Melara facade segment. Drawn by the author, adapted from Sergio Stenti,
Housing in Italia: dalle case popolari all'edilizia sociale privata, 1903-2015,
(Napoli: CLEAN edizioni, 2023), 170.

THE FUTURE OF THE SUPERBLOCK

Modulus Matrix, 2021 – Toral + Peris

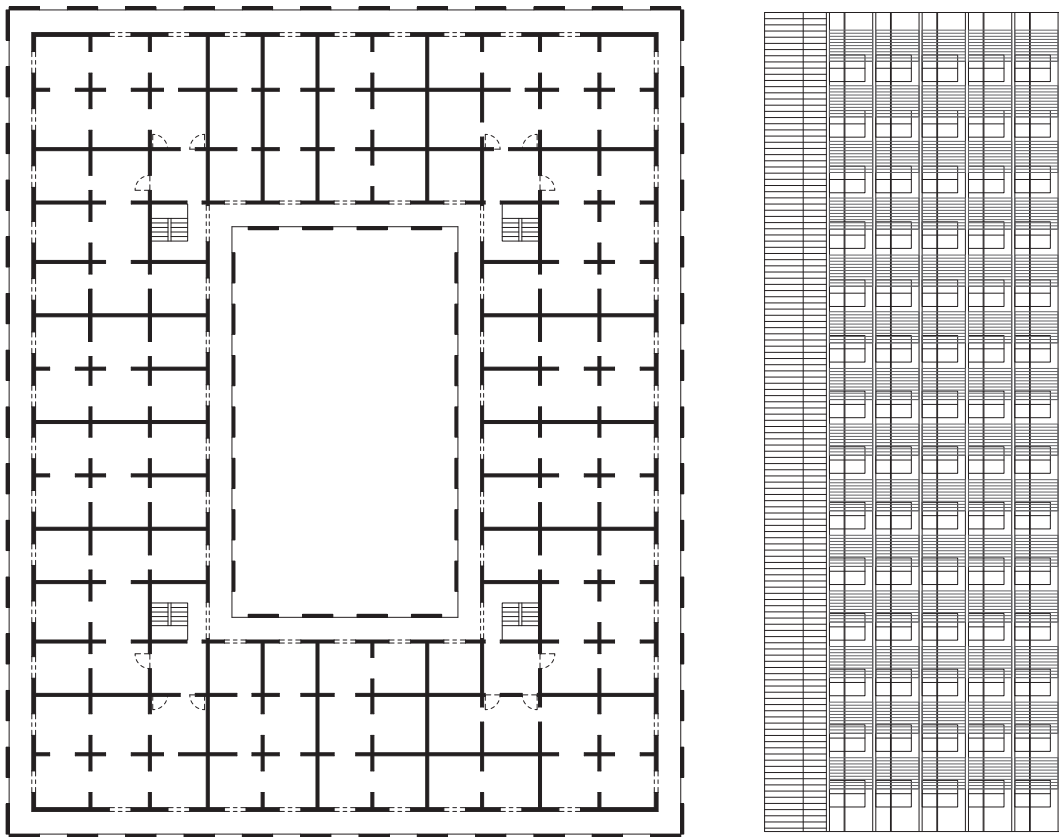
Having analyzed the superblock of the twentieth century, we are prompted to reflect on its potential future within the urban fabric and the forms it might adopt. The future of the superblock can be analyzed through the case study of Modulus Matrix by Peris + Toral. The studio is founded by Marta Peris and Jose Toral. Completed in 2021, Modulus Matrix is located in Cornellà in the periphery of Barcelona, Spain. It houses 85 dwellings. The proposal was for a competition to build a social housing complex, it had many restrictions imposed on it by the competition, leaving minimal options for the morphological design.

The project, being built in the twenty first century, is materialistically very different from the examples analyzed. The project is built from timber, embodying the responsibilities that architects have to build sustainably. According to Toral, the twenty first century is the century of timber. The block is built with a repeating timber structure in the form of a grid, measuring approximately 3,5 by 3,5 meters. The repeating timber structure makes it cost and time efficient to build¹²³. When analyzing the plan, it becomes visible that the timber grid dictates the dimensions of the rooms. The apartments are naturally well lit, have cross ventilation and modern features such as washing machines installed in them. This speaks to the high standard of living the apartments have.

The block, in its modern form, embraces the typological principles of the twentieth century superblock. There is a large emphasis placed on the courtyard, although not as monumental, it embodies an element of collectivity and transparency. In order to access the apartments, one must enter through the courtyard into one of four common staircases that leads to the apartments. In order to enter the apartment, one must use a collective hallway that passes other apartments. These hallways are exterior, and the inhabitants often appropriate the space with small personal installments¹²⁴. This eliminates certain thresholds between the residents and imposes a certain level of trust. Additionally, the façade along the hallway is made of glass, embodying the concept of transparency further. The courtyard entrance is private and accessible through a gate. However, the gate is made of metal mesh, fostering a strong connection between the interior and exterior. This link is further established between the apartment and the courtyard through the designated hallways.

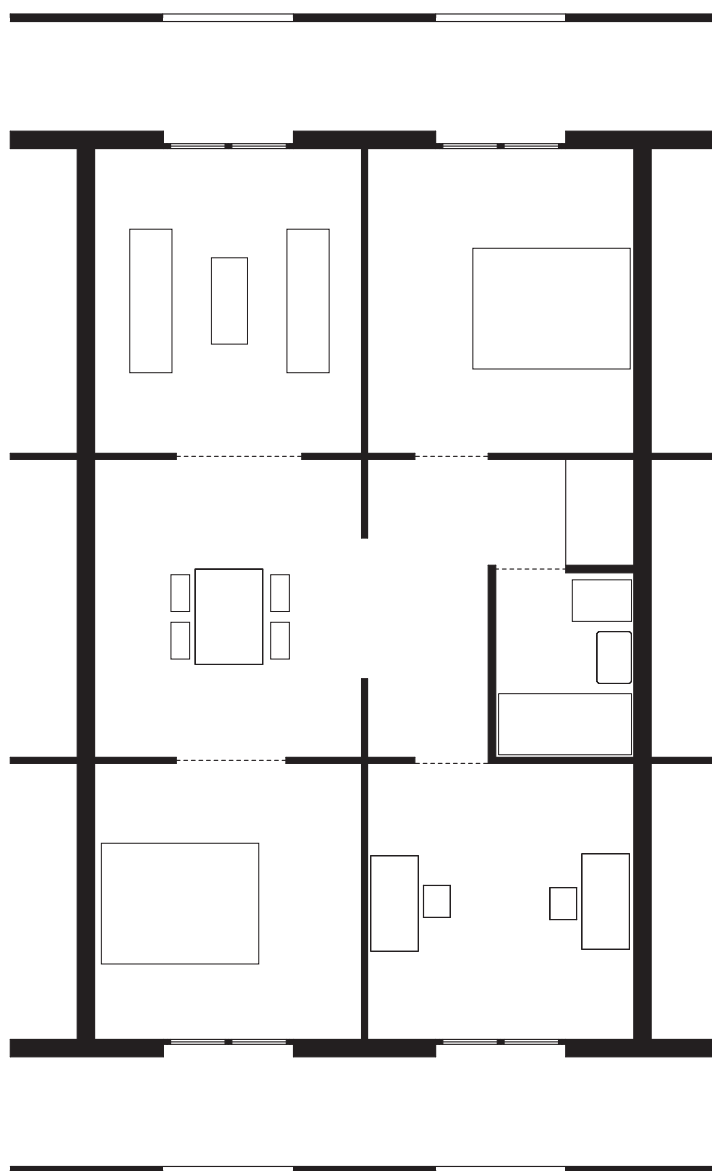
123 Jose Toral, 'PERIS+TORAL ARQUITECTES - Modulus Matrix' (EPFL, 29 October 2024), <https://www.youtube.com/watch?v=BHzI-Dn88ZY>.

124 Ibid.



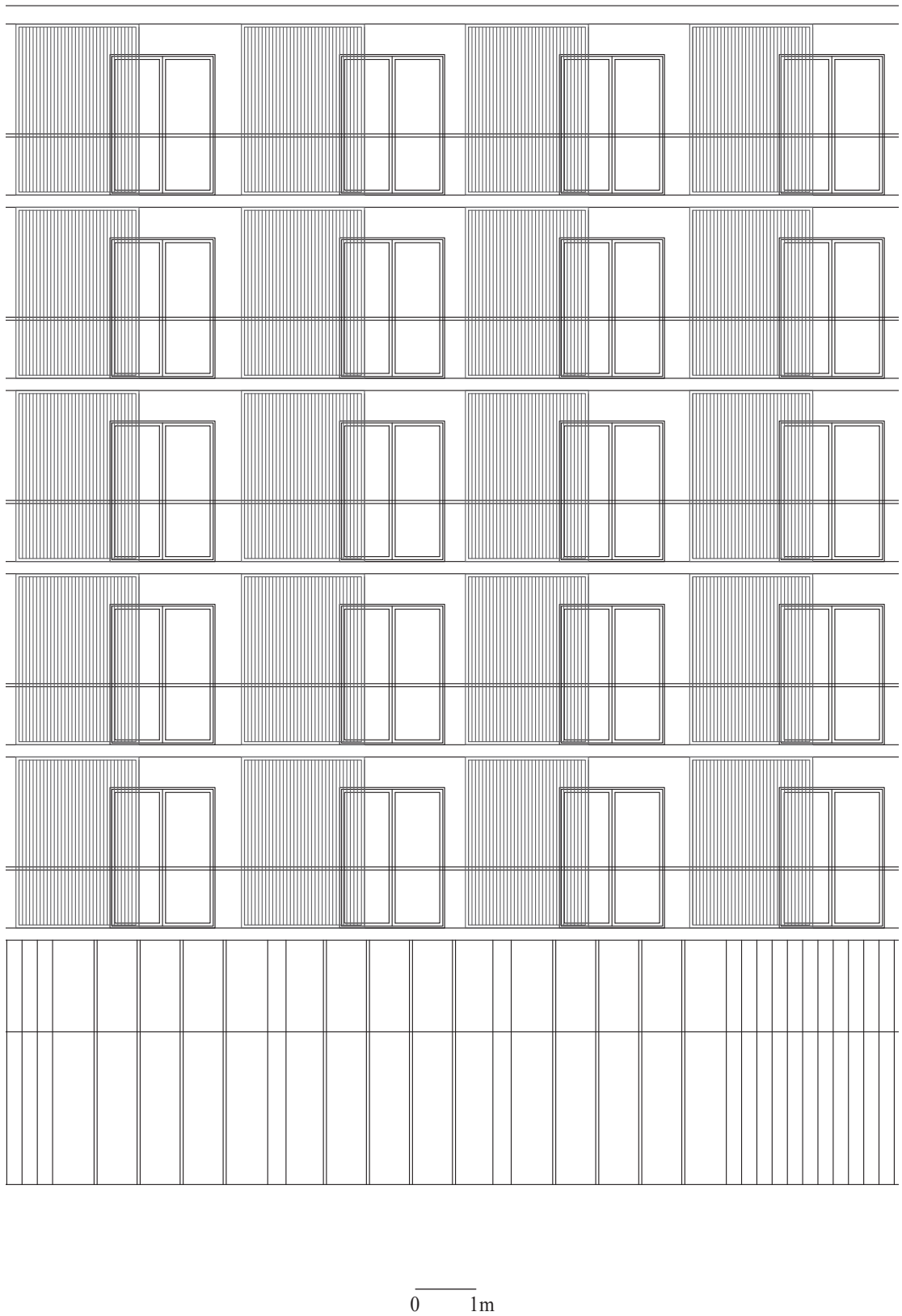
0 5m

Modulus Matrix building plan. Drawn by the author, adapted from Peris + Toral Arquitectes.



0 1m

Modulus Matrix apartment plan. Drawn by the author, adapted from Peris + Toral Arquitectes.



Modulus Matrix facade segment. Drawn by the author, adapted from Peris + Toral Arquitectes.

Lessons from the Superblock

The analysis of the case studies highlights a wide range of interpretations and outcomes. The superblock emerged during times of crisis, responding to an urgent housing need. Its development, especially in central and northern Europe, was supported by governmental initiatives and incentives, in times when public authorities could still exercise a large control on land use. To a certain extent, the superblock can be considered as the tangible manifestation the Welfare State and the larger scale application of the social democratic policies had on cities: Vienna, Copenhagen and London particularly. The dismantling of the Welfare State in the 1980s and 1990s, saw the gradual disappearance of the superblock as a project, paralleled by the interest of both policymakers and architects in any important typological innovation. If there is something important that could be learned from the history of the superblock it is its feature of enclosing or marking the presence of a communal space. This opens up the possibility for developing both old and new forms of life, protected and almost autonomous from the rest of the city. In the light of the contexts and examples analyzed in this research, we can try to summarize a series of conclusional points: architectural language and monumentality, the architecture of the courtyard, and communitarian values.

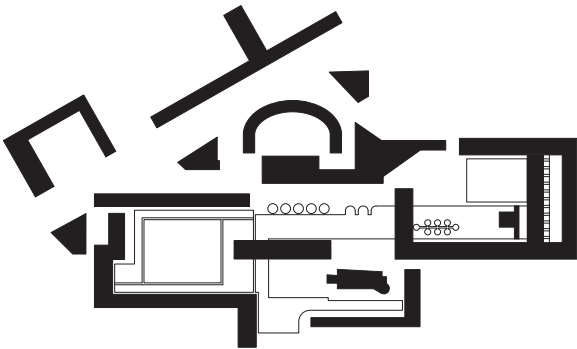
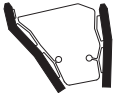
The architectural language of the superblock offers significant value to the building, a quality often overlooked in more recent architecture. The use of ornamentation and classicism within the superblock plays a crucial role in elevating the value of the space. As seen in the case studies, these architectural features historically fostered a sense of pride and recognition among working-class residents, strengthening their place in society with a sense of permanence. This emphasizes the idea that architecture should do more than provide shelter, such as give meaning, and contribute to the broader urban fabric. The scale of the building, alongside its ornamental value, gives the superblock its monumentality. The monumentality of the superblock is extended into the architecture of the courtyard, which provides a refuge from the surrounding built environment by introducing a natural element. Framed by the parameters of the superblock, the courtyard provides a central space while placing important functions on its exterior. Similar to the cloister in monasteries, this design can attract both residents and, in some cases, the local community, giving the space its strength to foster social interactions. The semi-public nature of the courtyard encourages openness and inclusiveness, making it especially beneficial for users such as young families, students, couples, and older generations, who often experience a lack of space in the urban fabric of cities. The emphasis on community within the block, particularly in the courtyard, restores a level of social cohesion that has been lost in more recent architecture.

The rapidly growing urban fabrics threaten the future of the superblock. As already seen with modulus matrix, there is a lack of availability of land, even in the peripheries of cities, forcing the projects to decrease in scale and hence monumentality. This brings up the question: if the superblock is to continue, what approach should it take?

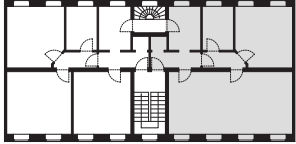
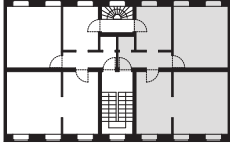
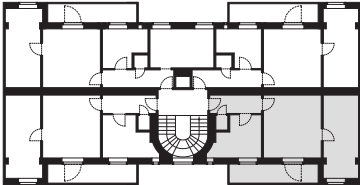
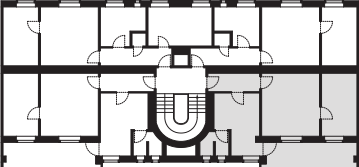
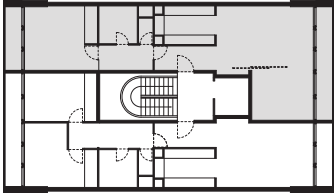
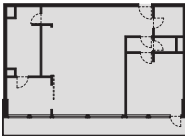
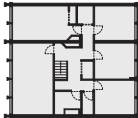
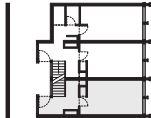
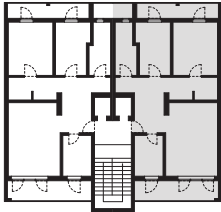
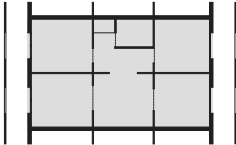
ANNEXE

ANNEXE

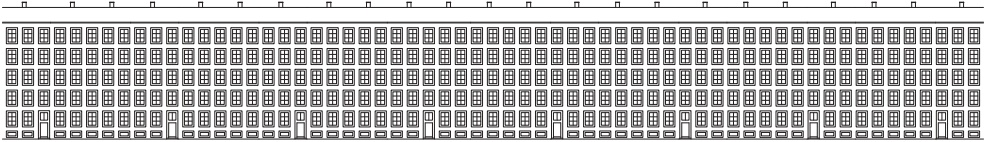
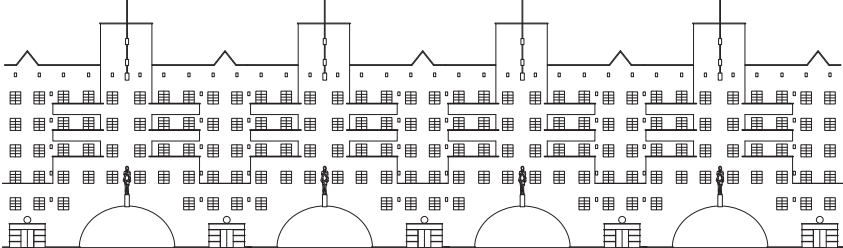
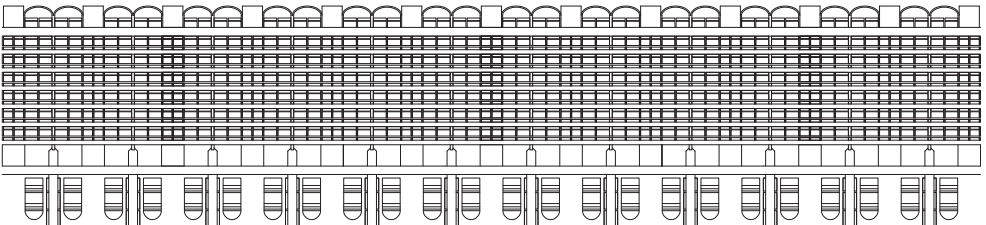
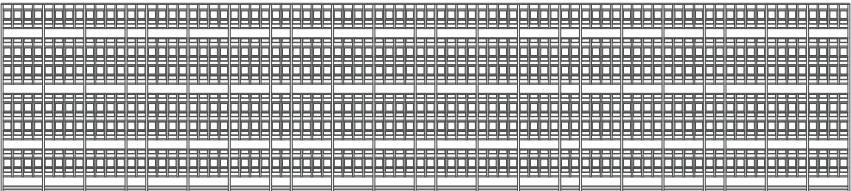
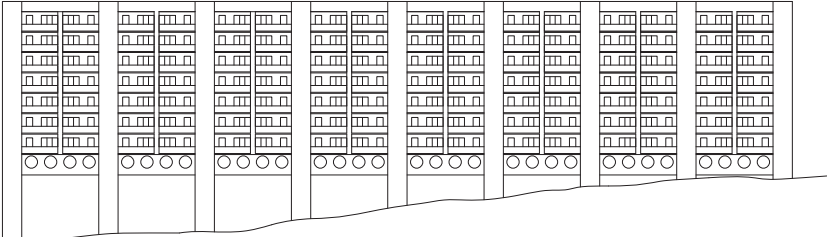
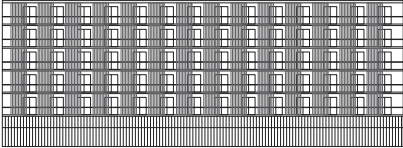
Building Taxonomy

Apartment	Building plan	
Hornbækhuset		
Karl Marx Hof		
The Barbican Center		
Robin Hood Gardens		
Rozzol Melara		
Modulus Matrix		

0 100m

Apartment	Plan type 01	Plan type 02	Plan type 03	
Hornbækhuset				
Karl Marx Hof				
The Barbican Center				
Robin Hood Gardens				
Rozzol Melara				
Modulus Matrix				

0 5m

Apartment	Elevation
Hornbækhuset	
Karl Marx Hof	
The Barbican Center	
Robin Hood Gardens	
Rozzol Melara	
Modulus Matrix	

0 10m

Photography series

Hornbækhuset, 1923 - Kay Fisker



Top: Hornbækhus set fra langs Aagade. Image from Arkitekturbilleder by Sandra Gonon.

Bottom: Kig mod nord vest langs Aagade. Image from Arkitekturbilleder by Sandra Gonon.



Top: Hornbækhus Facadeudsnit. Image from Arkitekturbilleder by Sandra Gonon.
Bottom: Gaardrum. Image from Arkitekturbilleder by Sandra Gonon.



Top: Entrance, Hornbækhus. Photograph by the author.
Bottom: Door detail. Image from Arkitekturbilleder by Sandra Gonon.

Karl Marx Hof, 1930 - Karl Ehn



Top: Karl Marx Hof facade. Image from The Riba Journal by Ralph Deakin.
Bottom: Pedestrian Arch. Image from Hidden Architecture by Philip Lawton.



Top: Building Corner. Image from The Riba Journal by Ralph Deakin.
Bottom: Under Arch. Image from National Galleries of Scotland by Peter
Suschitzky, Julia Donat & Misha Donat.



Top: Kindergarten. Image from Hidden Architecture by Kenan Malik.
Bottom: Door. Image from Hidden Architecture by Kenan Malik.

The Barbican Estate, 1982 - Chamberlin, Powell & Bon



Top: Aerial view of the Barbican Estate. Image from The Historic English Archive.
Bottom: Barbican Estate oasis. Davis Asch , Barbican Estate, 2018. Saatchi Art,
United Kingdom



Top: The Barbican, 1975. Image from British Culture Archive by David Hoffmann.
Bottom: The Barbican, 1975. Image from British Culture Archive by David Hoffmann.



Top: Structural Detail. Image from Joas Souza by Joas Souza.
Bottom: Barbican Estate Flat Interior. Image from Joas Souza by Joas Souza.

Robin Hood Gardens, 1972 - Alison & Peter Smithson

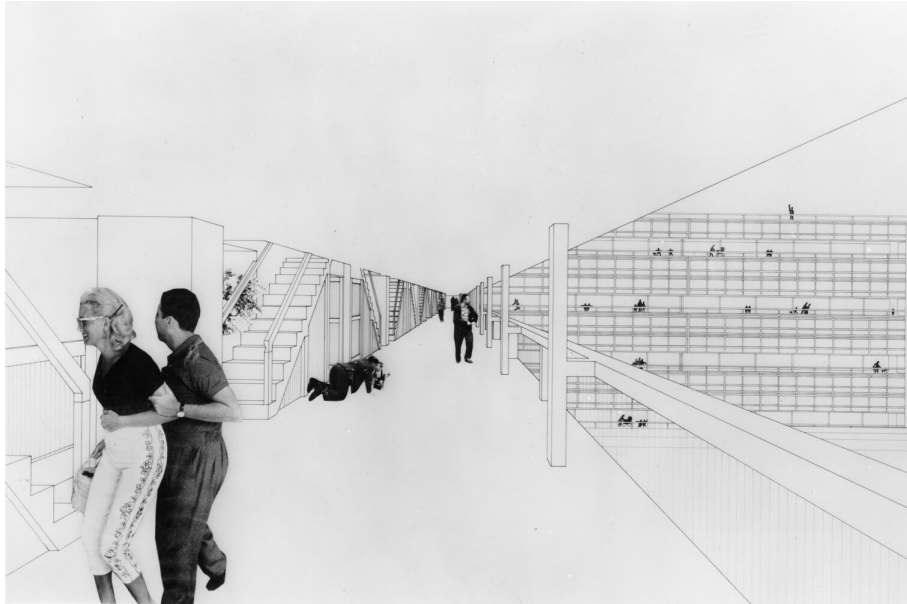


Top: Robin Hood Gardens. Image from Brutalism as Found by Kois Miah.
Bottom: Exterior Facade. Image from Brutalism as Found by Kois Miah.



Top: Image from Garden. From Aranzazu Melon Aranzazu Melon, 'Robin Hood Gardens and the Rehabilitation of Post-War Mass Housing in London', *DOCOMOMO Journal*, no. 51 (2014): 17.

Bottom: Grandfather and Granddaughter in Kitchen. Image from Brutalism as Found by Kois Miah.



Top: Golden Lane: Street Deck. Image from *Brutalism as Found* by Alison and Peter Smithson.

Bottom: Moyna Miah and his grandchildren outside the eddy space. Image from *Brutalism as Found* by Kois Miah.

Rozzol Melara, 1981 - Studio Celli Tognon



Top: Rozzol Melara. Image from Ater Trieste.
Bottom: Courtyard and Civic Center. Image from Atlante architettura contemporanea by Marco Introini.



Top: Raised Building. Image from Greyscape by Dario Lorenzini.
Bottom: Facade Detail. Image from Ater Trieste.



Top: Walking Deck. Image from Greyscape by Dario Lorenzini.
Bottom: Window Detail. From Juan Baraja by Juan Baraja.

Modulus Matrix, 2021 - Peris + Toral



Top: Facade. Image from Peris + Toral.
Bottom: Facade Detail. Image from Peris + Toral.



Top: Entrance. Image from Peris + Toral.
Bottom: Courtyard. Image from Peris + Toral.



Top: Walkway. Image from Peris + Toral.
Bottom: Kitchen Interior. Image from Peris + Toral.

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Collective énoncé team

Collective Rampart, Jean Richter

Gay Apocalypse, François Mégret

Mechanical Symphony, Paulina Ornella Beron

Murder on the Floorplan, Léo Perrin-Livenais

Peasant-Mania, Julia Maraj

Speculative Coastlines, Emile Iacopo Jourcin & Melina Schechinger

The Architecture of the Superblock, Michelle Mortensen

The Boundaries of Labor, Lea Marzinzik

Typological Mestizaje, María Ruiz Medina

Work It Home, Emilie Hamel

