

Living around you



Peter Grue 160304

Political Architecture : Critical Sustainability

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Introduction

The past ten years the housing market in Copenhagen has become increasingly exclusive to high earners. The city is growing rapidly and still the price on housing is increasing. With a high interest from private investors, it is not difficult to find resources to build. But most of what is built today is developed with an eye for profit. The market values have seemed to take over the housing schemes in the city. The only tool at this point seems to be governmental legislations on the percentage of social housing. It is declared from the government that 20 % of housing in newly developed areas should be social housing. But these numbers do not seem to have an remarkable impact on the overall price of housing in Copenhagen. Maybe there is a need for a different argument to a non-profit driven urban development.

One major driving force for this interest in a non-profit driven urban housing has been research that I, along with some other students, did in relation to the decision-making behind the ongoing development of the Lynetteholm-project. Through this research we were looking at the public debate on the development, the arguments towards and against Lynetteholm and also alternative proposals to it. What we found was, not surprisingly, that most of the arguments for Lynetteholm were based on market values. Even though the development of an entire new city part is at a completely different scale to that of a housing block, it will be the same mechanisms and values that are driving the conditions for the new housing at Lynetteholm. The only political tool to suggest non-profit driven housing within a project like Lynetteholm, at this point, will be legislations.

In the search for alternative city development I have looked towards Vienna, and the city's historical and ongoing development of social housing. The Red Vienna model goes back to the interwar period, but its ideas are to some extent still present today. The municipality has proven resilient to the idea of selling off land to private interest which has had a huge influence on the housing market compared with other European cities.

The aim is to propose a housing project in Copenhagen which is not based on market values, but rather on the base of a strong democratic association. The idea of participation, commons and division will be discussed by challenging some core architectural elements, while also looking for potential conflicts both in the development of the housing and in ideas for ways of living together. It is my ambition to come up with an argument for non-profit driven housing that is not only based on legislations but also on particular architectural qualities which enhance the idea of shared spaces.

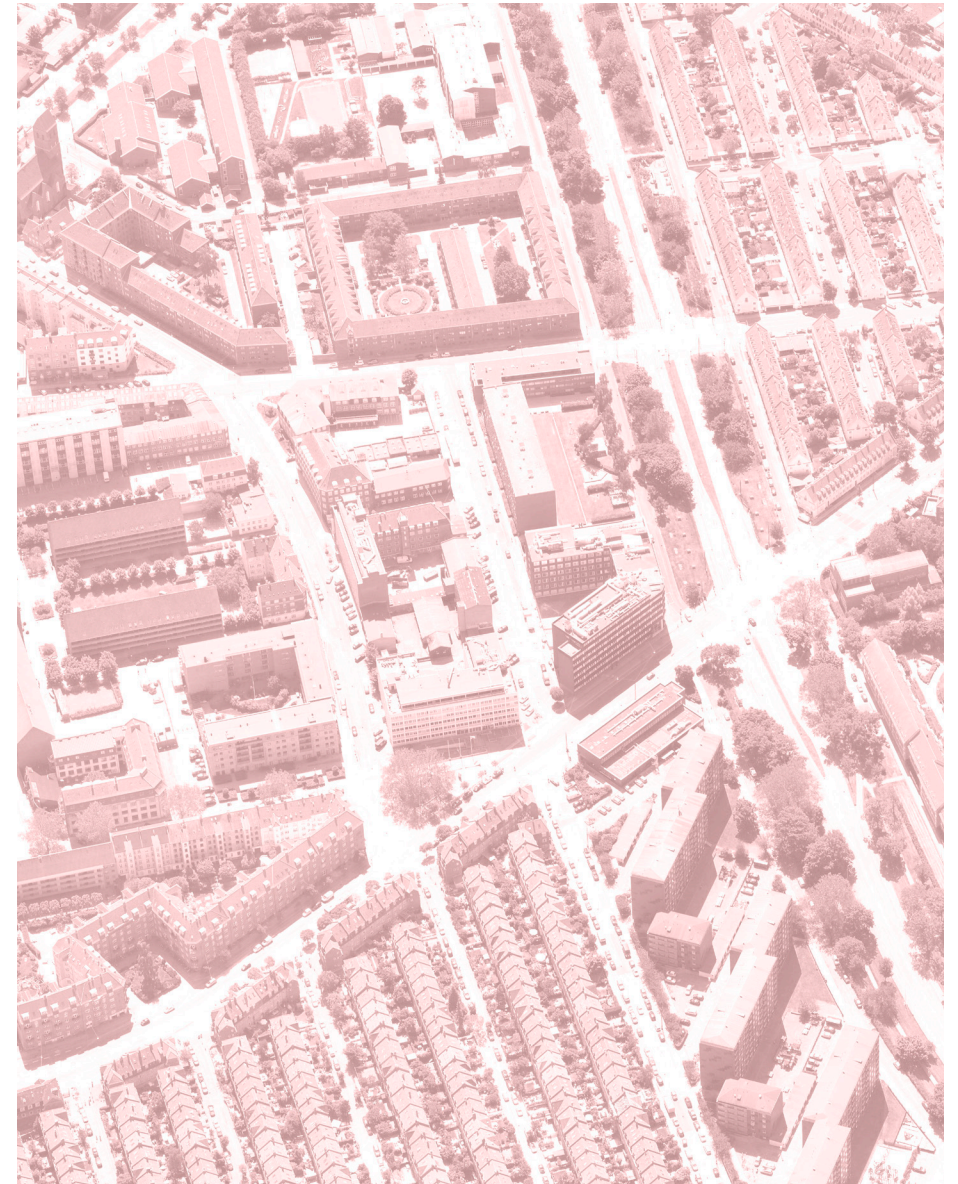
1. Copenhagen / Conditions for housing

Housing in Copenhagen

This chapter aims to lay out the underlying conditions for housing in Copenhagen through an examination of different financial housing models and a look at four specific building developments. Financing is an inevitable part of the development of housing, and understanding this financing will help to understand not only why the ownership scheme looks as it does, but also the way in which building blocks in Copenhagen are developed and designed.

In a recently published report, the Danish think tank CEVEA concluded that most of the newly built housing in Copenhagen is unaffordable for the working class.¹ Since many can not afford to buy private ownership apartments in the city and the rent on rental housing is increasing, newly developed housing is becoming exclusive for people with resources. Social housing appears to be the key to solve this problem of lack of diversity of housing in Copenhagen. But the waiting lists on social housing are long and the amount of newly built social housing is limited.

In each of the four specific building developments, which I have examined as case studies, attention is drawn to the financing and development model. The analysis also highlights the particular spatial and organisational qualities of each housing. Two of these case studies are from the first half of the 20th century and are significant examples of new housing models of their time. These are also characterised by their extreme length, repetitiveness and presence in the streetscape. The two subsequent casestudies are more recent (21st century) housing examples, with very different conditions and qualities.



Housing finance

The past centuries have presented a variation of different financing models for housing in Copenhagen, each resulting in differing housing typologies. The following notes sum up some of the underlying conditions, not so much for the manifested buildings, but rather for different financing models for housing.

The earliest Danish example on social housing came from a quite surprising actor. In 1853, The Danish Medical Association initiated the housing project today known as Brumleby. The development was not labeled as a social housing project since it was a privately-funded initiative to raise the living standard and in particular the sanitation amongst the more destitute areas of a dense Copenhagen following the Cholera pandemic.² Nonetheless the agenda for the housing project served a social purpose and today the facilitation of Brumleby is run by the social housing association KAB.

Around the time of the first world war there was a shortage of housing in Copenhagen. The first 'almennyttige boligforening' (housing association benefitting everyone) was initiated around 1915, and in 1922 the municipality started supporting housing developments. The social housing associations were now able to build on land bought by the municipality. Each development would have its own economy through a housing association, subsidized by the municipality.³

Today 20 % of all housing in Denmark is social housing or 'almennyttige boliger'. They are all owned by almennyttige boligforeninger and subsidized by the municipalities. While the municipalities are financing 10 % of each development, they also have a right of allocating the 10%

for people with special needs. Almennyttige boligforeninger are not allowed to make profit from the housing developments. Between 2010 and 2019, 32.074 housing units were built in Copenhagen. Out of those 4.545 are social housing, which is around 14 %.⁴

An 'andelsboligforening' (Cooperative housing association) is an association in which the members share a housing together. The first cooperative housing projects were initiated in the late 1800's, but the housing model as it is known today, was developed after the second world war, when it was possible to establish cooperatives in existing housing blocks.

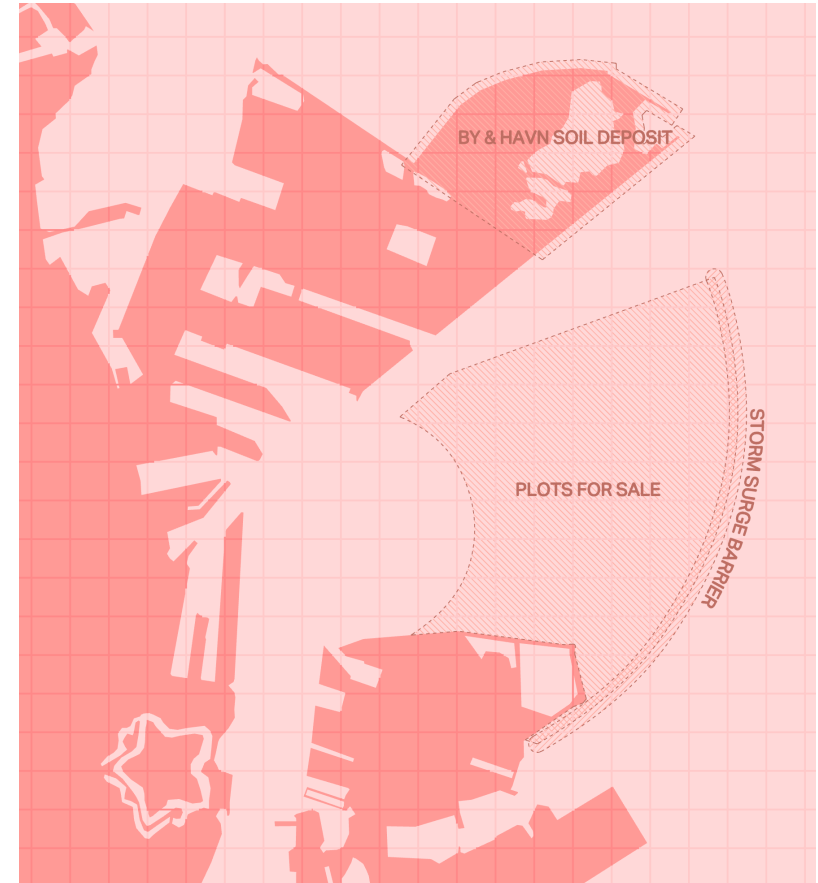
The amount of 'andelsboliger' increased greatly from the early 1980's up until 2004, because of 'tilbudspigten' which meant that people renting an apartment would have rights to buy the apartment first, if it were to become available for sale. That, combined with public subsidies for buying the housing blocks, have resulted in around 33 % of the housing in Copenhagen being cooperatives today.⁵ Out of the 32.074 housing units built between 2010 and 2019, only 285 units are cooperative housing, which is only 0.9 %.

The CEVEA report, which provided these numbers on the different housing types built between 2010 and 2019, was making it clear that the most common housing types being built in Copenhagen today is private rental housing. Private rental housing is mainly driven by profit. This financing model is facilitated by development companies. Investment in housing in larger cities, at this point, is a very secure investment given the increasing demand on urban housing.

By & Havn and Land Value Capture

Lynetteholm has been a preliminary research object in relation to this programme. An interest in the decision making processes behind Lynetteholm, led to the subsequent focus on housing conditions. By & Havn, who are developing Lynetteholm, have had a major influence on the way Copenhagen has expanded over the past decade. To understand the decision making, a critical study and mapping of By & Havn's development models was undertaken. Land Value Capture is a key model for By & Havn. It is put to use both in the development of Ørestad and Lynetteholm. In short, land value capture is the idea to sell off land which is developed to become new urban areas. The profit from the sales is then to be used in larger infrastructure projects that subsequently increase the value of the developed area.⁶

In the project of Lynetteholm, land value capture is used to delineate the housing plots (which do not exist at this point), to finance the perimeter of the island, which will function as a storm surge barrier protecting Copenhagen from flooding. Another contribution to the financing will be the deposit of soil from building projects in Copenhagen, which is now located in Nordhavn. Land value capture has been criticized since there is a point of risk - if By & Havn does not succeed in gaining the estimated profit on the plots, they will not be able to pay the debt. It is also very questionable whether this model is able to do anything about the rising price of housing in the city. Optimists argue that an increase in the number of housing will lower the price of housing units, however there is no specific evidence of that.⁷ This model of Land Value Capture is basically market-driven. The market-driven Copenhagen today is not capable of providing affordable housing. In relation to this, the housing project of Lynetteholm seems much more profit oriented.



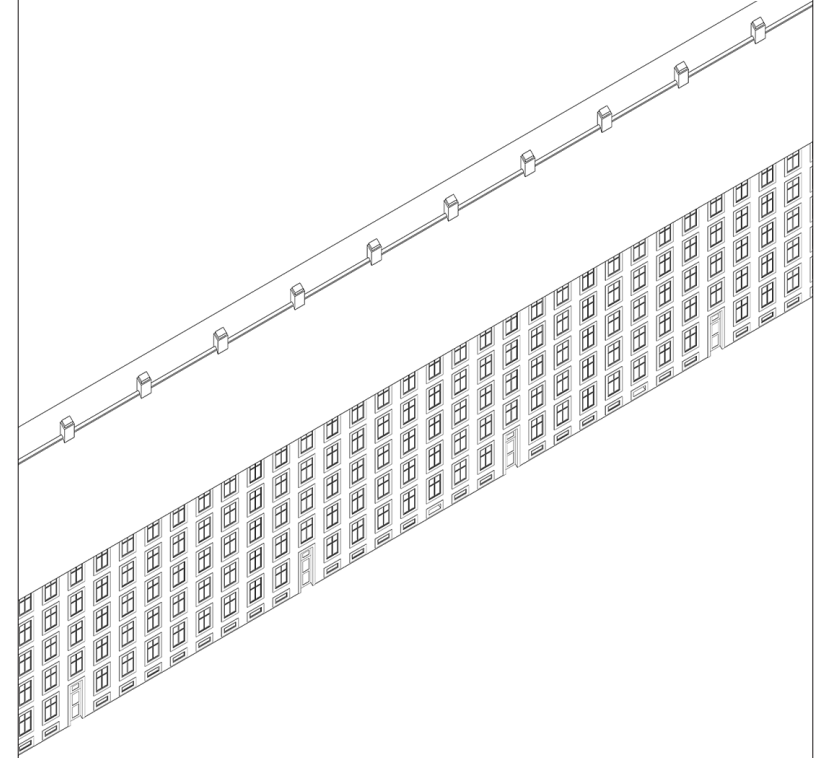
The conditions behind two repetitive housing blocks

The two housing blocks, Hornbækhus and Vestersøhus, from 1923 and 1939, are two different examples of early groundbreaking housing projects in Copenhagen. Both are designed by Kay Fisker, but Vestersøhus in collaboration with C.F. Møller.

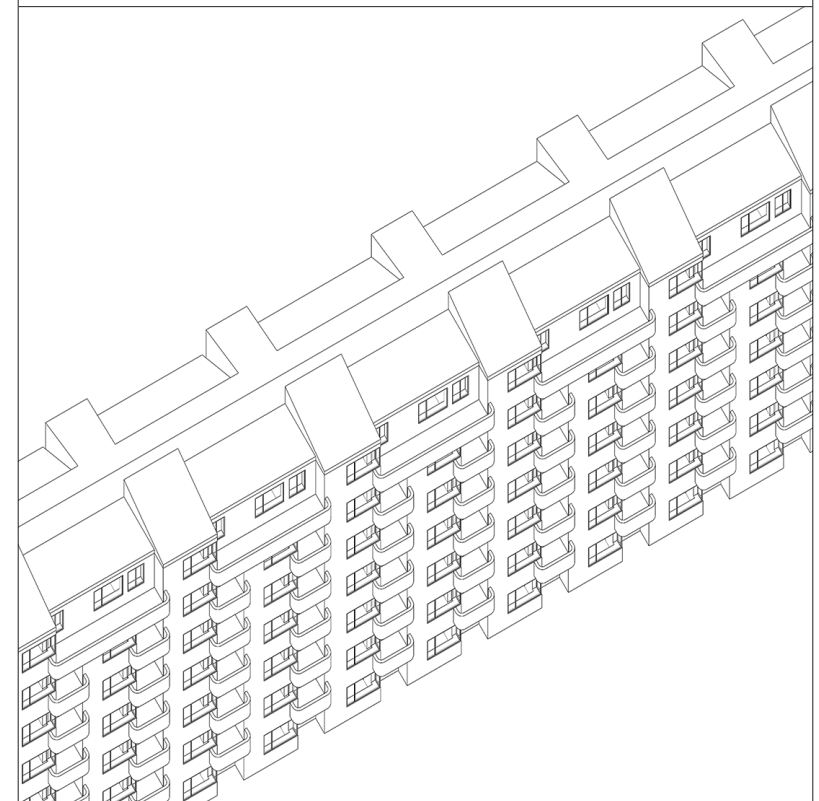
The almost 200 meter long housing block, Hornbækhus, was an early social housing subsidized by the municipality. The municipal support for the social housing was dependent on a certain standard for the apartment plans. Sanitation was a priority with toilets in every apartment, which was not that usual at the time. Staircases inside the building block left the courtyard open with a big green garden. Hornbækhus was the first of its kind to include a courtyard designed by a landscape architect.⁸ At the time, courtyards were usually filled with small back houses. The block contained four different plantypes for apartments, with several shops in the ground floor. The strict rythm in the facade does not reveal any change in programme. In 1964, Hornbækhus switched from being a social housing-block to being owned by a cooperative housing association.

The 500 m long housing block Vestersøhus, facing the lakes in Copenhagen, contains even more variation in the apartments, since their sizes vary from two to six rooms. The apartments are privately owned. The apartments were built with a pushed-in balcony next to a pushed-out bay window. Stripped of any ornamentation, the balcony and bay-window system, became the characteristic feature of the facade, defining the rhythm and articulation of the building block. The spacious stair cores, individual balconies and integrated garbage shaft, enabled the building not to include secondary kitchen stairs.⁹

Hornbækhus, 289 apartments



Vestersøhus, 436 apartments



Hornbækhus



Vestersøhus



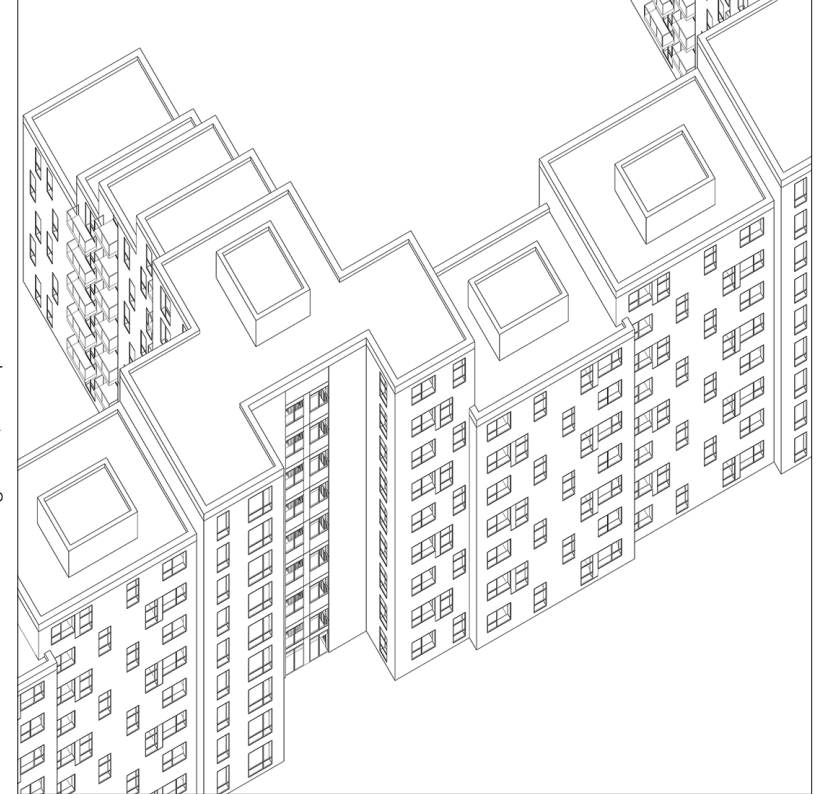
The conditions behind two recent housing blocks

The two selected housing blocks in the recently developed part of Sydhavn do not have much in common. Both the size, the financing and the close surroundings are very different.

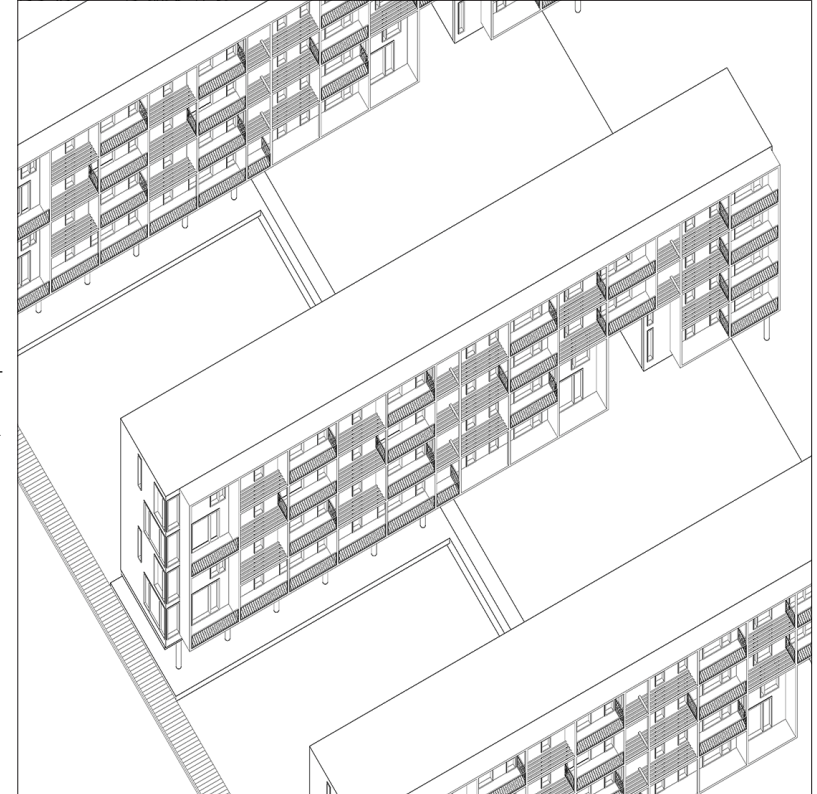
During the construction of Karnaphuset, Tegllhuset, Jernhuset, Stålhuset & Belvederehuset, as the five housing blocks on Vasbygade (by Arkitema) are called, a banner was hanging from the concrete slabs: "Denmark's longest building block is being built here". This statement was exposed to a large audience, since Vasbygade is one of the busiest in Denmark. The noise from the street has been considered, and two layer of windows are installed, to both be able to ventilate and reduce the level of noise. The block was developed by the pension fund Velliv. This extensive development project is an example of profit-driven private rental housing. All 609 apartments are for private rent.

The 2008 housing, Sømærk, by Vandkunsten, has a different ownership model. It is developed collaboratively by KAB and Finansgruppen A/S. It consists of 50 % private apartments and 50 % social housing. Completed in 2008 when the Danish economy was at a low point, the development was affected by the financial crisis, which resulted in some of the planned privately owned flats ending up as private rental units. These specific apartments are owned by the company Heimstaden A/S., facilitating the renting, The relation to the water was an important part of the housing. The small water-gardens in-between the blocks have public access, and are suggesting a more active way of living near water.¹⁰

Tegllhuset, 609 apartments



Sømærk, 120 apartments



Jernhuset



Sømærk



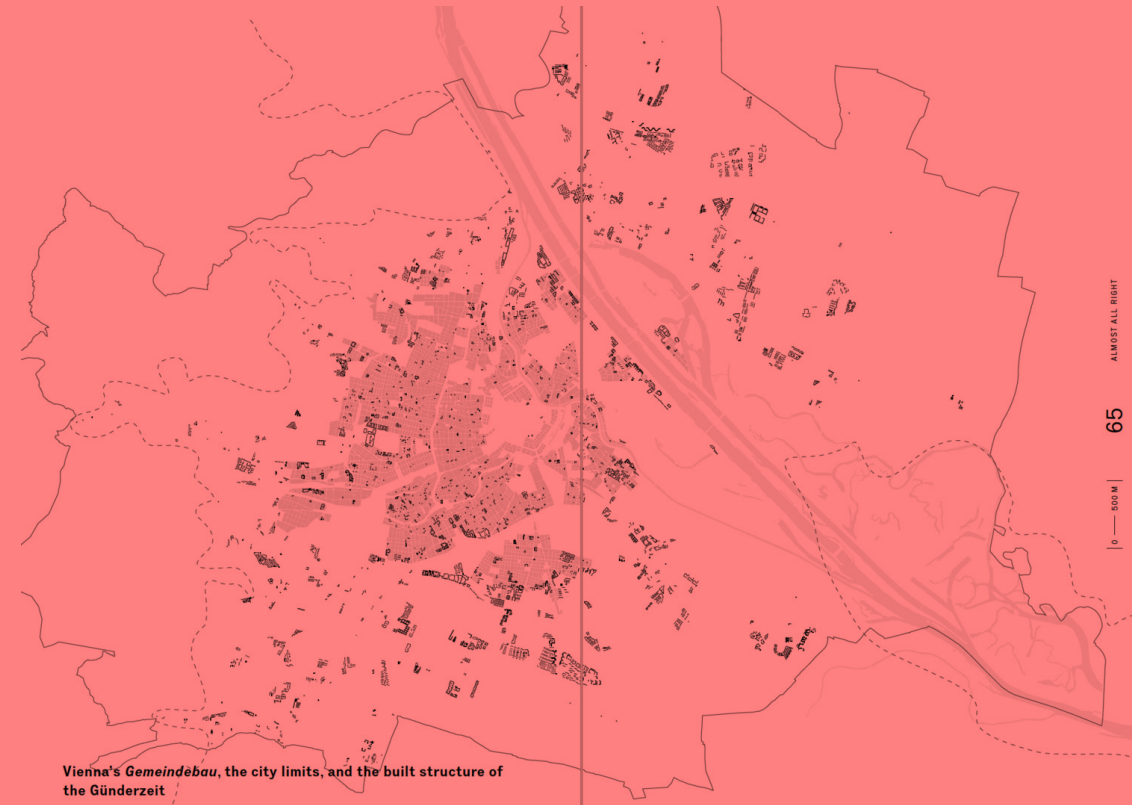
2. Red Vienna

Considering Vienna

In relation to the debate on the rapid rise of housing prices in larger European cities, Vienna has been a widely used example of a different approach than the mere developer-driven city. The Red Vienna project dates back to the early 1920's but has made an impression that is still visible in the housing financing model of Vienna today.

After the first world war, as in Copenhagen, Vienna was facing a shortage of housing. The city responded with a massive building programme and during ten years built 64.000 flats in the city, funded through taxation on private property. Today 40 % of the housing in Vienna are what is called social housing. The social housing are not only for people in a specific income group. This large social housing sector has had a lasting influence even on the private housing market, since the social housing is able to compete with private housing.¹¹

Vienna seems to offer a housing finance model which is resilient to the interest-driven developer model, that is causing a rapid rise in housing prices all over Europe. In 2021 the business oriented American news media, Bloomberg, even published a short documentary on the success of Red Vienna.¹²



SCIBE Vienna Research Collective, Public and Social Housing Map (unfinished), Vienna, 2012

Karl Marx-Hof

Karl Marx-Hof is the best known building project from the Red Vienna period (1918 to 1934). The more than one kilometer long building block contains around 1300 apartments, surrounding green open courtyards. Even though the name of the block and its fortress-like appearance are politically loaded, the architect, Karl Ehn, was not a politically active figure. The city government behind the project was primarily "Austro-Marxist", and that has of course influenced the name and also the programme of the building.

The building is an example of a 'Superblock', an invention from the Red Vienna period. The block performs as a 'city within the city' with its size and variations in programme inside the block. Apart from housing, the block also contains many public facilities such as a library, a kindergarten, restaurants etc., and of course courtyards.

According to Pier Vittorio Aurelli, in *The Possibility of an Absolute Architecture*: "The result was the autonomy of the superblocks from the planning standarts of the city, which led to an archipelago of places for communitarian life. The formal and typological theme of the courtyard was decisive in reinforcing the identity of this communitarian life." ¹³



Red Vienna Today

Vienna's early response to provide affordable housing has made an impact which is still present in the way the city facilitates housing today. The idea of social housing does not belong to Vienna alone, but it is the amount of social housing in this city, and the (pro)active role of the municipality that makes the case of Vienna significant. The city seems to have a model of resilience towards a problem present in many western cities.

In the article from 2012 in *Architecture Design*, Almost All Right, Andreas Rumpfhuber, Michael Klein and Georg Kolmayr reflect on the current Viennese housing situation. Even though the model is highly appreciated for being proactive and for dealing with the rapidly growing housing prices, they find points of criticism in the distribution of municipality-owned and subsidized housing in Vienna.

In the very end of the article, they point out three main reasons why the Viennese housing model has become resilient to the market - affordability, communality and solidarity. On one hand, the authors describe the success of the model's resiliency while being able to produce high quality housing, while on the other hand, there are also some critical points in the article. The model does not fit well with people in precarious work conditions and neither does it include people with migration background, since one has to live in Austria for two years before being accepted for the waiting lists.¹⁴

To the outside world, Vienna appears like an isolated island with a population that is fortunate enough to benefit from a welfare state that remains intact. Social housing is evenly distributed in the city's landscape, levelling out inequalities not only in a social, but also in a spatial sense, resulting in very little socio-spatial segregation and only modest changes in rent between one district of the city and another. There is enough affordable accommodation for a large portion of the population; the municipality actually owns 27 per cent of the city's housing stock, and indirectly controls and influences another 21 percent, which is owned by limited-profit housing developers, resulting in a so-called 'integrated market'. This means that social housing is not considered to be a supplementary, discrete market for a specific user group, such as 'the poor', but rather that social housing in Vienna competes with the free market for the same share of potential clients.¹⁵

Andreas Rumpfhuber, Michael Klein and Georg Kolmayr

3. A housing association and a housing proposal

A proposition for housing and an association

The project proposes site specific housing on Enghavevej 76. Learning from the past two chapters, the housing aims to offer a positioned difference to the ongoing development of housing in Copenhagen. I have found that the approach to do this should happen through a proposition for a housing association which focuses on inclusivity, diversity and community, rather than profit. The development of housing should not be a money machine. The declared values of the housing association provides the opportunity to skip the role of the profit-led developer.

Inspiration is found in social housing development, which does not aim raise profit. At the same time, the association of Urbania is taken into consideration since it aims for something similar to what I am proposing. The values of the proposed association should be declared, and together with the situated potentials of Enghavevej 76, a proposition for a built housing will be proposed.

The manner in which the declared values of the association inform the design of the housing, will be tested primarily through thinking through drawing at two scales. 1:200 will offer an idea of the general flow and programming of the housing, while designing at a close-up scale will offer a closer look at specific situations and conflicts in living together in community.

Learning from Vienna

The momentum of the social housing sector in Vienna has reached Copenhagen. Vienna has been referred to during the 2021 municipality-election in Denmark where (in)affordable housing was a much discussed topic. To learn from the current state of housing in Vienna suggests not only to increase the amount of non-profit-driven housing, but also to regard the architectural potential for a more inclusive and common social housing sector. It is not merely the scale of the social housing sector which makes it resilient to the market-driven city, but also an inclusive spatial arrangement, that prioritizes the quality in the architectural commons. To consider thinking about housing in Copenhagen with an impact from the Viennese model, would mean to aim for the three strengths which are pointed out in the article 'Almost Allright' - affordability, communality and solidarity.

Of course Vienna is unlike Copenhagen in many ways. In the 1990's the Viennese municipality refused to sign an EU-agreement, which would have forced them to sell off land in the municipality for private development. Unlike Vienna, the municipality of Copenhagen owns almost none of its own land for housing development. This means that the Viennese model cannot be directly applied in Copenhagen, and therefore the financing of housing in Copenhagen should be considered differently.

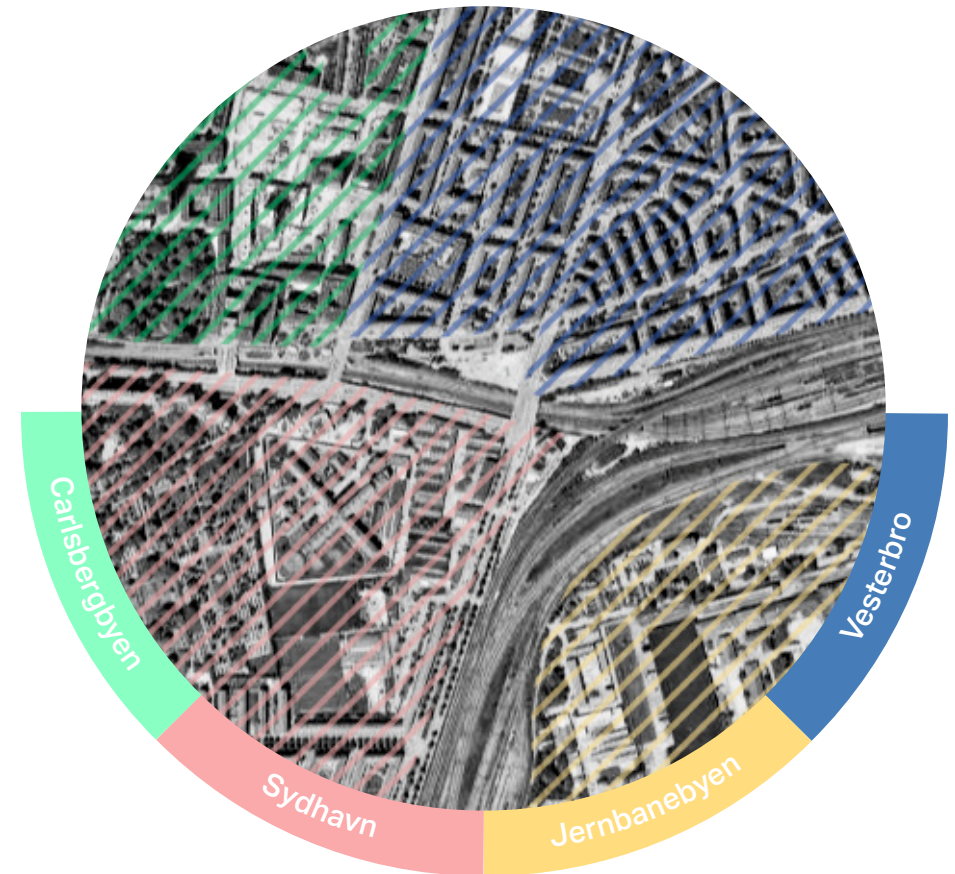
Situated potentials

Situated in-between the ongoing construction of Carlsbergbyen and the soon-to-be developed area of Jernbanebyen, the plot at Enghavevej stands in relation to two of the larger urban development areas in Copenhagen. At the same time the plot is also located in between two older city-parts, Vesterbro and Sydhavn, which primarily consist of the building blocks that generally make up most of Copenhagen. The site offers a relation both to the contemporary development of Copenhagen aswell as the more grounded urban areas.

Another important relation for the plot is the railway. The plot used to house the former Enghave Station which has later been relocated and renamed to Carlsberg Station, only 300 meters away.

Along the northern perimeter of the plot runs a green strip, continuing from Sønder Boulevard. The narrow park-like strip has a communal quality that builds up a potential coexistence with the proposed development of the plot.

A potential collaborator, or at least someone to introduce the project to, KAB (Københavns Almennyttige Boligselskab), have recently moved into a new building obliquely opposite of Enghavevej. This relation offers potentials of engaging a major stakeholder in the Copenhagen building development.



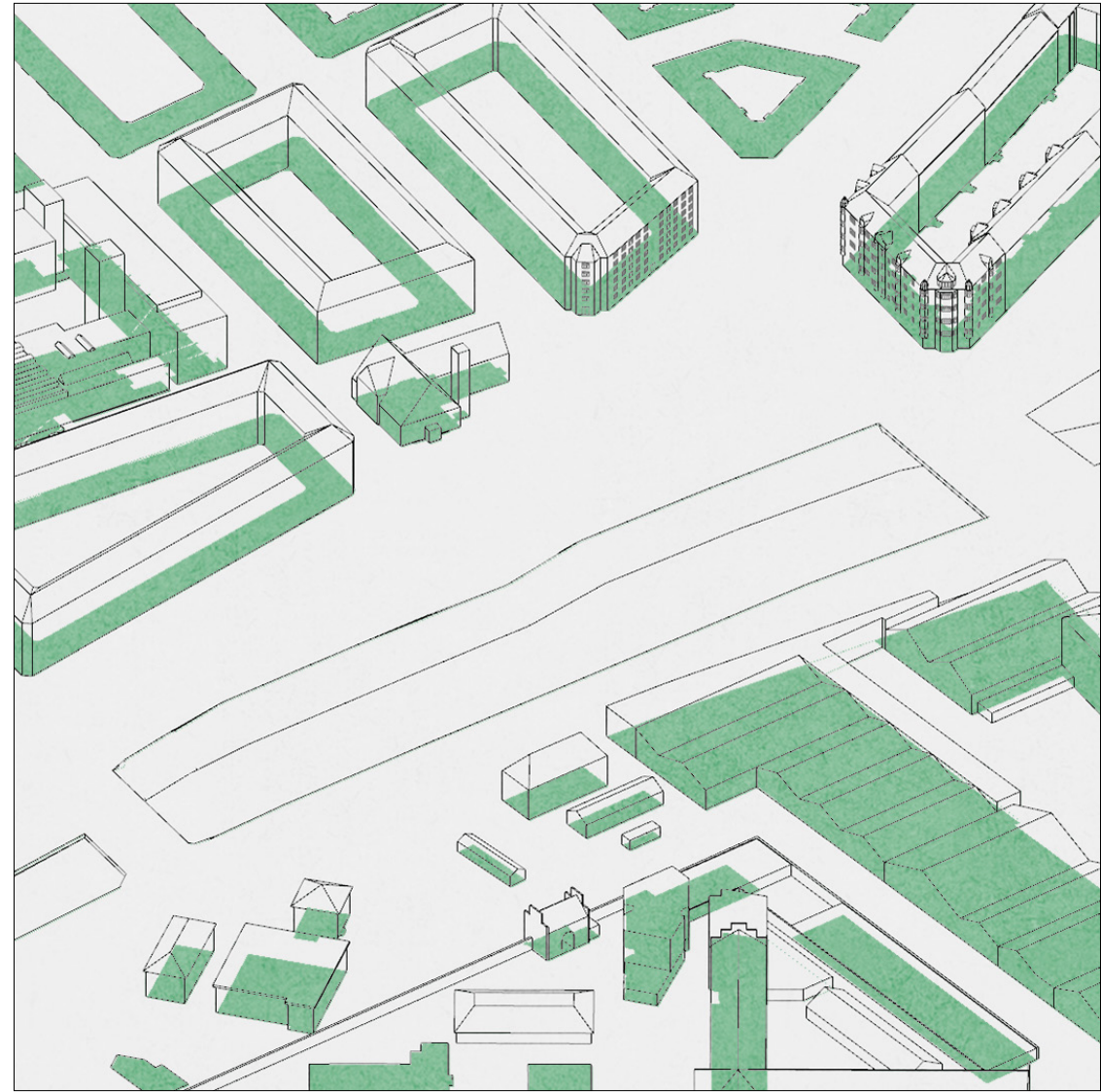


Close relations

The plot at Enghavevej 76 already suggests a continuation of the surrounding repetitive building blocks on Sønder Boulevard and Enghavevej. The continuing park facilities from Sønder Boulevard makes a continuation of this block typology an obvious approach. If the housing is to act performatively in the neighborhood, and in relation to the rest of Copenhagen, the obvious solution of extending the city block structure should be reconsidered.

In order to be performative, the housing will not act as a corner-puzzle to complete the densification of the neighborhood, but rather as an intervention. The closed block as a typology should not be disregarded, but challenged instead. Different formations should be tested on the plot, both in its relation to the neighboring building but also towards the buildings own performativity.

The long park-strip from Sønder Boulevard, aswell as the dug-down-railway surrounding the plot, should be considered in the arrangement of the building. The long, parallel bodies of the park and the railway, offers directions and limits to the plot. The plot can be read as a point of intersecting infrastructure.





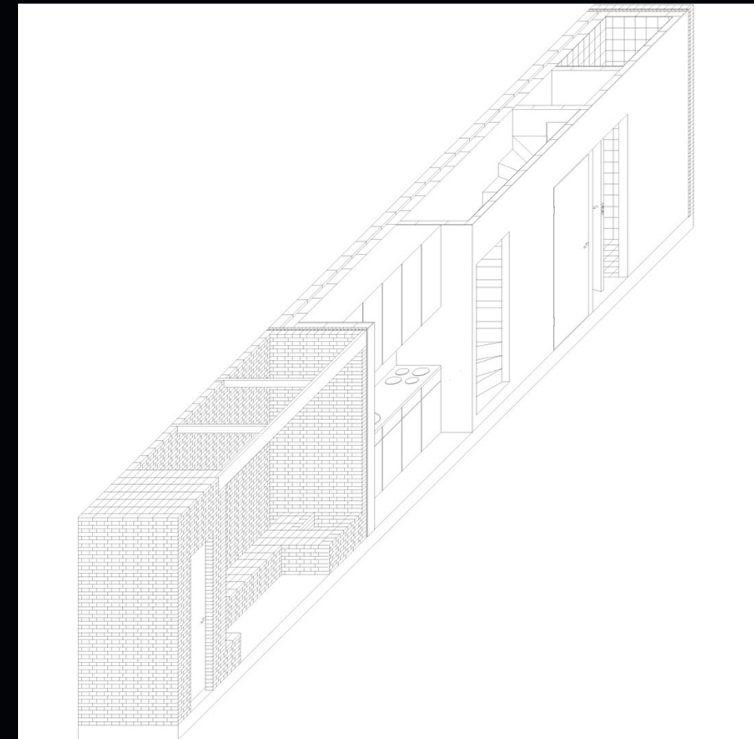
Google street view

Building cores

To consider the building element of the core offers an essential approach to consider the circulation of the housing programme as well as spatial latent potentials. As in Dogma's 2012 housing project **Frame(s)**, the core can offer both circulation, technical installations and, perhaps most importantly, a framework for the building programme.

This idea of a repetitive core can easily be related to the vertical staircase cores of the typical Copenhagen housing block. The repetitive staircase core is both seen in the Hornbækhus and Vestersøhus. In Vestersøhus, even though the rhythm of the core is determined, the housing offers a great variety of apartment plans, from one- to seven room apartments. This suggests that it is not only the formation of the building cores that should be tested, but also their spatial performativity.

What potentials does it offer apart from circulation, installations, division and structure? The idea is to challenge established notions or limits of building cores, and to test what 'differences', in terms of conditions, they can provide. The *Frame(s)*-project presents an example on a horizontal core which fits the low rise typology housing. The vertical cores are commonly used to connect layers of floor plans in taller building blocks. This notion of framing and connecting through cores offers a way of thinking and working with these elements. The core as circulation also provides an idea of potentials of the common parts of the building programme. Usually no one really takes ownership of the core. The core is something that is owned in common.



Reference: *Frame(s)* - dogma.name

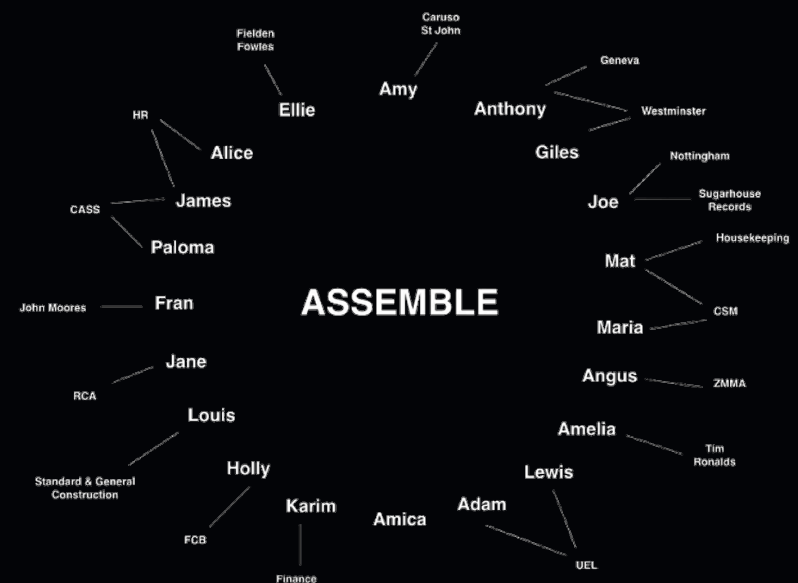
4. Structure of work

Collaborations

Even though I will be developing the thesis project individually, an aspect of collaboration is to be regarded. With the ongoing research the plan is to reach out for possible consultants, who might become 'friends of the project', and maybe even collaborators in some cases. The idea for sparring has potential not only at the informative level, but also at the propositional-research-level. This idea of testing ideas, both diagrams as well as spatial ideas, can possibly lead a way in for a stronger and richer collaboration. The idea is not only to interview, but rather to bring something to the table.

The possible involvements could be categorized with different relations to the project. The differentiation between a critical and an analytical approach are two examples that mark a variation in relations. While I am aiming to programme the project individually, collaborations may provide an opportunity for the project to take unexpected turns and create friction between ideas derived through research and the opinions of others.

These considerations on collaborations are inspired by the approach practiced by the London-based studio Assemble. In a 2016 presentation, Joe Halligan from Assemble gave a presentation on their work structure. Comparing their structural approach to the New York Hip Hop-collective, Wu-Tang Clan. As Wu-Tang Clan, Assemble's collective approach enables every employee to work cross-disciplinarily, while engaging with self-chosen project work at the studio.¹⁶



Non-situated objects

The potential of modelwork is regarded as part of the co-evolutionary research. To kick-off spatial studies from an early stage, conceptual models offer a possibility to consider specific elements of the project early on, without having to commit fully to the object, but rather to some derived reflections regarding to the object. The non-situated object offers an ambiguity in scale and relations, which can offer specific spatial considerations, before the other tracks have "fallen into place". They are considered tools, but they also have the potential to formulate ideas or provoke dialogues which can be effective in a collaborative relation.

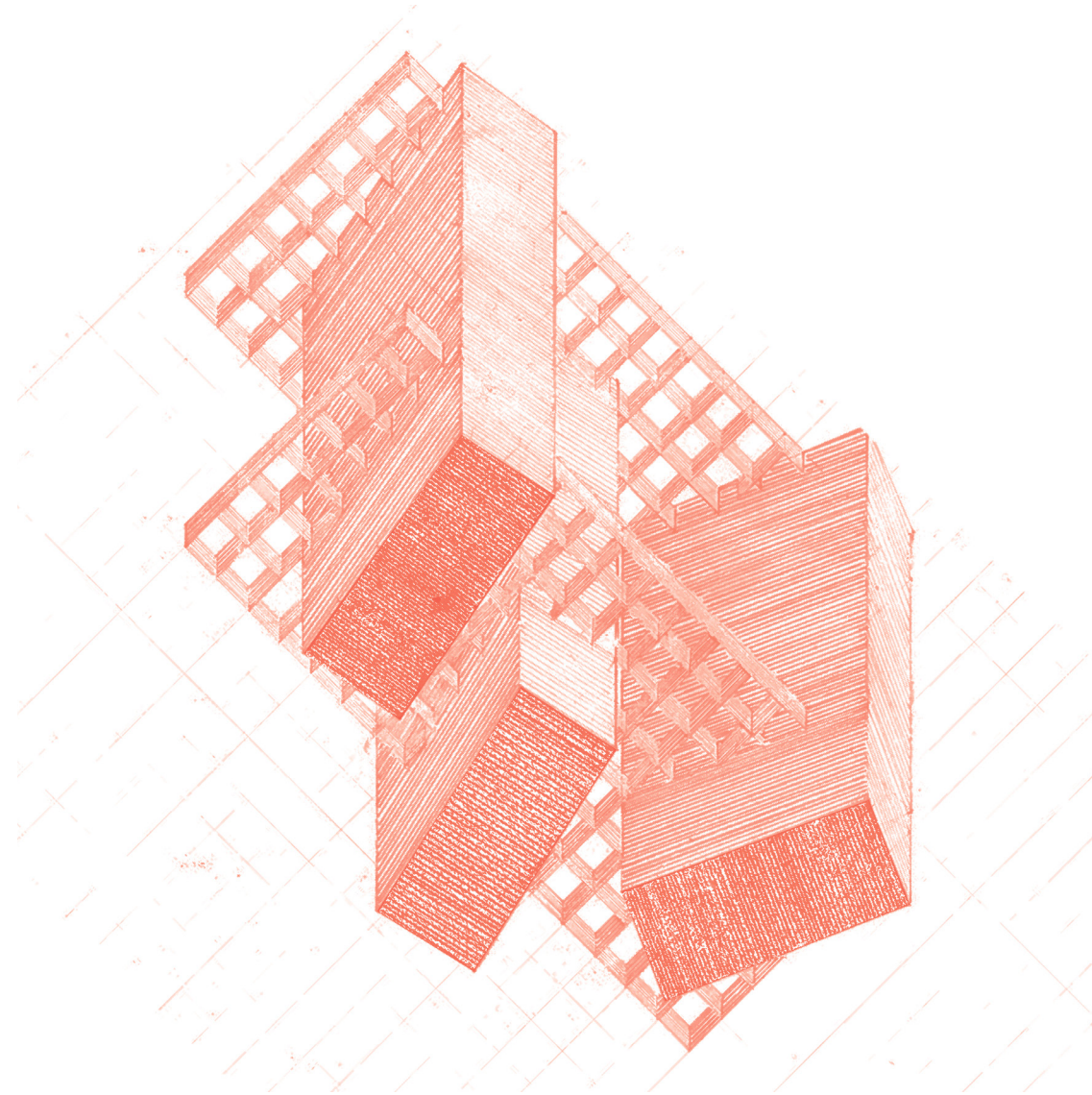


Image: Concept for a series of models and drawings

Deadlines

While the intentions on the co-evolutionary approach aims to keep the many strands of research open and interrelated, the deadlines (crits) can offer a framework to guide the project towards a more conclusive direction at certain points throughout the timeframe.

The first crit, which is only some weeks after this programme is handed in, provides an opportunity to receive feedback on some early tests and reflections on the project. The intention is to have models ready, and have initiated the collaboration and site specific work.

At the stage of second crit the project should have an ongoing but clear direction on the propositional research, with a relation to the other strands. Even though the direction will be set at this point, the project should still be able to change on specific points.

The third crit is quite late in the process and offers an opportunity to test the project and perhaps to look for 'weak spots' that needs to be worked on.

Hand-In

Disclaimer: *The following list of hand ins is only indicative, and there will be potential changes to the material.*

Written piece:

A text (5-20 pages) will expand on parts of the project which is suitable in a written format, rather than drawn or modelled. The format of the legal document 'Articles of Association', can provide an idea of the formal arrangement of the housing association. A less formal, but more expanded text on the 'Core Values' of the association is also to be regarded.

Non-situated objects and drawings:

Early experiments which test potentials for core elements and their arrangement with reflections on relations between drawing and object.

Site-specific propositional drawings and models:

Plan drawings and sections will work both as an important part of the process as well as representing the project in the end.

A series of 1:200 plan drawing will show the programming and circulation of the housing block and courtyard, while perspective views and axonometric drawings will provide and understanding of the inhabited life. A larger axonometric drawing will show the housing block in relation to its surroundings and also give an idea of use and inhabitation.

Simple section models in 1:50 will provide possibilities for testing thresholds between public, semi-public and private parts of the block.

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⁸ Knud Millech, *Danske arkitekturstrømninger 1850-1950*, (København, Østifternes Kreditforening, 1951) 299

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¹⁰ "Teglvaerkshavnen Housing", EU Mies Award, <https://eumiesaward.com/work/1440>

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¹² "Vienna's Radical Idea? Affordable Housing For All", Bloomberg, published on September 17, 2021, YouTube, https://www.youtube.com/watch?v=41VJudBdYXY&t=607s&ab_channel=BloombergQuicktake%3AOriginals

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