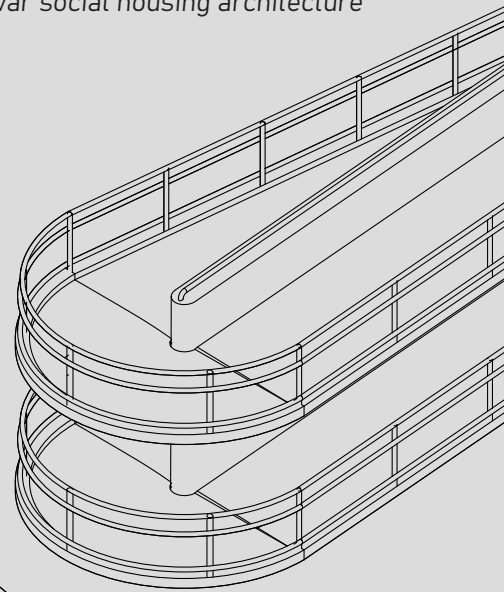
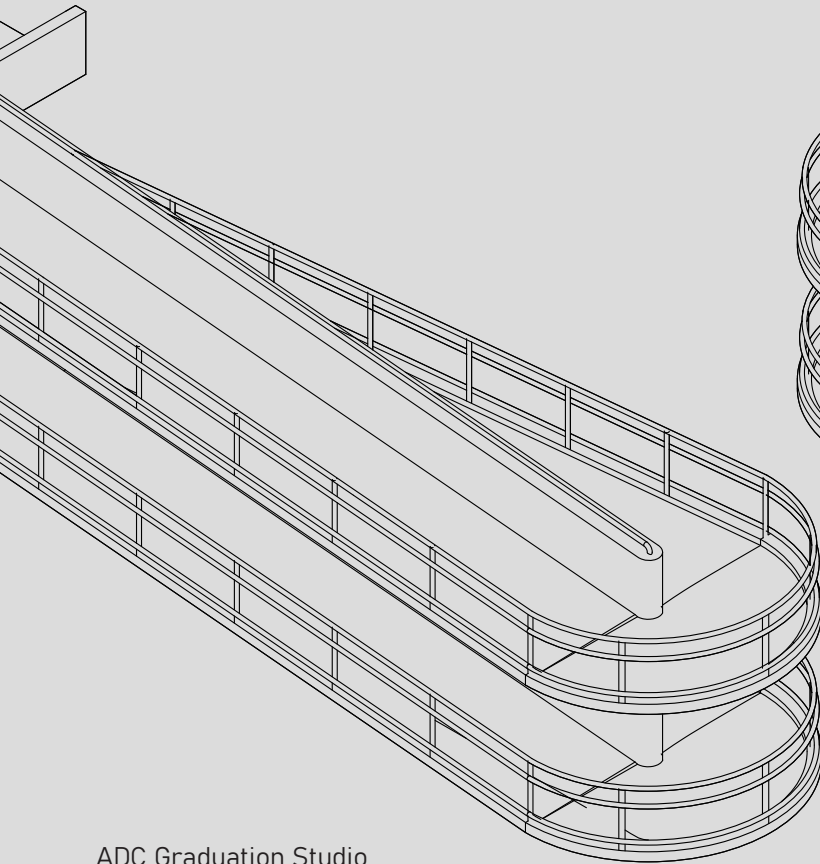




Social Quandaries

understanding the quirks and features of London's post-war social housing architecture

Research | Heterogenous City



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8

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Architectural Design Crossovers

Social Quandaries

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Fascination

To an outsider London is often seen as a city full of vibrancy and friendliness. One might think of desired areas like Chelsea, Notting Hill or Belgravia. Characterised by their high density and abundance of green space. They are all pedestrian friendly with shops, pubs and entertainment within walking distance. Places as in Richard Curtis movies, like Notting Hill or Love actually. While visiting London myself over the past couple of years I got a very different impression. The inner city did not seem to be inhabited by Londoners that I came to know through the movies I watched as a child, instead there seemed to be an overwhelming amount of wealthy people from foreign countries who drove supercars and lived in London for only a couple of months in the year. London only became affordable when entering more suburban areas. In these areas one main housing type is that of the Council Estate which were almost all in noticeably worse conditions than that of the privately owned properties.

Introduction

Five million council homes in Britain housed almost one third of the population of the United Kingdom, in the year 1980¹. In 2010 the percentage of people housed in council housing in the UK decreased to 17% and the management of the majority of the council houses was converted to housing corporations. In the years after the 1980's Council estate housing projects have been used as examples of failure of government. With the passing of time many of London's post war council housing estates have fallen into disrepair, lack of maintenance, overcrowding and lack of outdoor space. This is why local authorities want to do away with the old blocks, to build new modern homes. These new homes are often re-evaluated for a higher rent making it impossible for old residents to return. On the other hand, there has been re-appreciation for certain council estates that have bold social ideals and aesthetics. This in its turn hurts the Londoners for whom the Council housing estate was intended.

With this research my primary objective is to derive valuable insights from the existing council housing estates, with a specific focus on identifying redevelopment strategies that are inherently inclusive, sustainable, and capable of enhancing the living standards of their residents. Thereby addressing the dire need for better council housing in the city of London and attempting to slowly restore balance to a disjointed housing market. "the balance we approve of in architecture, and which we anoint with the word 'beautiful', alludes to a state that, on a psychological level, we can describe as mental health or happiness."² this balance I think is not only found directly in the architecture but also in a balance in its residents. As London is a Heterogeneous city its buildings should facilitate as such, its buildings and infrastructure should be designed to accommodate this diver-

¹ Boughton, J. A History of Council Housing in 100 Estates. UK. RIBA Publishing, 2022

² De Botton, A. The architecture of happiness. Vintage, 2008.

sity. By doing so, we can foster an environment that promotes mental well-being and overall happiness among its inhabitants.

Framework

In order to understand the London council housing estates a literary research into the architecture, urban planning and social wellbeing of council estates is done. To do this the council estates will be analysed as an urban artifact. To further understand the history of the council estates I will contextualise the council estate within the Welfare state after which a research into social design typologies will be done.

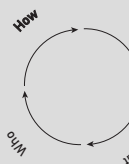
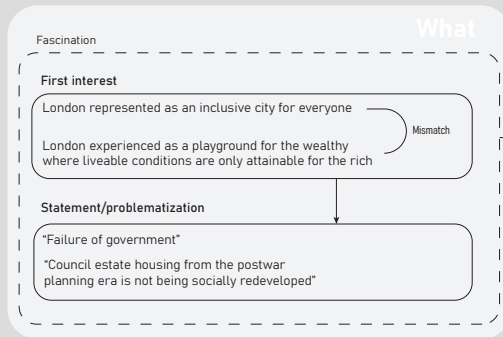
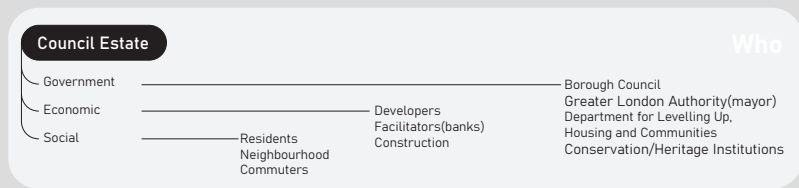
To better understand the Council estate as an Urban Artifact (Rossi 1966) there will be research into; its location, its imprint on the ground, its topographical limits and its physical presence. In Rossi's understanding of the Urban Artifact each estate relates not only to the objective fact of their material form but reveals real-estate and economics on the one hand and historical, social and cultural influences, including class structure, on the other.

In the book 'Paris Haussmann: A model's relevance', a detailed plan analysis of Haussmann's masterplan for Paris is done in a clear and simplified drawing style. It focuses on the architecture of the Haussmann building block and does this by going through all the scales of design, from typological plans to the ornamentation of the window frames. In this way the architecture is understood through all the scales. The way the book analyses these housing blocks makes sense in the case of Paris since almost all of the buildings are of a similar age and building style. In the case of London and the understanding of the architecture of social housing within it also seems logical to limit the scope of analysis to a certain time. Making drawings of a similar style to that of the Paris Haussmann: A Model's relevance book creates an understanding of the various scales of 1960's Council housing in London.

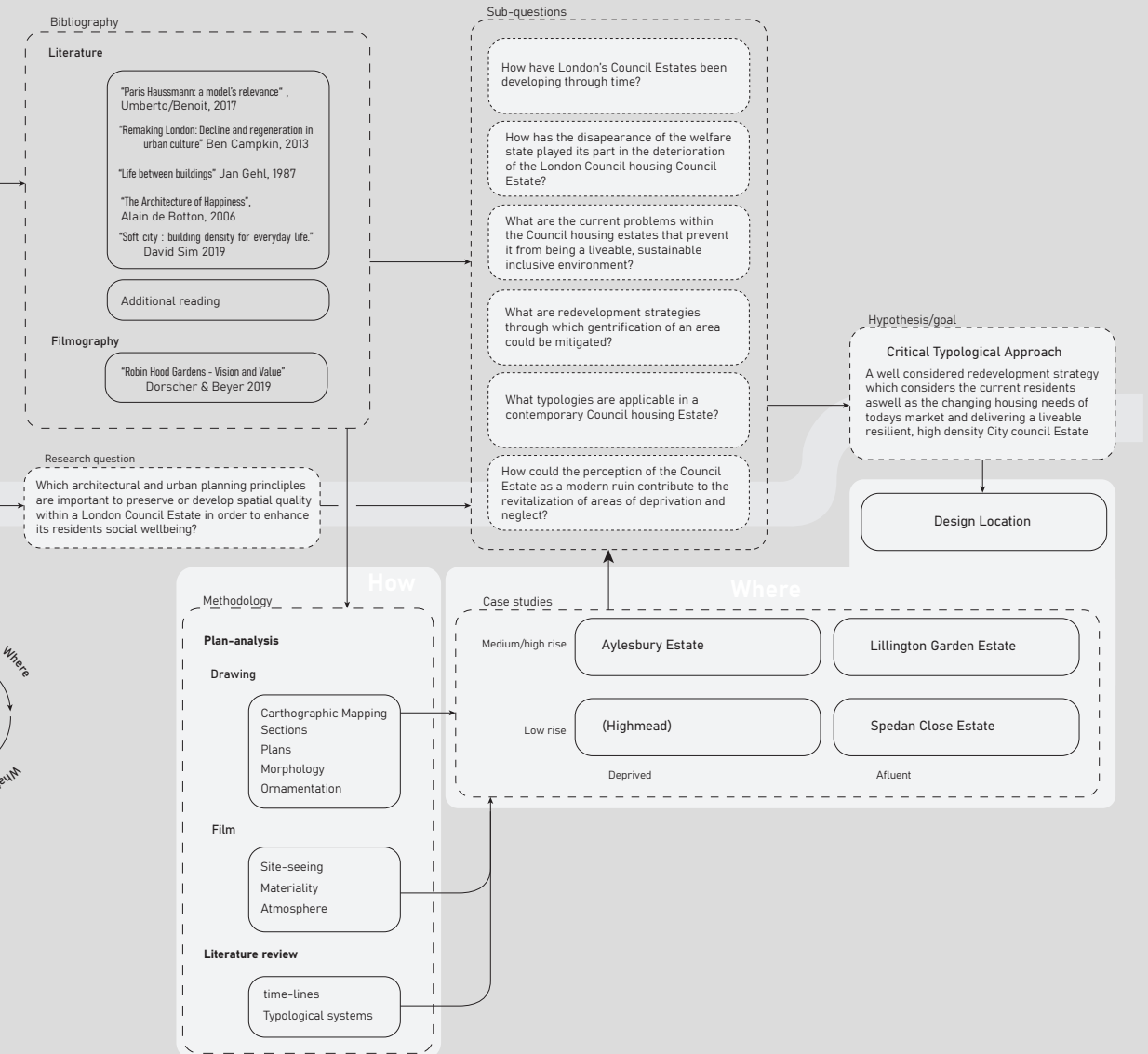
By looking at the early council estates historical context surrounding early council estates and their role within the welfare state, this research aims to shed light on the impact of the decline of the welfare state on these housing developments. Drawing on the insights presented in Ben Campkin's book "Remaking London," the study will explore the shifting political perspectives over time and the resultant policy changes that have contributed to the decline of council housing estates. Furthermore Campkin describes the current conditions in which the estates are being managed. Understanding these layers will give insight into the qualities and negative elements of today's council estate's. To judge whether certain architectural and spatial qualities influence the social well-being of residents there will be an examination of the role of social design within the council estate.

Jan Gehl analyses urban space through his notion of the human dimension, the five human senses experienced at walking speed and not at the speed of a car in the book 'Life between buildings'. This human

dimension will be used to further understand and measure how the spaces perform. To do this the public space in between the buildings will be analysed to see how much space is available for social interaction. Important to note is that Jan Gehl only researches the public realm, an argument can be made that the public realm is not the only element that influences social-well-being, that the architecture of the building inside and out both have an impact on social-well-being as well. To understand the building and its architectural qualities, the analytical framework proposed by Alain de Botton in his work "Architecture of Happiness" is used. Specifically, Chapter 5, which delves into the virtues of architecture, serves as a valuable reference for exploring the inherent qualities of a building. In this chapter De Botton, analyses ethics with architecture. He, just like philosophers, tries to find



the virtues in people; generosity, modesty, honesty and gentleness, but De Botton searches for these virtues in architectural buildings. Following ethics, architecture has the same principles, for instance that a single virtue does not constitute a 'good' person or building. The virtues are; order, balance, elegance and coherence. Each virtue build up of multiple principles that constitute 'goodness'. To learn and propose a critical typological approach towards social housing we can compare the notes we have made to a more global view on the subject given in the form of nine criteria set up by David Sim in 'Soft City'. These criteria are not proposals for a new typology but they try to stimulate relationships between buildings and their surroundings and improve connections between people and the resources of the city.



History

"We are working for an active democracy, in which men and women as responsible citizens consciously assist in shaping the surroundings in which they live, and take part in deciding how the community's wealth is to be shared among all its members."

1964 Labour Party Election Manifesto, "The New Britain"

In order to make judgements on the qualities and inferiorities of post-war social housing in their current situation there will be an analysis on the architecture of three different council estates. Before the focus on architectural features the estates and social housing in general will be placed in their particular context in a brief exploration of the political, economical and material discourse in the second half of the twentieth century and beginning of the twenty-first century. Each of the estates were built during the height of the welfare state.

Secondly there will be an exploration of each specific estate, their production, architecture, location and historical context. To assist the textual descriptions and explanations there will be drawings which were drawn using original design drawings as reference which can be seen in the second chapter of the book.

Third, an exploration on how the estates would be perceived by standards of quality given by sources like Alain de Botton and David Sim. Alain de Botton uses the term 'virtues of buildings' to ascribe certain architectural qualities to buildings. The virtues order, balance, elegance and coherence will be explained and shortly described how they are represented in the three case study estates. The same will be done with the qualitative research done by David Sim in his work *Soft City*. Here David Sim proposes 9 criteria for a better and more social way of building.

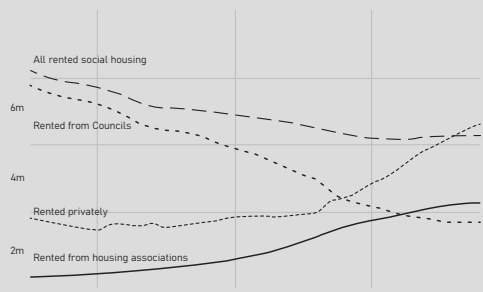
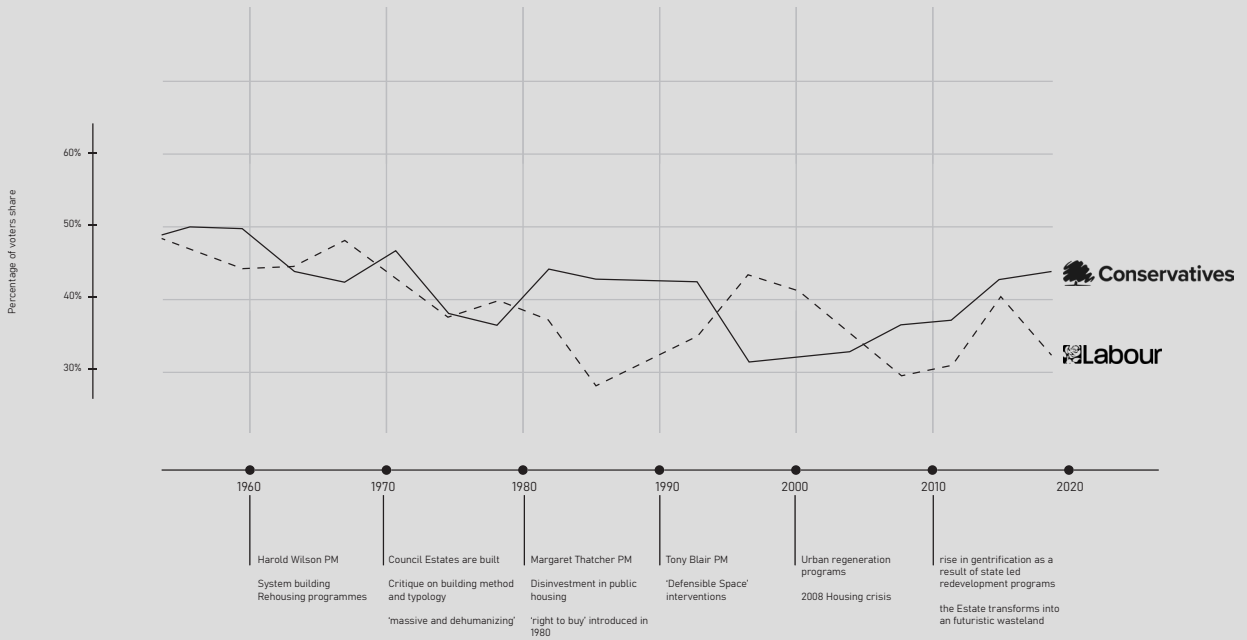
Great ambitions

In London's post-war years it rapidly developed social housing estates, due to the shortage in housing and population growth. In the 1960's Harold Wilson's government addressed the housing crisis with a large number of policies including the production of social housing. The policies targeted low-income families, but also ordinary working people. The government created financial incentives for local authorities to build new housing and create housing corporations. In order to maintain affordability and increase the building rate the government promoted and stimulated the use of system-building, a process where large sections of the building were manufactured off site and later assembled on site. The system-building was also a

¹ Boughton, J., 2022. *A History of Council Housing in 100 Estates*. Routledge.

necessity because of the decreased need of manual labour in a time of shortage of tradesmen in construction. This also further developed the change where larger estates were conventionally built as uniform low-rise family homes. But from the 60's onward larger estates were often mixed in housing type and form. In the end this resulted in the building of an average of 126,00 council homes per year between 1945 and 1979¹. Building in this dramatically fast way did have multiple drawbacks. Especially in the system build estates construction defects were a common occurrence. These problems paired with poor maintenance helped foster an increasing distaste towards large social housing estates. Critics called the estates impersonal and 'inhuman in scale' and this helped a new political narrative which had a sceptical attitude towards the role of the state and preferred the free market system. From the 1980's onward Margeret Thatcher changed the political look on council housing, council housing became a problem, not a solution. She introduced the 'right to buy' in 1979 which allowed council housing tenants to buy and own their council house with a 33% to 50% discount off the market value. Councils were prevented from reinvesting these profits into new housing schemes and thus this led to a decline in council houses, especially desired council homes

Welfare state & Council housing Estates



were sold. Till this day council housing is still being sold off to private investors or new homeowners, this happens while the councils are building a minimal amount of council housing themselves. This is why the waiting list for Council housing has become very long, up to eighteen years.

At the end of the 90's the government of Tony Blair made an important political agenda point of the regeneration of council estates. In the campaign for the 1997 general election he stressed that the 1960's estates were in desperate need for urban regeneration. In city centres this regeneration of poorly built homes led to new desirable homes in desirable locations. The regeneration scheme in combination with the right to buy laws would be one of the reasons estates were subjected to gentrification caused by the onward sale of leases by original tenants to more affluent purchasers.

In 2018 the list for London estates that would be going through a regeneration scheme was 118 estates long. For a lot of these estates demolition is part of the planning, there is worry that in the rebuilding of these estates a large amount of social housing will be lost and in turn luxury housing is built resulting in a further loss for council housing¹.

¹ Greenwood, B. Z. (2018). *Dozens of London council estates earmarked for demolition*. BBC News.

Aylesbury Estate

Built in the late 1960's the Aylesbury Estate in the London Borough of Southwark has been one of the most notorious and largest estates in England. The design of the Estate was done by the then newly formed architects office of the borough of Southwark. The design was approved in 1966 and the construction started in 1967 and ended in 1977. Because the government required larger authorities to use a system building the whole of the Aylesbury Estate was built in this way. This meant that the Aylesbury was built using a Danish system called 12M Jespersen¹, pre-cast concrete reinforced concrete, assembled in-situ. The Estate holds around 2400 dwellings which are configured in straight long housing blocks. The reason for this configuration was chosen purely to accommodate the large construction vehicles that could transport the heavy precast concrete elements and the cranes that would place them. Although all the housing blocks were long straight blocks they did vary in height. The low rise blocks facing the east west direction were mainly around four or five levels in height, while the high-rise blocks in the North south direction were much higher, up to 14 stories. The plan consisted of housing that met the requirements for Parker Morris, his requirements for modern living which he had written down in "*Homes for Today and Tomorrow*"² in 1961, furthermore the plan housed various amenities and space for social interaction.

The architects of the Aylesbury were clearly inspired by the Athens Charter modernist housing schemes and its architects like Le Corbusier. The exposed concrete, repetitions of geometric forms and the elevation of the block on large concrete pillars. While the great examples of modernist architecture like Unite d'Habitation in Marseille have their decorative relief sculptures and pleasant roof gardens. The Aylesbury estate contractors took over the lead and with this the main objective was not quality and nice detailing but cost efficiency.

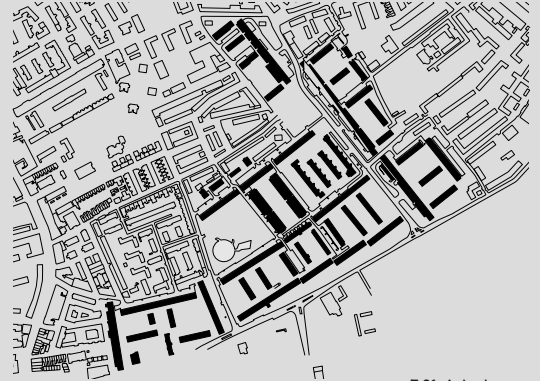
The architects of the Southwark borough bureau had also visited the Park Hill Estate in Sheffield, it is clear that certain design principles of the Park Hill are also found in the Aylesbury. The separation of pedestrians and the traffic is an example of a principle taken from the park hill Estate. At the Aylesbury Estate the pedestrians traversed outside on a large system of interconnected pedways which were connected to the ground level by stairways and ramps (S.01 & I.04). Where the low-rise blocks had just one layer of pedway on the 1st floor level the High-rise buildings also facilitated shops and services on a pedway on the 2nd level. The ground level of the housing blocks mainly facilitated the garages for the occupants and parking spaces for visiting cars. In between the buildings there was a variation of open greenspace as well as more parkings space.

¹ Promo video Jespersen 12M system: *Promo video by Liang construction*. (2016, January 25). [Video].

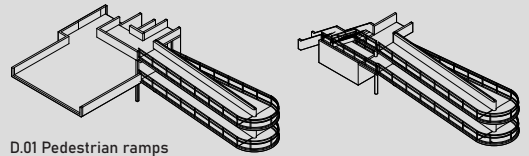
² Parker Morris Committee. "*Homes for today and tomorrow*." Ministry of Housing and Local Government (Ed.), HM Stationary Office, London (1961).



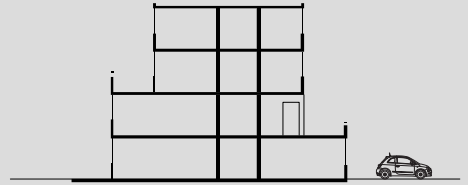
B.01. Southwark



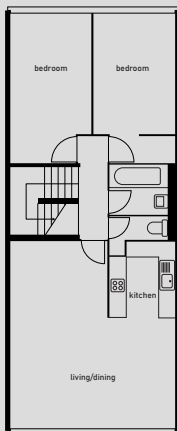
E.01. Aylesbury



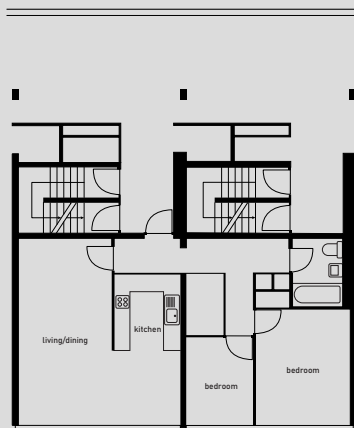
D.01 Pedestrian ramps



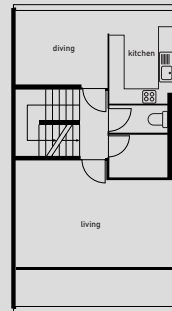
S.01. Danesfield



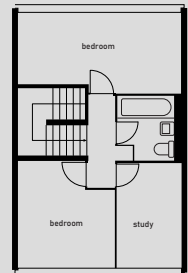
P.01. Plans Danesfield
floorplan 1



floorplan 2



floorplan 3



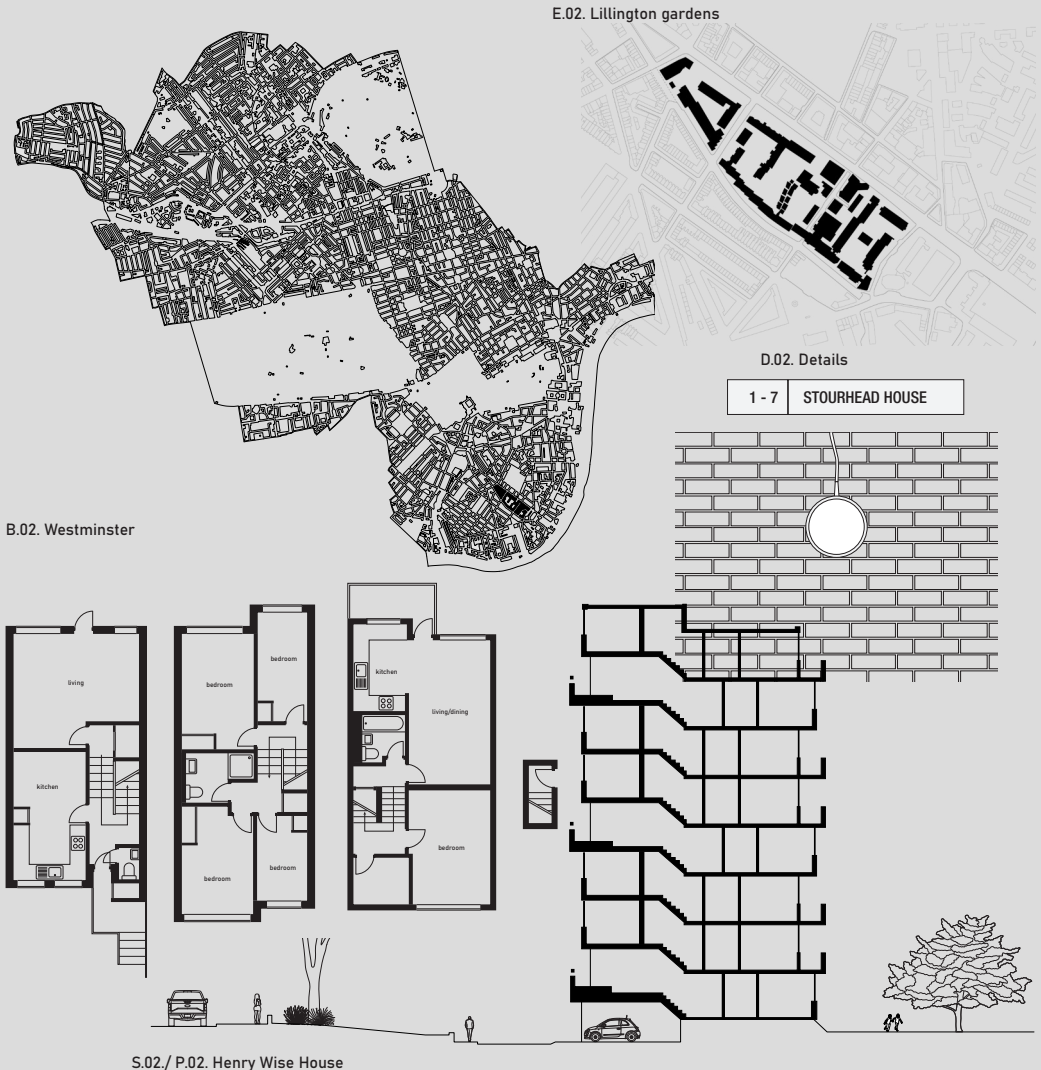
Lillington Gardens

The Lillington Gardens Estate is known for its red brick facades which seems to be a complex structure of shifting levels. The estate is found in the middle of Pimlico in the south of the Borough of Westminster. In 1960 the Borough of Westminster bought the 5 hectares of land that the Lillington Gardens was to be built upon. Prior to the estate the area was in a run-down state, due to being damaged in the second world war. In 1961 the borough set out an open competition to find a new proposal for the grounds and put forward Philip Powell as the Judge of the competition¹. Powell who had previously worked for the council while designing the Churchill Gardens Estate eventually chose John Darbourne as the winner and he would then form a partnership with Geoffrey Darke. Other contributions for the design were also done but where the design of Darbourne and Darke stood out was the materialization and the layout. Whereas the other designs often chose for the modern approach exposing raw concrete the winning design chose a dark red brick to oppose the sterility of the concrete which was so popular at the time. Another important reason for the choice of materiality was the requirement to preserve the Grade II listed St James-the-Less church, which was also built with a red brick facade. The brief for the competition required housing for approximately 2000 persons and had strict definitions and percentages of the size of dwellings (from 4 bedroom to bedsit units). Furthermore the brief asked for an older person Hostel to house around 90 people, three public houses, ten shops, an estate Hall, premises for a builder, a public library and two doctor's surgeries. With this extensive brief the Council of Westminster displayed their knowledge and understanding of how to guide a designer. The Westminster council had already been rewarded multiple times for their high quality social housing Estates. The building commenced in 1964 and was divided in three stages, by the start of 1967 stage 2 started and by 1968 stage 3. The Lillington garden housing blocks reach a maximum height of eight stories, but the blocks that are around the perimeter of the site are all five or six storeys blocks of houses and maisonettes. These blocks enclose the site and at certain places have wings pushing inside of the interior space of the site. The interior space has very deliberate Landscaping choices which create intimate green spaces with selected views towards the church. These private gardens are as said before guarded by the housing blocks surrounding them, this creates a high sense of privacy and security. This addition of the private garden came from the architects notion that 'parents were reluctant to allow their children play at ground level when their home was several storeys up... children were deprived of outside space' the architects already found some ways to correct some of the problems that came with the high tower blocks that were being

¹ *The architecture of Darbourne & Darke: Lillington Gardens housing.* (1980). *Architect and Builder*, 30(2), 26-31.

built. Darbourne and Darke were also accredited to have created one of the first low high-rise building blocks and breaking with the slab tower blocks that dominated in the sixties.

The apartments in the low high-rise buildings are connected through galleries that give access to two levels of apartments. On these galleries there is special space provided for planted greenery as can be seen on the image on page 48. The galleries are accessible through a stairwell and an elevator shaft at a central position. The galleries face the street outside of the estate but between the street and building a large strip of greenery divides the two different spaces, the trees placed in this green space create a protective layer between the always busy Vauxhall road and the exterior facade of the Lillington gardens estate. The combination of the greenery on the corridor as well as the street in combination with these red brick facades and concrete construction all in all give a sense of life and warmth that situate the path leading up to the apartment as a very comfortable one.



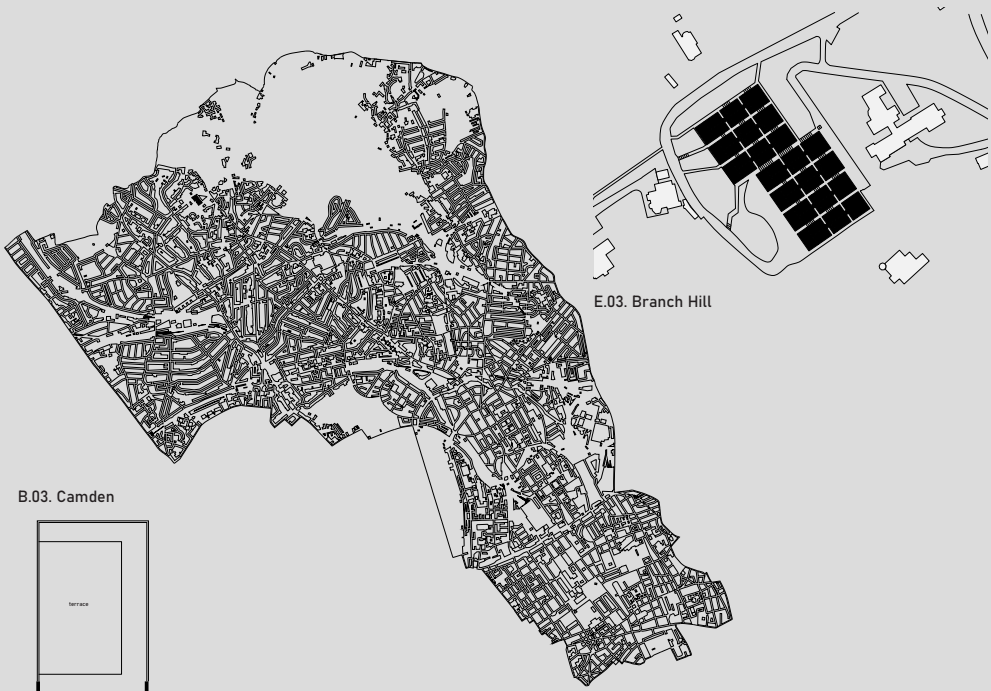
Branch Hill Estate

The Branch Hill Estate is situated on a hill in the Hampstead area of the borough of Camden. The Borough of Camden was officially formed in 1964 as a result of the overhaul the London boroughs were having, where every borough should have at least 200.000 residents. The restructuring decreased the 86 different boroughs down to 32. Camden was formed out of the amalgamation of St. Pancras, Holborn and Hampstead. After the formation there was an overall majority of labour councillors that were set on increasing the amount of social housing within the Borough.

The Estate lies quite isolated from other built housing, the housing that is in the general area of this building is of a completely different nature. The buildings in the area were mostly built in the 19th and 18th century while the estate stands out in its 1960s modernist style. The brief the council set out for the small estate was to have 21 semi detached houses that were not more than two storeys high. The architects set out not to disturb the view from the elderly care home called Branch Hill House further up the hill. To do this they used the Newport high-school by Eldred Evans and David Shalev as a reference to let the outside garden space continue on the roof of the next house underneath¹. Through this half stepped housing project they created one of their strongest design positions.

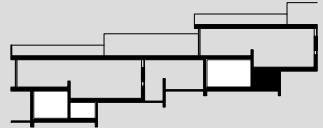
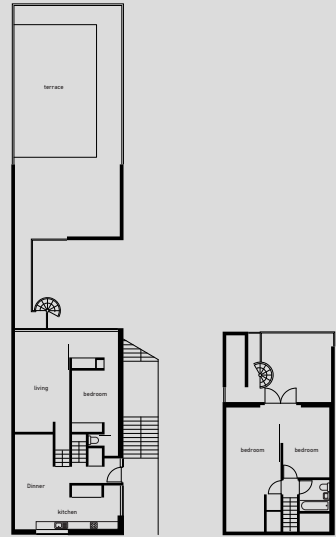
The final shape of the project had 21 pairs of semi detached houses layed out in an orthogonal grid. There are three rows of terraces where the houses are stacked on top of one another. In between the houses the horizontal corridors are narrow and give access to the courtyard at the back lower level of the houses. In the vertical direction the houses are divided by long stepped staircases which give access to the front door of the houses. The staircase is around three metres in width giving the homeowners ample room to claim the space in front of their houses. At this moment the claiming of this space is mostly done through adding potted greenery or placing small seating areas. The horizontal and vertical walkways are only accessible by foot, or a potentially brave cyclist. Since the residents of the estate don't have parking directly in front of their front door the architects designed specific parking spaces on the highest level of the estate. These parking spaces are elegantly tucked into the hill but only offer space for up to 14 cars, this causes quite a frantic parking situation on the lower level of the estate this can be seen in (1.17).

¹ Gordon Benson. (2019, April 2). *Gordon Benson: Architecture on Stage* [Video]

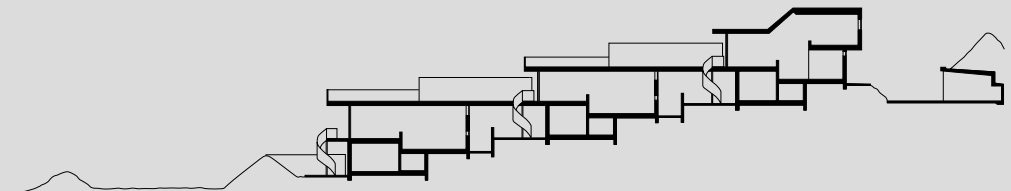


E.03. Branch Hill

B.03. Camden



P.03. plans Branch Hill



S.03. Section of 3 houses on Brach Hill

Qualitative Assessment

David Sim 9 criteria for better Urban Living

In the chapter 'Nine criteria for a liveable Urban density' David Sim lists and explains the ideology on how to create a liveable urban centre. It starts with the premise that 'high density' is and can be best achieved with the use of a lower to medium rise built environment. Furthermore, stating that high rise buildings are not a necessity to achieve high density living.

Sim also stresses that the quantification, or maybe he means capitalisation, like FAR (Floor Area Ratio) are not useful in measuring the success or quality of a building. The FAR is mainly used by building developers to calculate how much floor area they are missing out on of usable space, since if architecture grants them a high area of usable space compared to the total space the project takes in, the profit margin will be higher. Following are brief descriptions of all the nine criteria that Sim created followed by the comparison of the criteria with the three case study council estates.

Diversity of Built Form

Diversity of built form comes in various ways and can be stimulated on multiple levels. Having dwellings, work, learning and recreation all in close proximity to each other allows for more local living.

A mix of public and private properties within the same environment contributes to more diversity. To further stimulate the mix of private and public city planners could subdivide land into smaller plots to allow a larger variety in ownership.

The diversity also comes in a varied size of building as different functions require different sizes of space. This therefore also requires a variety of typologies. An apartment, industrial sheds, production spaces, specialised buildings. In order to allow this kind of variety in built form one important point is that the buildings should respect each other's built form. One building should not overshadow the other, respecting the facade and its use cases.

Diversity of Outdoor Spaces

Outdoor spaces should be inviting to be in, they should not only be pleasurable during a walk in the park or while weeding the bushes in your garden, they should be nice while waiting on the bus or putting out the garbage and give opportunities for pleasurable encounters. Through consuming fresh air, physical activity and meeting people being outdoors is beneficial for physical and mental health

Human Scale

The human scale stands for the dimensions rooted in the human senses and behaviour, this results in smaller built components and lower heights. To design with spaces with the 'human scale' the designer must pay attention to the experience of the user at eye level, creating spaces in which the materials and surroundings are pleasant to the senses. Creating small tight spaces is one way of letting a person to focus on the smaller details, forcing them as well to be in closer contact with other people and another benefit of the smaller spaces is the greater sense of security since people have a comfortable overview of the space.

Smaller Carbon Footprint

A building should not have a negative effect on the environment, by working with sustainability in mind, the buildings should use less energy, pollute less and save natural resources and materials.

As for the design of buildings Sim suggests that having more joined-up buildings instead of free standing reduces the costs for heating and cooling as well as construction costs.

Also having narrower buildings to allow great daylight penetration and lower buildings for good natural ventilation should decrease the amount of artificial heating and lighting.

Then Sim makes an argument for light construction and preferably wood, as this saves the embedded energy. The lower building heights also lends itself great for prefab construction which is also possible with wood and this lower building height means there is no need for elevators.

A Pleasant Microclimate

A good climate and Physical comfort when going outside in the immediate vicinity of buildings is important in encouraging people to go outside. Buildings can be shaped and adjusted to serve the outside climate of various public or private spaces. These measurements won't help with the extremities but it will help with softening the extremes.

High rise buildings catch colder winds from high up in the air which crash onto the facade and travel downwards towards the street level. This causes stronger often cold winds to enter the outside spaces. The tall buildings also cast far longer shadows keeping places darker and colder.

Courtyards again make a good place where the heat/cold will be trapped to serve as an intermediate space where temperature does not change too quickly. Another element that increases the enjoyment of the microclimate is to allow the resident to experience it from their private space. This is achieved through balconies, french windows or dutch barn doors. As these allow the outside air to enter the indoors.

Flexibility

Importance of multiple purpose space becomes clear while seeing the value of land. Within London the price of land comes at a high cost, therefore being able to change the purpose of a space makes more sense than ever. This can be in a public space or building. School playgrounds can be changed into public parks on the weekend, a car park can change into a street market and office lobbies could serve as a space for pop-up stores or temporary gallery space. An important factor that seems to be necessary to reach flexibility within space is the requirement of the flexible space being on the ground floor. One more point that increases the potential for change of use is the direct access from the public realm to space.

Sense of Control and Identity

Buildings and its surroundings should be made up of identifiable distinct places, physically defined and are controlled by an individual or group. Residents should and could experience security through multiple layers. Here the first layer is the home itself with its private spaces. The next layer is the group apartments that share a common gallery or stairwell. This group is made up of people with a shared interest in cleanliness, safety, security, and quietness at night. A group of this neighbourhood creates a sense of belonging, seeing the same faces and recognising people is an important part to feeling safe and at home. If recognizing people is one way of increasing a sense of control and identity, recognizing how the built environment works is another. Blocks that have clear inside and outside spaces are one of them. Where residents know that the front is more public, more exposed, it is tidier and more controlled. The inside of the block is more informal and relaxed, people put up their washings and create their own space.

Walkability

Most of the movements that are made everyday are done by walking, getting in and out of an apartment going for groceries. The goal is quick and easy access, convenience, spontaneous participation, and being able to get from one place to another quickly and easily.

For the walkability again the ground-floor is extra valuable, this is the level at which you enter a building and houses most of the amenities of a building. Another important element concerning the walkability of a building are the staircases. Shared staircases that offer enough space for encounters with neighbours and have plenty of daylight offer a valuable quality that is not gained by adding an elevator.

Greater Biodiversity

Urban form should integrate with the natural world. The design of buildings and public spaces should keep in mind natural life, fostering greater biodiversity. One of the ways to promote diversity is to achieve a higher number of property subdivisions. This action will lead to various ways of design, standards and natural elements as gardens.

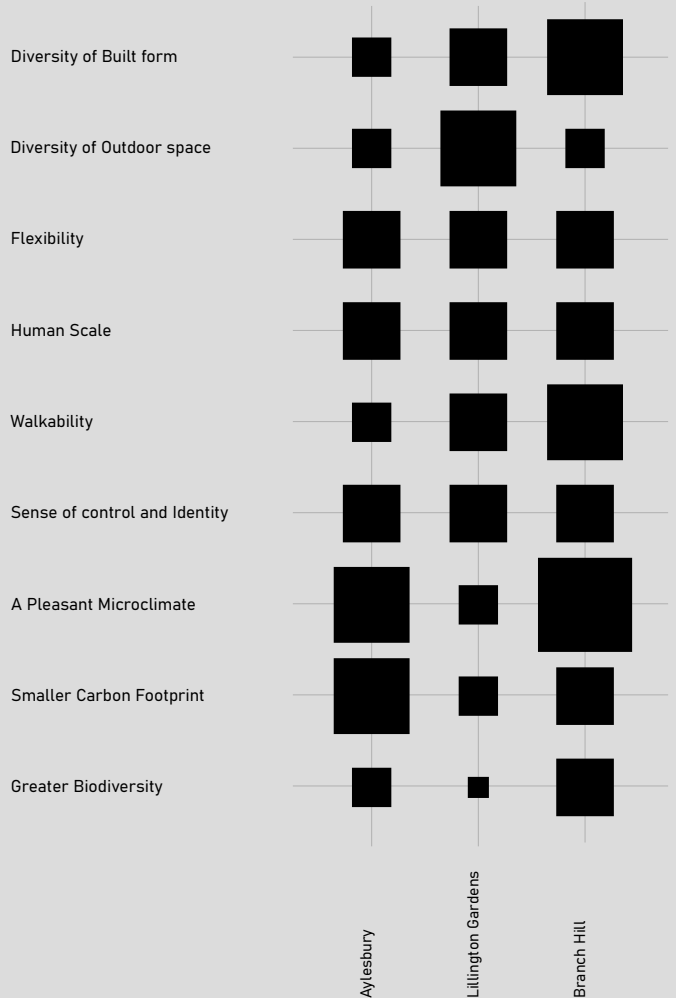
Protected gardens like in courtyards or walled gardens permit different types of natural life and plants to thrive.

The lower building heights also give roof gardens a better climate to survive and flourish in.

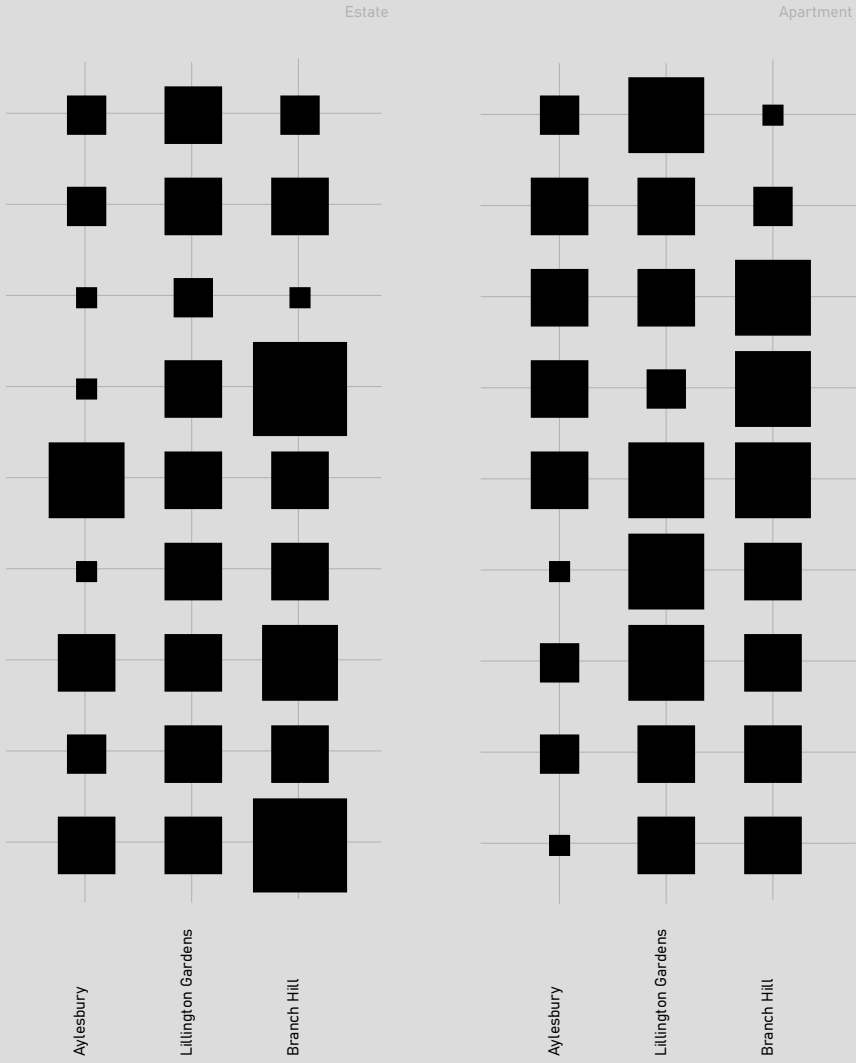


David Sim | 9 Criteria for better Urban Living

Borough



Everyone has heard of at least multiple of these principles that are given in these nine 'criteria', but having David Sim spell them out in such a clear and succinct way makes this a valuable source. As the Council Estates that I visited more or less all have some points down and others not. That is there needed to be a way to compare these estates to the criteria that Sim made. Therefore a matrix was set up where different scale levels of the estate were compared to the nine criteria.



Alain De Botton; The virtues of Buildings

De Botton starts out by explaining multiple points of notice. He writes that the way philosophers have described the failings and strengths of fellow human beings, and that he himself will attempt to distil what virtues are in architecture. He continues by saying that in everyday life we hardly ever try to distil our grudges or admirations into hypotheses, but still we often do just as philosophers have described, and whose aim it was to write a treatise to identify and dissect human goodness. Just as philosophers have assigned names to virtues in individuals, we may need to do the same for buildings. By identifying architectural equivalents of qualities such as generosity or modesty, honesty or gentleness, we can better understand that the beauty of a building is not derived from one single source, just as excellence in a person is not determined by one trait alone.

Order

The inherent order observed in the streets of Paris, as well as in the frameworks of large-scale mechanical structures, serves as a reminder of our capacity to transcend our primal instincts and transform disorder into a harmonious arrangement. By harnessing our creative abilities, we possess the remarkable capability to convert barren and neglected landscapes into inspiring monuments of human achievement. Geometry stands for a victory over nature, and it is this order that we need to survive. Our drive towards order goes hand in hand with our drive towards life.

Order also gives us an easy to understand system in which we can understand architecture, just as we schedule our days to start work at 8:30 AM and have lunch at 12:30, so do buildings have their order. Through this order we know how to travel through and understand buildings.

This also goes for the larger image of the built environment, in the 18th century an emphasis was laid on originality designs which often did not go hand in hand with right next to each other. A good coherence in the built environment is important to preserve order and not chaotic. Although order is something to strive towards it can also be too much. Till thus far we appreciate order if it is accompanied by complexity.

This is also seen when assembling materials; where wood and bricks might seem too chaotic and not have the same texture from up close when put together in an order. This tension between chaos and order is further explored in the layout and contour of the site and building. One can think of the order that is created by the building code on Borneo-eiland in Amsterdam where all the houses have a width of 4.5 metres and a height of 10 metres, but the facade design completely differs from one another in materiality and layout. This area strikes a great balance between order and complexity.

Balance

As seen in the chapter on order beauty often comes from a mediation between two opposites. The large variety of opposites exist therefore De Botton gives multiple examples. The first example is the Yale centre for British art designed by Louis Kahn where a harmony is made between the cold and grey concrete and the warm and natural oak wood, so here a good balance in materials is made. Then he proceeds to Herzog & de Meuron their stone house in the alps. This building has a rigid square concrete structure which is often associated with industrialisation. All the while this construction lends itself perfectly for dry stacking limestone which is a traditional way of building agricultural buildings like sheds or barns in the alps.

As to why people find beauty in balance De Botton claims that just like our own personalities we need to balance the extremes. Because buildings that possess a subtle balance can deeply affect us, as they serve as a representation of how we can reconcile the conflicting aspects of ourselves. They serve as an example of how we can strive to create something beautiful out of the opposing elements within us.

Elegance

Humankind admires strength, man made objects that withstand harsh forces. Creations of infrastructure that allow us to travel quicker, technological creations that advance communication or other elements of our life. The beauty also lies in that which is stronger than us. Like a large water dam, or the rigid structure of a Lighthouse in the middle of a rough storming ocean. Nevertheless strength is not everything. In sports there are various types of athletes who express strength in different ways. One of the most classic examples of this is the comparison between tennis player Roger Federer and Novak Djokovic. Federer is often considered to be the player with more beautiful play. This can for instance be seen in the back hand of Federer. Federer uses the single handed backhand, this will always look better and smoother than a double handed that Djokovic uses. Another element is the way this strength is expressed by the player, where Federer stays cool, calm and collected, Djokovic often lets out screams of emotion. This subtle difference in beauty also reveals itself in architecture and is referred to as elegance. When a work of architecture carries itself in construction with economy and grace as well as strength. When a construction is modest and does not boast of the large span it has to bridge.

Calling an object or building elegant is not as straightforward as looking for the appearance of simplicity, for it to be elegant we must also see that it had to overcome technical or other difficulties to get there. This is because we admire works that look very simple, although we sense that their creation must have required a great effort to achieve this kind of complexity. Whereas this simplicity is often seen as abstract shapes and a lack of ornamentation this is not the case. As elegance is also found in places where the creators went the extra length to create beauty. The patience and carefulness with which for instance the flowers in the columns of the bibliothèque Sainte-Geneviève of Henri Labrouste have been carved and moulded. They show the attention with which this building was built and they add an element that shows that humans sometimes without possibility of profit or power like to create flowers inside of structural work. In order not to throw shade on such detail and craftsmanship we need a culture that does not only appreciate pragmatism but also allows for play.

Coherence

This piece starts off by describing two different buildings that are great examples of incoherence, the second is a tower block in Shepherds Bush London designed by Sidney Kaye. This building displays a clear horizontal expression and therefore feels wrong. This was confirmed by Louis Sullivan's book 'The tall office artistically considered' that stated that tall buildings were in danger of incoherence. The reason for this incoherence was because the mass of the building is a vertical one while the decorative elements are in horizontal orientation. According to Sullivan all the tall buildings should be designed with the term 'lofty' in mind. This meant that they must be proud and soaring into the sky, a single unit that points towards the sky.

Going further into coherence De Botton writes that "nothing in architecture is ugly in itself, it is merely in the wrong place or of the wrong size, while beauty is the child of the coherent relationship between parts."

Analysis

Every estate that was analysed through a drawing exercise and photography is now laid next to the qualitative criteria or virtues that were set out in the chapters before. Next to a textual explanation there will also be a diagram in which every estate is laid out on multiple scales and then marked a number from 1 to 5. This will prove helpful in later stages of the design process, as it needs a continuous reference to specific design elements and their qualities.

Aylesbury

Aylesbury is perceived as an estate whose problems mostly stem from the construction principles and the lack of maintenance of the Estate. Although these problems are significant and very present it can not be ignored that the derelict spaces, worn down pedways and used concrete have a quality that comes with the loss of structure with great intentions.

Order; Although the Aylesbury looks very ordered in plan and in architecture the reality feels quite different because of all the anomalies that are created through the later additions, dilapidation, destruction and an array of different block typologies.

Balance; The balance between for instance materials in this estate has been completely lost due to very cheap building construction. Where the concrete stands in large contrast because the painted colouring in blue and red that is applied to the concrete is often not well maintained and does not balance well with the very soft colour of the aggregate concrete. Another place where balance is not achieved is the element of 'separation of functions' this is where the wide open green spaces in between buildings denies us both the pleasure of being in nature and to be surrounded by an urban environment.

Elegance; The concrete in this project certainly portrays its strengths, showing nice degradation and weathering that comes with time. The problem is found in the materiality of its facade, which is constructed out of a multiplicity of low cost materials that overall give the facade a cheap appearance that with the passing of time has not been adjusted or maintained which is why the facade gives a largely deprived and disrepaired feeling.

Coherence; Although a large variety of building types with multiple different housing typologies inside the Aylesbury does have a coherence that connects the whole of the estate together. This coherence is partly due to the pedways that are laid out through the whole estate and is the element which ties the whole estate together. The other part that ties the estate together is that the whole estate is built by using the same prefab concrete elements which is why a majority of the height and width dimensions of single units are the same throughout the estate.

Lillington Gardens

The Lillington Gardens is seen as a council estate that both has great design principles and that makes good use of its materials. The estate is also quite unique because it is also one of the first estates that creates a mix in typologies. The critique on the estate could be that the 'right to buy' laws have enabled this estate to lose a large proportion of its council tenants, mainly because of its central location and its proximity to Westminster which is why the Estate has become quite popular with members of parliament.

Order; The Lillington Garden estate makes a great case for an estate that is on display in a very visible fashion. The facade is structured in a very repetitive way, this is offset by the irregularity in the depth of the facade. This enables cascading greenery on multiple levels of the galleries that lead to the apartment entrances.

Balance; The one thing Lillington Gardens balances greatly is the feeling of being in the inner city while also giving space to calm private green areas. This makes it so that residents that often describe living in the estate makes them feel like they are escaping city life. Furthermore the estate strikes a great balance between the two exterior materials of brickwork and concrete.

Elegance; when searching for elegance within the Lillington Gardens one need not look further than the name of the estate. One of the estate's most elegant elements is its garden. Showing views of the 19th century church laying between greenery and an offset red brick facade. It is the garden layout that invites you into these private gardens and it is the views display of greenery that keeps you there.

Coherence; The Lillington Gardens Estate keeps its coherence through its materiality. All the different blocks are built with the same handmade bricks, and because the blocks all follow the same level height and repeating pulling and pushing of the facade. The whole of the estate feels as one designed unit that incorporates the church that in its turn also makes use of a red brick for its facade.

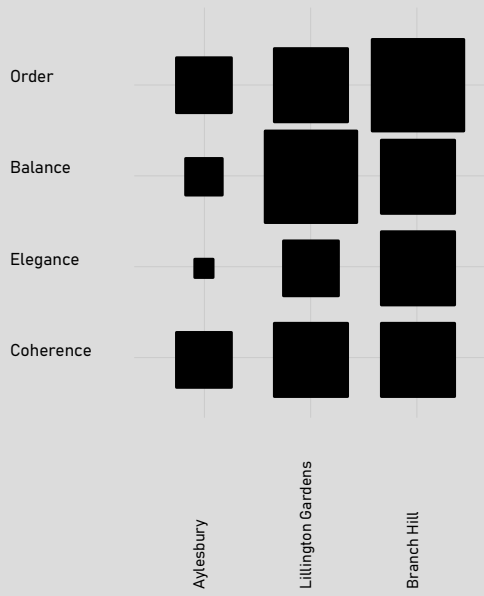
Branch Hill Estate

The council estate that perfectly makes use of its sloped surroundings to create an unconventional housing plan that increases density while not sacrificing outside space. The Estate faces the same problems that Lillington Gardens does. The right to buy law made these spacious 2 storey houses located in the rolling hills of Hampstead very attractive to outside buyers who liked the modernist architecture and the exposed concrete exterior elements.

Order; The Branch Hill Estate has an orthogonal plan layout in which the whole estate has been fitted. This makes a clear distinction between the horizontal and vertical pathways where the vertical are staircases and the horizontal are level pathways between the houses. Because the houses slide into one another with the ground floor the floor plan might be hard to read since on the floorplan of a single house you are actually looking at the roof of the house underneath.

Balance, Elegance; The balance in this estate lies between its surroundings and its modernist architectural aesthetics. The natural surroundings of the Hampstead hills stand in stark contrast with the estate's concrete materiality and straight rugged architecture. In this contrast a balance is found that enhances both sides, the nature creates an elegant display for the architecture

Coherence; from the parking that is neatly tucked away underneath a hilltop in order not to disturb the view from that elderly home to the front that is fitted in a concrete balustrade every element seems to have been carefully thought out. In this way the estate fits in with its surroundings in such a way that they seem to belong together.



Translation into principles

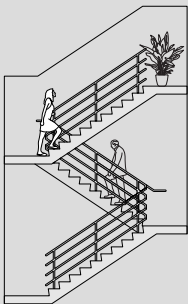
In order to methodologically reduce the research done into the estates and the findings of the analysis, six architectural principles/factors are set up that try to represent elements in 1960's council housing that have stood the test of time and could still be valuable in council estates today.

Facilitating interaction and vegetation.

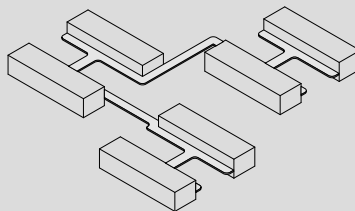
By facilitating greenery to come into communal spaces, residents start to take over these places to make them their own. This in turn creates areas where neighbours are able to keep in contact and run into each other. These small interactions are important for a feeling of belonging and feeling included and safe in the space. Furthermore there are a multiplicity of reasons to want more greenery in spaces, including health benefits and benefits to the interior and exterior climate.

Pedways and walkways

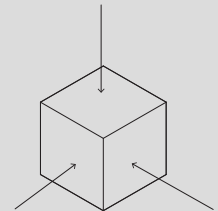
A controversial topic are the pedways of the 1960's, over the years there have been a multiplicity of iterations of the pedway that have had there positive and negative features. In the 1960's the pedway was seen as a new way of movement that was completely separate from car traffic. Unfortunately the 60's were not the days of grand expenses, but more of minimal decoration and fast building. This is one of the reasons the pedways of those days were very minimal, made up of bare concrete and simply creating fast traffic from point A to B. Those minimal efforts reflected in the perception of the pedways in the end 1960's, the pedways were quick getaways for thieves and offered very unsafe and bare looking places. These downsides overshadowed the positive elements of pedways for many years, it was only in a few exemplar projects where the pedway was appreciated like the Barbican. In the latter project it became clear that if enough attention was paid to the design of a pedway and actually making the walk across it attractive that this could be a valuable asset to any city or estate. In this search or reassessment it also became clear that the 1960's pedways often have an aesthetic quality that still holds its own, a playfulness that invites you to enter them, especially the ramps (IMAGE).



Facilitating interaction
and vegetation



Pedways/walkways



Densification

Densification

The way in which the urban plans for 1960's council housing estates in London were set up often resulted in a denser urban development than was the case before the 60's. This principle carries through to today's cities, where development strategies often try to increase the density of inner city living.

Mixed typologies

In the postwar era some urban planners and designers already started using mixed typologies in council estates, although the majority of estates was still focused on the nuclear family typology. As early as 1944 there were reports of a need for mixed developments, one of the main drivers of this need was the council housing waiting lists became filled with single and two person households. That is why inner city developments from the 1950 onward were first to also offer housing types adjusted to smaller households. This is another principle that continues today although the number of household types has increased significantly. Therefore giving council tenants access to a more varied typology range is beneficial for the tenant as well as the council itself.

Multifunctional plinth

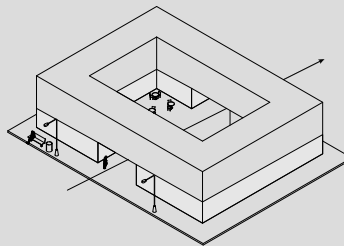
As seen in the Lillington garden Estate the mixed usage of a building creates an outside space that is used throughout the day creates a more lively outdoor space.

Courtyard buildings

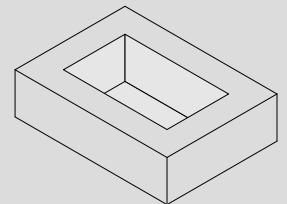
The courtyard building type is seen in many of the 1960 Council estates, some incorporate the courtyard more than others but in almost all of them they offer greenery and communal outside space. This greenery provides a temperature buffer that keeps the courtyard cooler during the warm summer days and warmer during the cold winter days. Furthermore the courtyard delivers a semi-private space where the buzzing of the outside city is taken away to be replaced with peace and 'quiet'.



Mixed Typologies



Multifunctional plinth



Courtyard buildings

Typological & Affordability Discussion

One of the largest problems in development and redevelopment of social housing is the problem of repetition and diversity. Where property developers want to increase profits by creating a single type of house, western society in the early 21st century often has a need for something different. Current day society consists of a multiplicity of life modes all existing side by side. The father/mother/child mode is now one of many. There are the DINKs and LATs¹, the part time parents, the divorcees, the single parents, the digital nomads, the polyamorous etc. Each of these individuals could search for a different housing scheme so therefore the Nuclear family house typology does not hold its ground, instead this asks for a typological supermix where social diversity is created.

The problem here is that property developers often ask for a lowest common denominator in order to keep the financial risks to a minimum. This often leads to monotonous housing plans and interior choices. This raises the question how to stimulate developers to be more daring in their choices and stimulate a more inclusive choice. One argument might be that housing in city centres of western countries are in very high demand, for this reason taking the risk on a different typology might not matter, since the location is almost always the key element in the search of an apartment.

The question is not whether we have a need for a larger amount of housing, but how we can create a larger range of choices in qualitative aspects that match the different needs of each individual. This way there would be a shift in the way people search for housing. You would not search for what is available but for what you need. So by creating a large palette of different housing options everyone can find a place that suits their needs.

Conclusion

In the research paper, an analysis was conducted on three council housing estates dating back to the 1960's within the Greater London area. The analytical framework was informed by the book "Paris Haussmann: A Model's Relevance" which employs a diverse range of mediums, including written analysis, drawings, and photography, to explain the various dimensions of the Haussmann plan in Paris. Drawing upon the research, the study concludes in a set of recommendations that form the basis for the research-based design approach. These recommendations were derived from a qualitative analysis of the estates and encompass insights gleaned from two reference books, which cover various factors essential in establishing architectural and urban spatial quality. The principles include: facilitating interaction and greenery, integrating pedestrian pathways and walkways, promoting densification, incorporating mixed typologies, implementing a multifunctional plinth, and incorporating courtyards. Consequently, the design process undertaken revolves around the systematic application of these guiding principles, which serve as the primary elements for creating architectural and spatial quality in the redevelopment of a council estate.

The overarching design objective is to demonstrate the value present in the social housing stock of 1960's London, emphasizing the significance of preserving or redeveloping these buildings rather than resorting to demolition. By pursuing this objective, the research aims to contribute to the discourse on sustainable urban development and underscore the cultural and historical importance of these housing estates within the urban fabric of London.

Estates in Lines

Boroughs

These maps display the borough, the social housing in the borough and the particular case study that is further analysed in drawing.

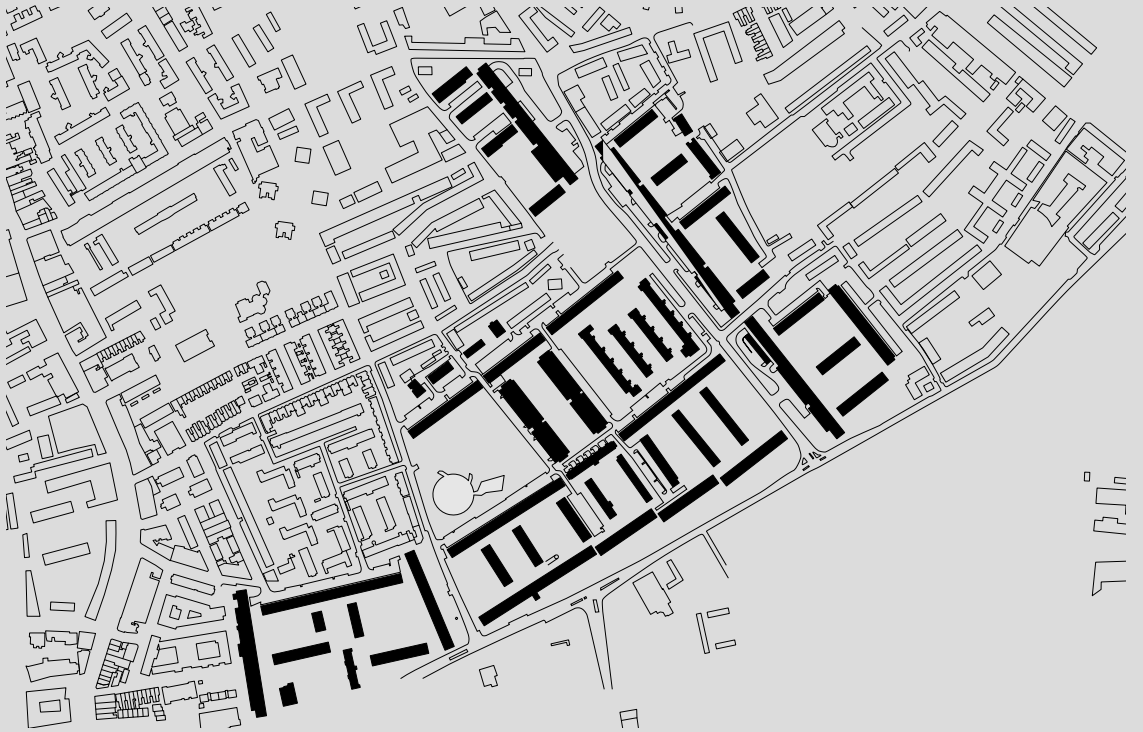






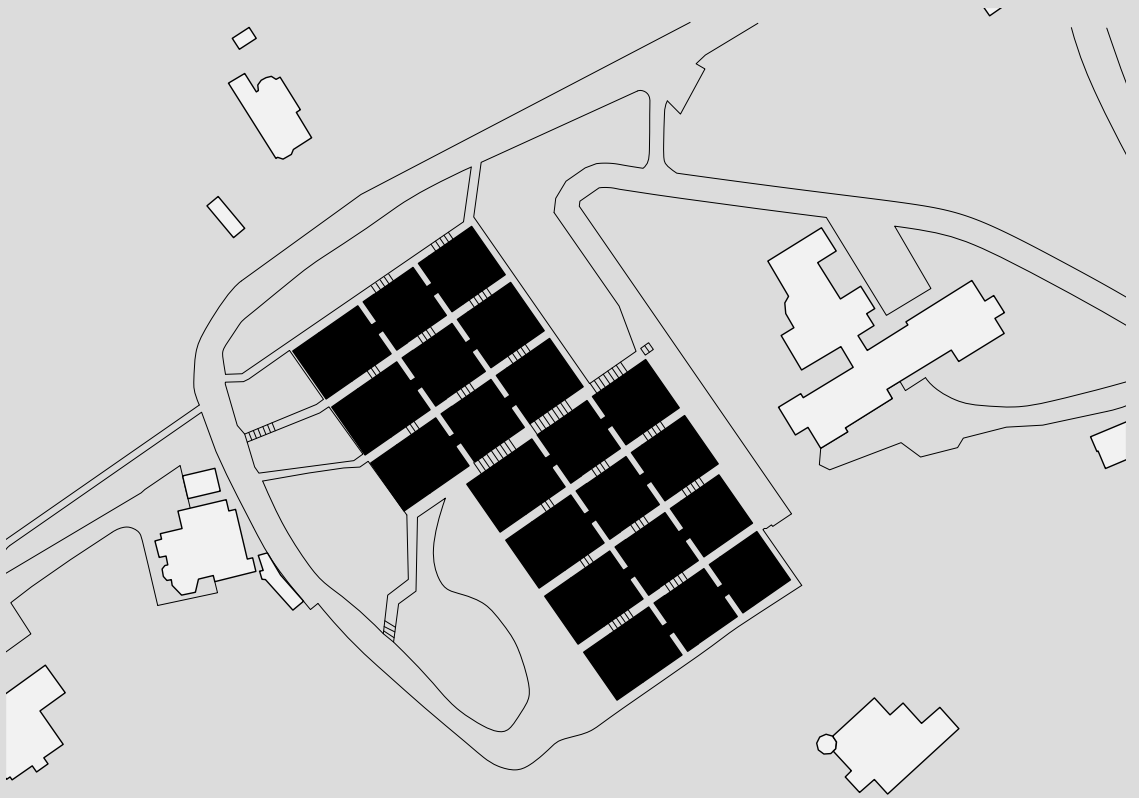
Estate

These maps display the Estates the direct morphology of their surroundings.



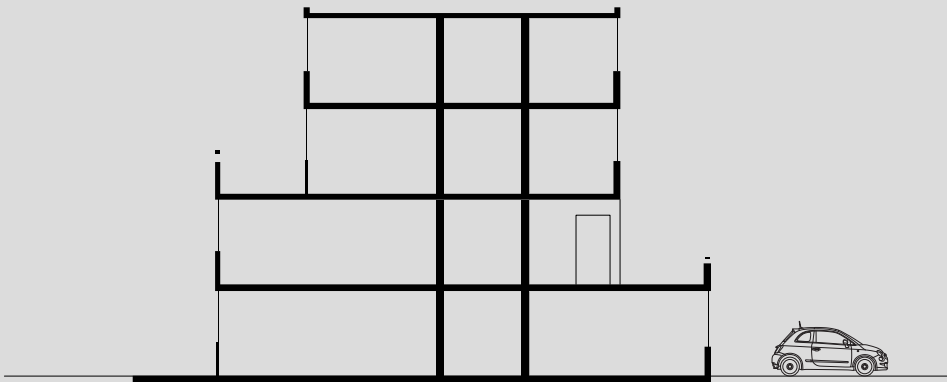
E.01. Aylesbury



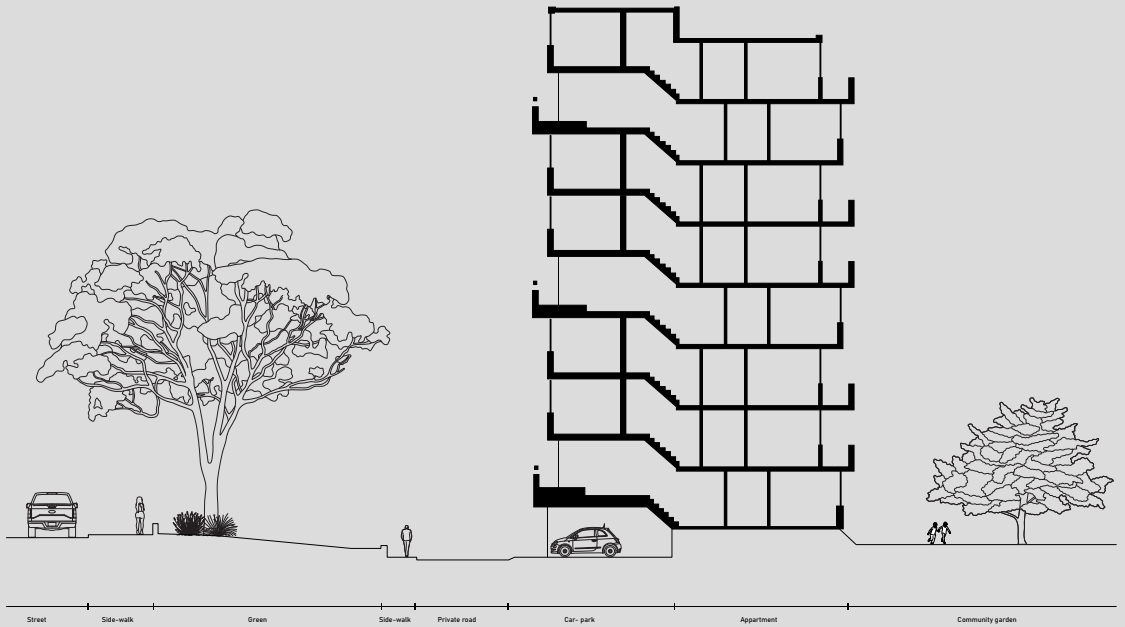


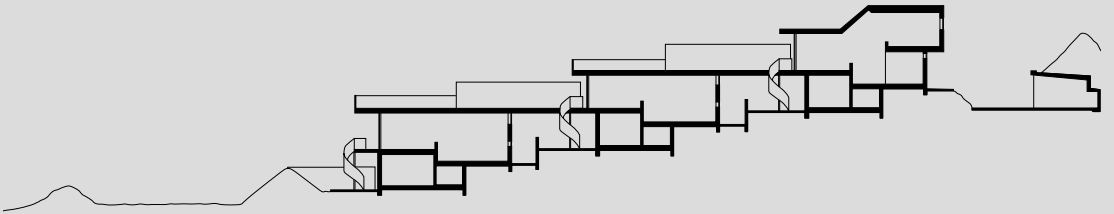
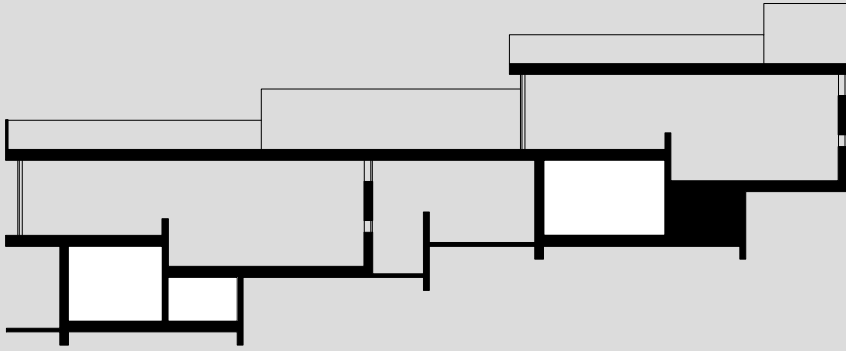
Housing Block

These drawings show a section of particular housing block within the different estates.



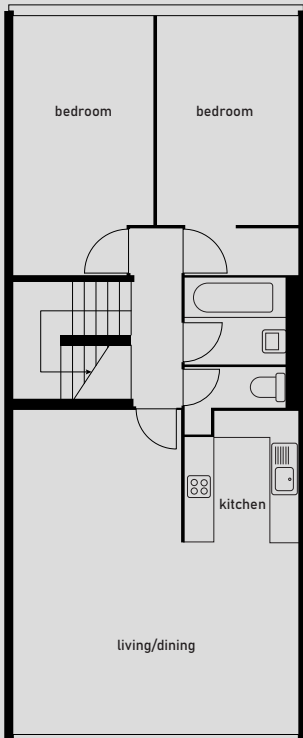
S.01. Danesfield



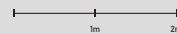


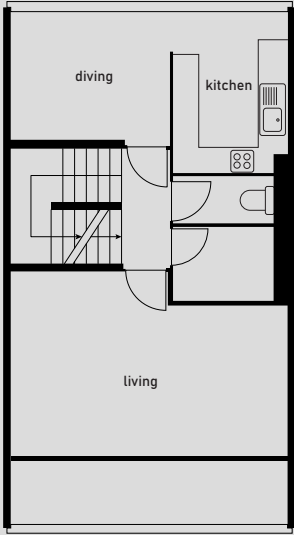
Appartments

These drawings show the floorplans of types of flats or appartments within the building blocks that the sections have been taken from.

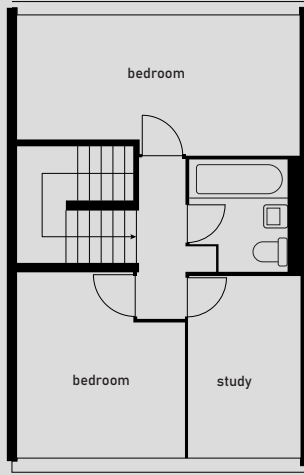


Ground floor





fourth floor

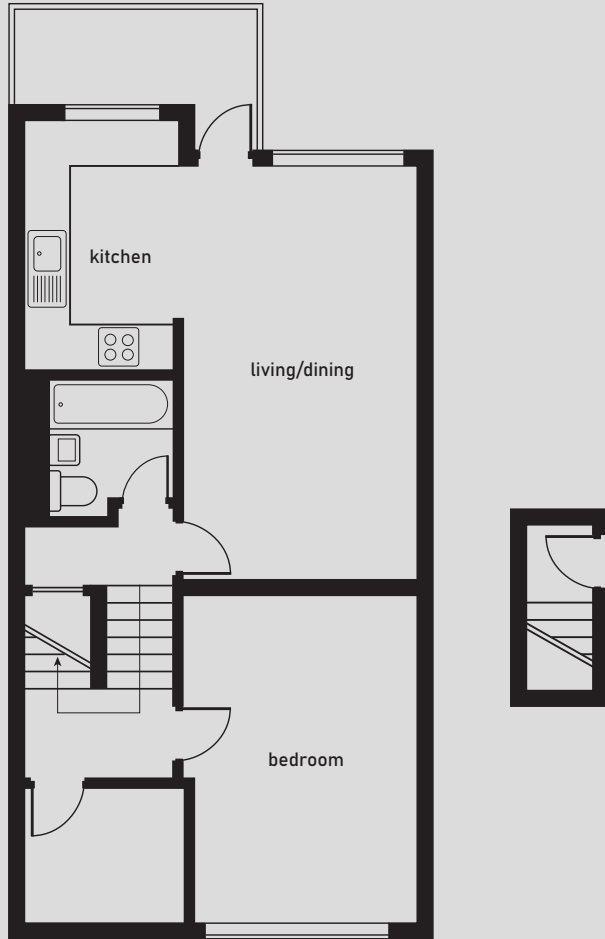


third floor



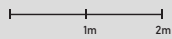
first floor

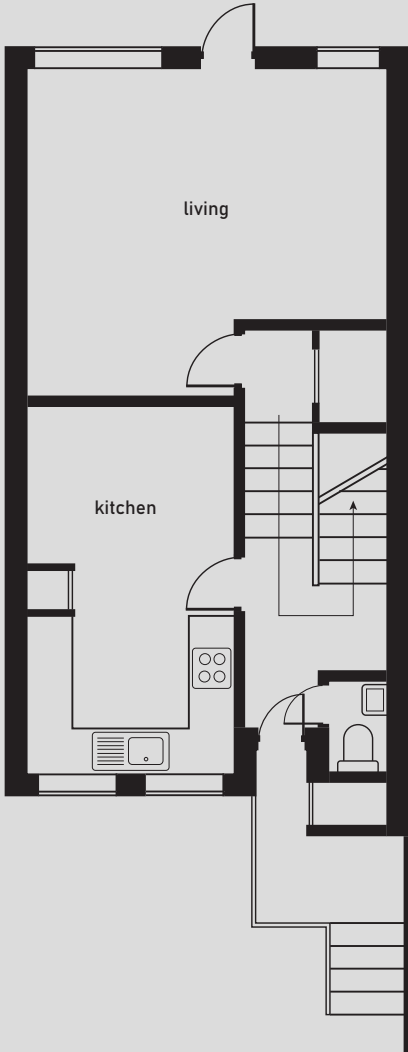




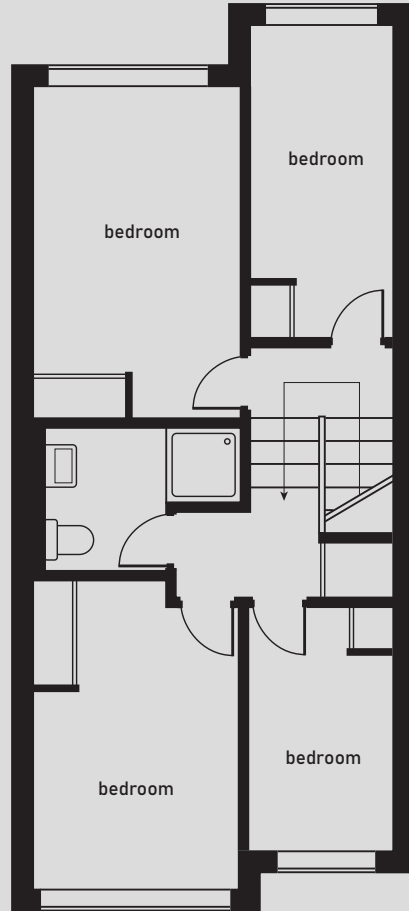
third floor

fourth floor

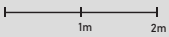




Ground floor

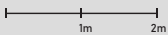


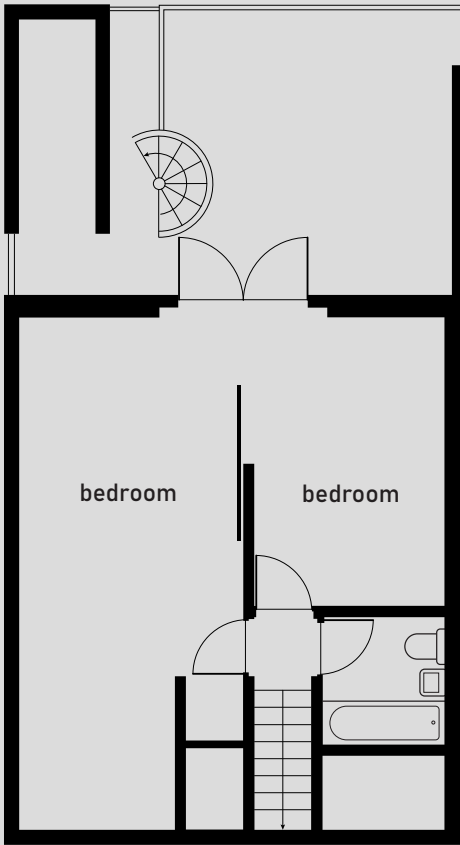
first floor





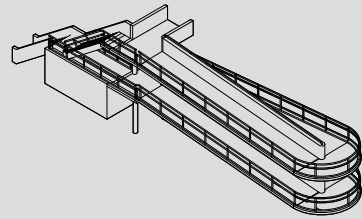
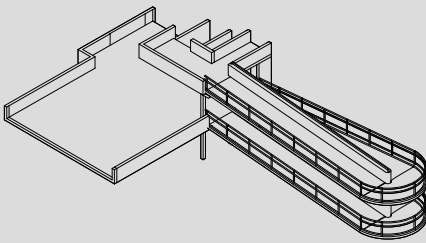
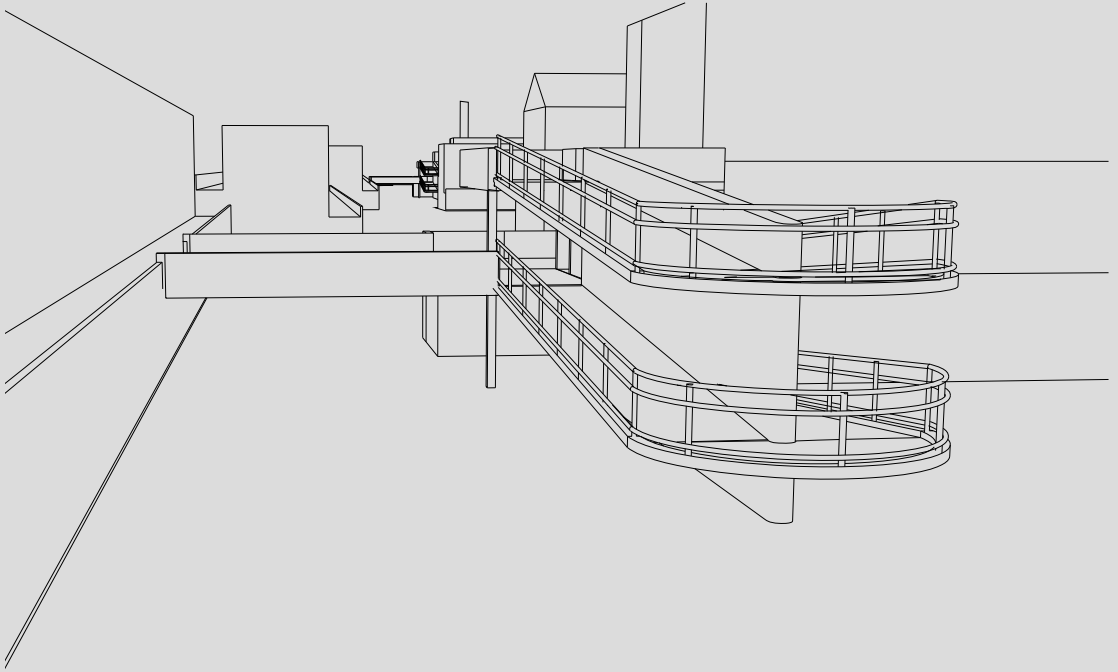
Upper level

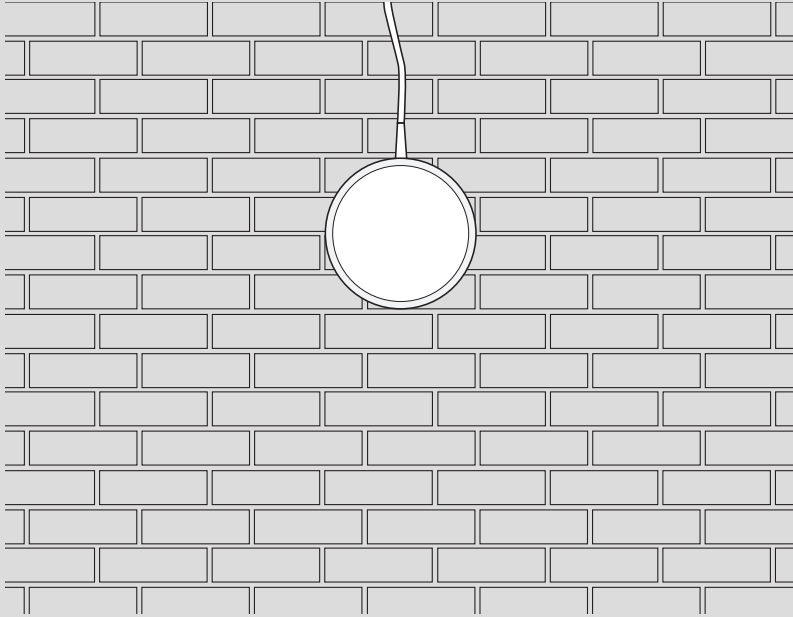




Lower level

Detail & Ornament





1 - 7	STOURHEAD HOUSE
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Estates in Images

Case study Estates

These images display each estate through images taken on the 1st excursion to London which took place November of 2022. With these images I have tried to capture the materiality and ambiance of the spaces putting a main focus on the public space that lies in and between the buildings.



I.01. Pedestrian walkway



I.02. Wendover block



I.03. Pedestrian ramps





I.05. View towards Taplow building



I.06. Inner courtyard with a view towards the church tower



I.07. The inner facade of the Henry Wise house



1.08. Stairwell and galleries, Repton house



I.09. Inner courtyard



1.10. Red bricks with concrete structure



I.11. Row housing inner-courtyards



I.12. Branch-Hill Estate garage & road entrance



I.13. Branch Hill top row houses



I.14. Horizontal walkways



I.15. Vertical walkways



I.16. Brick staircase



I.17. Parking at the bottom of the Hill



I.18. Vertical staircase Leading up towards the hill



I.19. exterior wall deliniating the exterior space of one house ontop of the next

Bibliography

Primary annotated sources

- Campkin, B. *Remaking London: Decline and regeneration in urban culture*. Bloomsbury Publishing, 2013.

Chapter 2.1 "the 'social eye' of the camera - that is, its ability to raise critical awareness of social relationships and material conditions" This marks exactly why I was interested in using film as a form of representation of the current situation in Council Estates.

- De Botton, A. *The Architecture of Happiness* Reissued in this ed. London: Penguin Books. 2006

Chapter 5 on the virtues of Architecture. In this chapter De Botton, analogises ethics with architecture. He, just like philosophers, tries to find/dissect the virtues in people, like generosity, modesty, honesty and gentleness, but in de botton's case he searches these virtues in architectural buildings. Following ethics, architecture has the same principles, for instance that a single virtue does not constitute a 'good' person or building. The virtues are described as order, balance, elegance and coherence. Each set up by certain principles that constitute good.

- Sim, D., & Gehl, J. (2019). "*Soft city: building density for everyday life.*" Island Press. Retrieved October 17, 2022. Chapter: Nine Criteria: for livable Urban density

In the last chapter of this book nine criteria are given for a livable, resilient, high-density area. These criteria could be seen as a reference to answer to my research question. The criteria are: a diversity of built form and of outdoor spaces, flexibility, a human scale, walkability, a sense of control and identity, a pleasant microclimate, a smaller carbon footprint, and greater biodiversity. If these criteria would work for a development of social housing in London is something that is not clear to me yet.

- Napolitano, U. Jallon, B. *Paris Haussmann: modèle de ville/Paris Haussmann: a model's relevance*. Zurich, Park Books, 2017

Used as main reference for the plan analysis of four Case studies of Council Estates in London.

- Boughton, J. *A History of Council Housing in 100 Estates*. United Kingdom: RIBA Publishing, (2022).

This is used as a reference for the complete history of social housing within Britain.

Books

- Minton, A. *Ground Control: Fear and happiness in the twenty-first-century city*. Penguin UK, 2012.

Specifically Chapter 7 Fear of crime, 'respect', Trust and Happiness was of interest to me, as they showed the sometimes deeply un-social way the city is currently being governed. While Chapter 8 Moving forwards proposed multiple ways forward which seemed less miserable.

- Gehl, Jan. *Life between buildings*. Vol. 23. New York: Van Nostrand Reinhold, 1987.

Gehl uses the human dimension as the starting point for his analysis and measures the success of the urban environment by quantifying the levels of pedestrian flows, levels and length of stationary activity - including human contact and social interaction. Gehl however addresses only the exterior spaces and in this he does not incorporate the influence of the architecture within these spaces.

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spatial (in)justice refers to an intentional and focused emphasis on the spatial or geographical aspects of justice and injustice. As a starting point, this involves the fair and equitable distribution in space of socially valued resources and the opportunities to use them.

The Idea of spatial justice I can use to compare the case study estates their resources and the accesibility to them.

tion : Sophie Didier, Frédéric Dufaux], justice spatiale | spatial justice | n° 01 septembre | september 2009

This article suggests through case study material, alongside other literature that the self-avowed community-led NDC regeneration programme is a trojan horse for state-led gentrification in London. This is a clear example where the state led regeneration program leads to Gentrification and does not adress the need for affordable social housing.

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- Frostick, C. Watts, P. Netuveli C. Renton, A. and Moore, D. "Well London: Results of a community engagement approach to improving health among adolescents from areas of deprivation in London." *Journal of Community Practice* 25, no. 2 (2017): 235-252.
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Motion Pictures & Videos

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The movie describes the Robin Hood Gardens and the clear disconnect between the original ground breaking vision of the architects and the experience of its inhabitants. This all results in the eventual demise of the Estate by demolition instigated by the Borough council. Although a clear argumentation on why demolition cannot be given by the Borough Council.
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