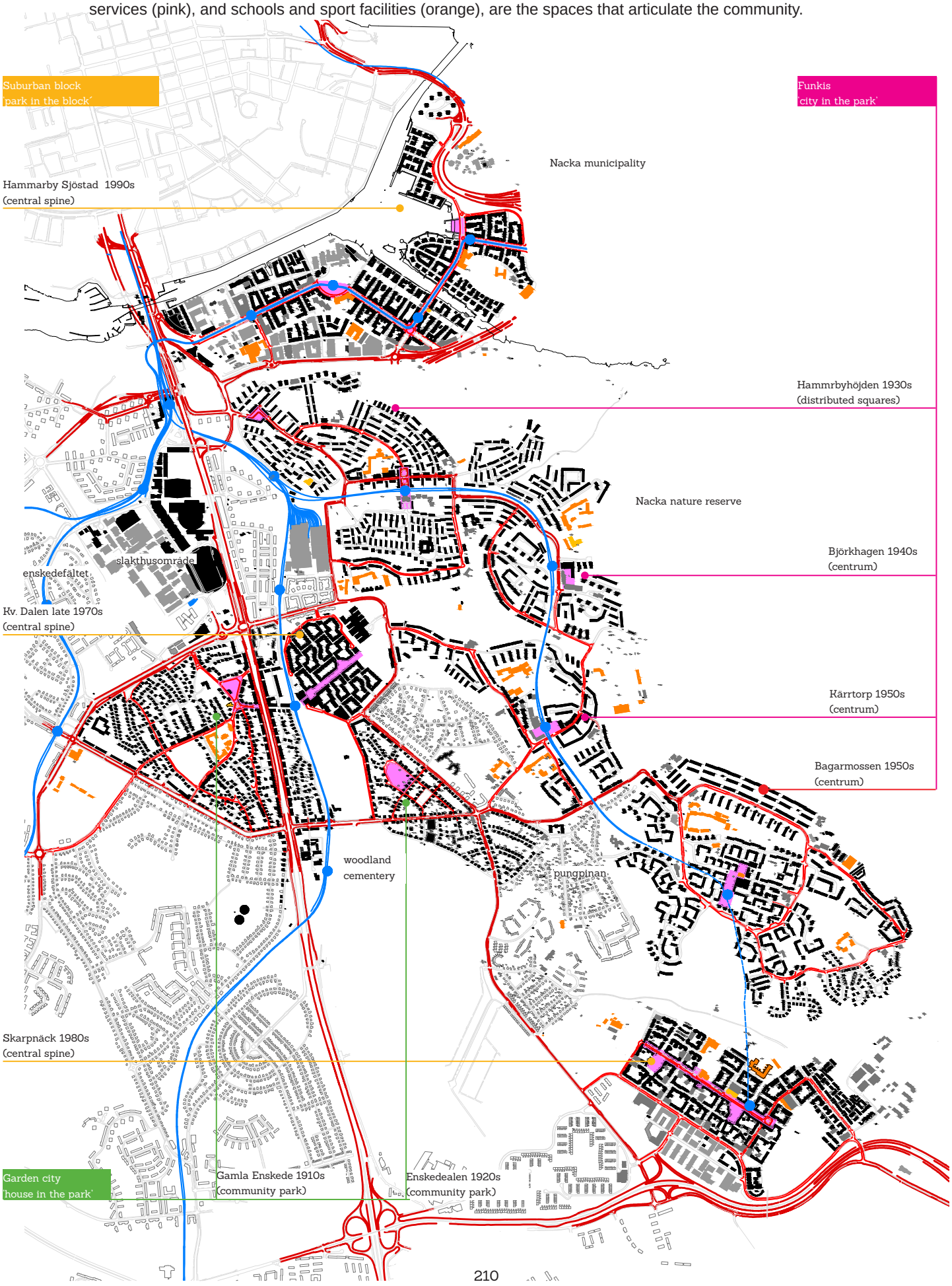
Figure 4.26

Suburbs in the Sotuheast of Stockholm.

To the eastern limit is the nature reserve of Nacka. In blue, metro and tram. Different types of central spaces with services (pink), and schools and sport facilities (orange), are the spaces that articulate the community.



of Järva, to the north end of Stockholm. They are far away but, as has been already discussed, there is a continuity in the processes, aims and ideas within the municipality, with the projects that will follow in the late 1970s and that introduce the suburban block.

The plans with the layout of the examples discussed here have been introduced already in chapter 3. In this section, I choose toput more emphasis in the transition from the garden city to the Miljönporgram, because I want to emphasise the process transformations, while the later periods have been extensively discussed in previous sections.

The House in the Park – Hus i Park (1910s and 1920s)

The expansion of the city outside the urban core responded to the search for decent housing and fresh air responding to cramped, dark, overcrowded and polluted urban environments. With the arrival of the train, light rail or tram to the cities, comes the possibility to expand beyond the contained limits of that thriving although packed city. Starting a process of building outside the inner-city enclaves dedicated to specific functions, addressing homogeneous social groups, following the principles of efficiency and zonification introduced in Tony Garnier's Cité industrielle (1917) and later popularised by Le Corbusier.

The first developments built outside the inner-city in the beginning of the 20th century were villa areas (*villastad*) of private initiative, built outside Stockholm municipality and connected by a light train to the city. This new villas were sitting in the middle of large plots surrounded by greenery. Some of the first villa areas are Djurholm villastad or Lidingö villastad (fig. 4.24). Short after, public authorities took responsibility in the provision of housing, and Stockholm starts to acquire land to build new housing areas, starting a centralised expansion from the inner-city. This first period of expansion is characterised by the construction of garden city (*trädgårdstaden*). Both the villa areas and the garden city aim to build houses surrounded by greenery, the first with big plots in the existing forest, the second in smaller plots with gardens, streets with aligned trees, and parks. Both fall under the ideal known as the 'house in the park' (*hus i park*).

Both have also differences. The model for the Swedish garden city follows influences

Figure 4.27
Gamla Enskede trädgårdstad.

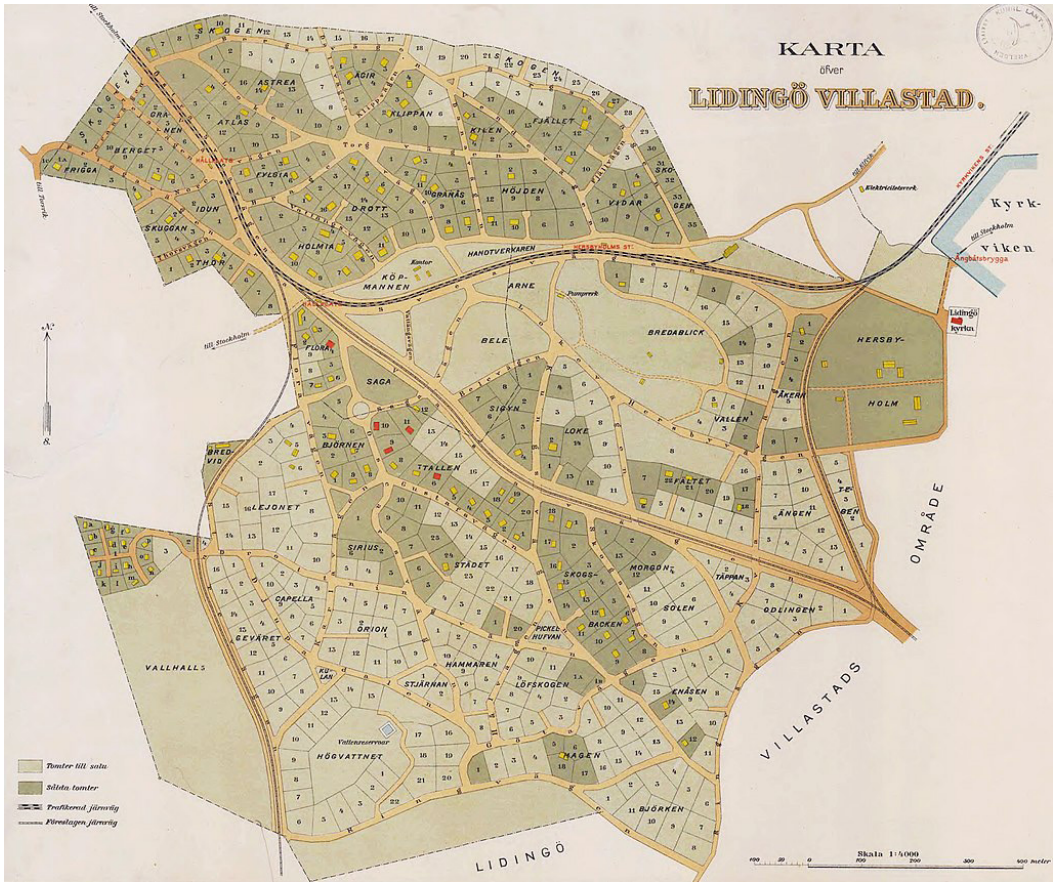
German and English experiences, influenced by the work of Raymond Unwin (1909) and by the urban planning according artistic principles proposed by Camilo Sitte (1889). The garden city ideal in Sweden in comparison to English or German examples, is more open and airy, with a higher variation of typologies. It introduces a tight perimeter of low apartment buildings that echoes medieval walls of German cities, delimiting and protecting the community with a mix of villas, row houses, and apartment buildings, all with their respective garden, in an urban scheme of traditional streets and squares. The streets are curved and adapted to the landscape. (Rådberg, 1995)

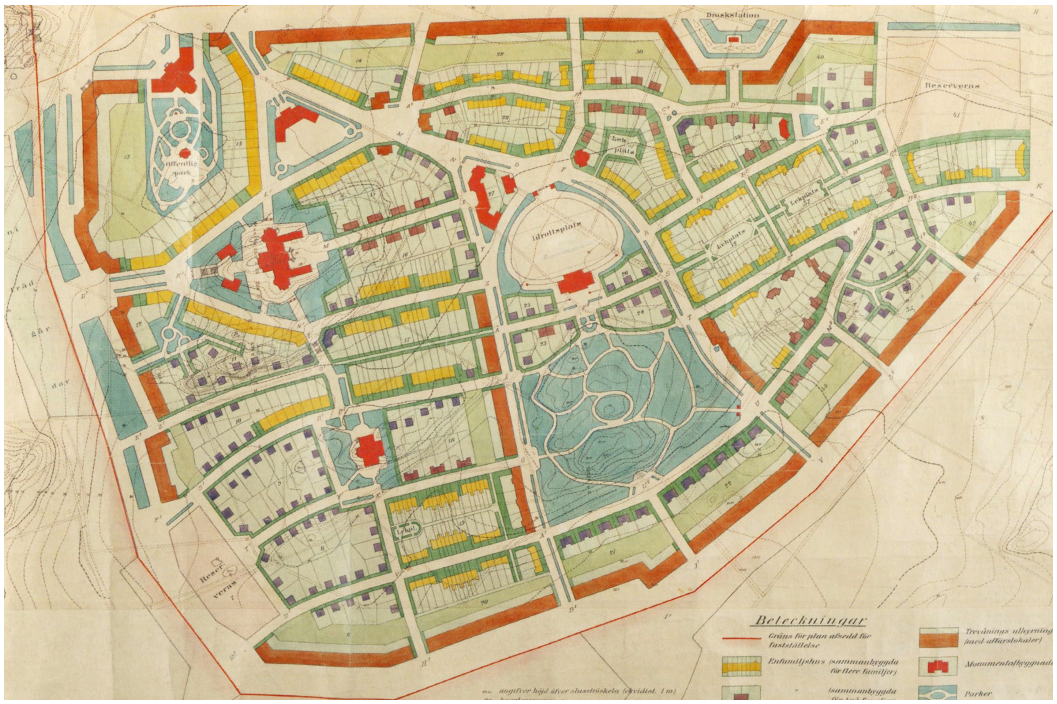
The first garden city built by the municipality in 1907 is Gamla Enskede (fig. 4.27), following the design of the architect Per Olof Halman. The predominant typology is the individual house with an own garden where the owners could cultivate. It aims to build a community and to introduce a sense of urbanity through the relation between buildings and public space, understanding the street as space for socialisation, where to meet the neighbours. With small plots, villas and row houses face the street, introducing elements of transition to articulate this relationship, such as bushes or low fences, shaping a continuous urban space, with a street network of winding roads, vistas, change of points of views, and sequences of spaces. The main typology in the original project for Gamla Enskede (fig. 4.28)

Figure 4.27

Lidingö villastad 1911 by P.O: Hallaman (above) and Cityplan of Gamla Enskede trädgårdstad as proposed by PO Hallman in 1907 (bellow).

For the last see the evolution of the project in figure 4.7





was the row house that frames the street, although in the final implementation many row houses and some apartment blocks in the perimeter where substituted by individual houses due to the demands of those moving in (fig. 4.7). It has a well defined perimeter and a central area with services such as the school, the church, the park, and the local shop that address the community. Streets for higher speeds are placed in the perimeter, while the internal continuous street network is for lower speeds. The border is emphasised by linear apartment blocks that define the limit and protect the interior.

Per Olof Hallman draw the schemes both of Gamla Enskede trädgårdstad and of Lidingö villastad. In Lidingö (fig. 4.28), of private initiative, Hallman draw a street network of romantic curved streets following the terrain. The plots are big incorporating the existing forest, it is thus less dense. The streets are not conceived as social spaces, they have narrow sidewalks, little relation of the houses with the streets, and there are no trees planted, relying in the greenery of the plots. Little space is dedicated to parks, squares or services and there is no mix of typologies including row houses or apartment buildings. Only villas of five rooms on big plots of over 1000 sqm, that sit in the middle of the plot, and do not frame the street, being separated six meters from the limit of the plot. The vegetation is respected as much as possible so the houses sit surrounded by forest (Rådberg,1995 p. 80-81). Rather than to the ideal of the community characteristic of the garden city, it is closer to an idealised ideal of the individual living in the forest.

Self construction - *självbyggeriet*. To the east of Gamla Enskede was built a second phase, which is today known now as Enskededalen (fig. 4.7). It maintains many of the characteristic of Gamla Enskede, such as small plots, the tram, and the border consolidated by a perimeter apartment buildings, with an artery road in the exterior and quite streets in the interior. Some of these apartment buildings embrace a common garden, which is accessed from the street by a tunnel in the crossing the building, a motive that will be recovered in Kv. Dalen. Beside the apartment buildings, the rest of the dwellings are individual houses that still frame the streets, the central park the that agglutinates the community, and a small square. The houses are built as part of the *egnahemrörelse* (own home movement), a public

Figure 4.29

Selfconstruction.

Above: Photo of the construction of one of the houses, where can be perceived the construction kit, Photo from the archive of Tekniska museet. Provably taken in Ölovsund around 1930.

Bellow: “Daddy! Build us a little house, so we can have a home”. Advertisement from 1934 the house in the park opposed to the cramped conditions of the inner city. By Såstugebyrån. City of Stockholm. Stockholms stads fastighetskontor)

impulse for housing that stertaed in the 1920s, and was active severall decades. Instead of building the houses, the municipality built the basic infrastructures and facilitated loans up to the 90% of the cost. An individual could buy a plot, and had access to materials and construction plans to build their own homes in their own time (fig. 4.29). This effort can be seen as first step in the standardisation of the housing production that is present in the rationalism that dominates the functionalist period, increased under paradigms of industrial production and efficiency during the record years.

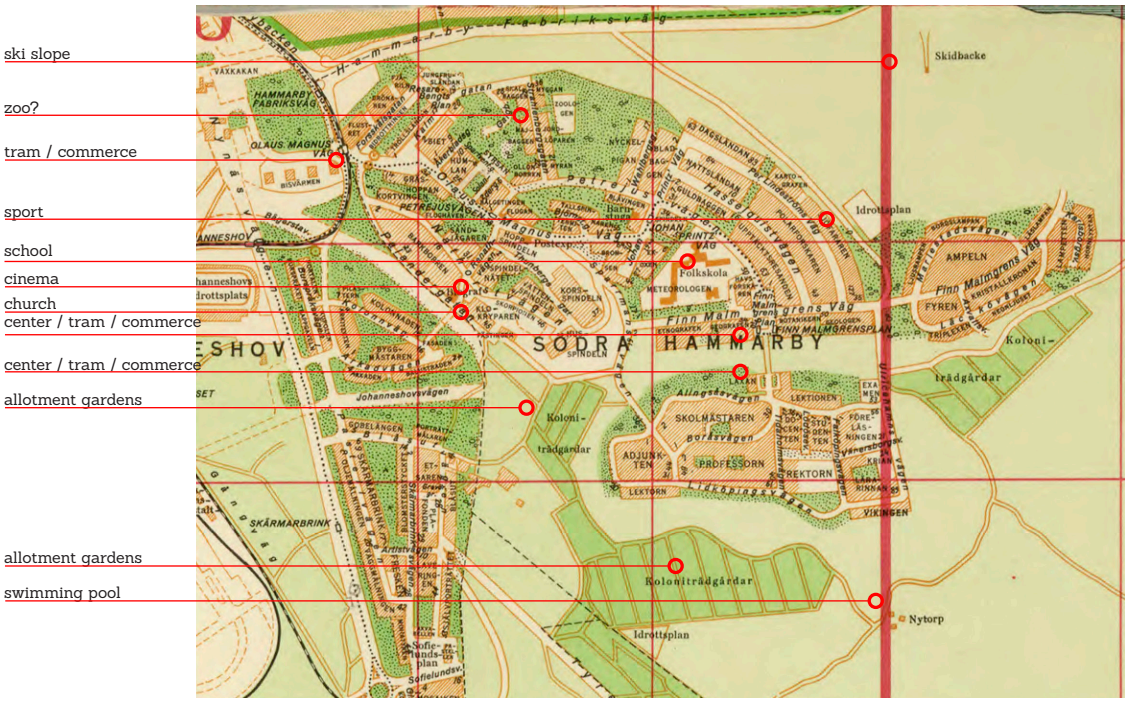
The City in the Park – Stad i Park (1930s)

One step further in the assumption of the responsibility of building affordable decent housing for the whole population is taken in the 1930s. Still keeping the aim of having access to light sun and greenery and a quiet space for families, apartments are built in linear slab typologies. The new developments from the 1930s are built in close relation to greenery and are referred to as the city in the park, as they aim to keep the idea of urbanity, reinforced by while the use of multifamily typologies.

In the 1930s concur the breakthrough of functionalism and the first majority of the Social Democrats in Stockholm parliament. Social Democrats would build the welfare state around the concept of Folkhem, (´the peoples home´) that relates the nation to a family under shared social equality and solidarity. At the same time the rationalist manifesto Acceptera claims that the new world needs to recognise the individual in the mass and harmonise both, following the formula of “private individualism and public collectivism” that according to Lucy Creagh (2011) would define social relations in Swedish welfare. The state provides with common basic needs and new services, and provides the individual with leisure and cultural development, while the home is seen as the space for self expression, totally separated from work.

Hammarbyhöjden (fig. 4.30) is an early example introducing aspects of functionalism, itwould be known as the white city (*den vita staden*) for the modernist prismatic white volumes that were a novelty at the time. However, the urban scheme does not follow a rationalist pattern of orthogonal street network with a clear order of street levels. Its

Figure 4.30
Hammarbyhöjden in 1944. Source: fragment of “1944 års karta “Stockholms stad med förstäder”, utsnitt c”. Generalstabens litografiska anstalt, Kartografiska Institutet. Stockholms stadsarkiv
It is indicated the distribution of services and common facilities.



continuous street network is closer to the garden city, it is adapted to the terrain and the landscape, generating winding streets that break the views and introduce different perspectives. Even if the typology is not composed of single family houses, the apartment buildings, to some extent, aim to have a dialogue with the street. At the same time it seeks as much contact with the surrounding forest and, unlike the garden city, it blurs the border, placing the buildings in between the trees. If in the garden city ideal, people could cultivate in their own plot, in Hammarbyhöjden are introduced collective allotment gardens. (fig. 4.31)

In Hammarbyhöjden the spirit was to build a prolongation of the city rather than an enclave. It was originally served by a tram with two stops on two different squares. One is located in the closest end to the inner city that talks about that idea of extension from the city, even if there is not a physical continuity. This tram stop disappeared when the metro came, but the square still has some commerce, but not the character of a social space. This, together with the construction of heavy traffic infrastructures beside the area, has increased nowadays the sense of disconnection from the inner-city. The second tram stop was located next to the current metro station. Initially shops and services, a church and a cinema, were distributed

Figure 4.31
The limit with the nature
Hammarbyhöjden (left). Kärrtorp (right)

along the area. Another aspect that relates it to the garden city is the presence of allotment gardens, where residents could cultivate, here not in their own garden but in common spaces dedicated to it.

Unlike the garden city as introduced in Gamla Enskede, the main traffic artery is not peripheral, it goes through the development what allows to dilute the borders to interact directly with the neighbouring natural reserve. There is a continuity in the way this street will continue into Björkhagen, Kärrtorp and Bagarmossen, crossing the areas and living the border in contact with the nature. If the garden city is referred as house in the park, Hammarbyhöjden is referred as city in the park, but could be also be called city in the forest

because rather than relying in designed gardens it embraces the existing forest,.

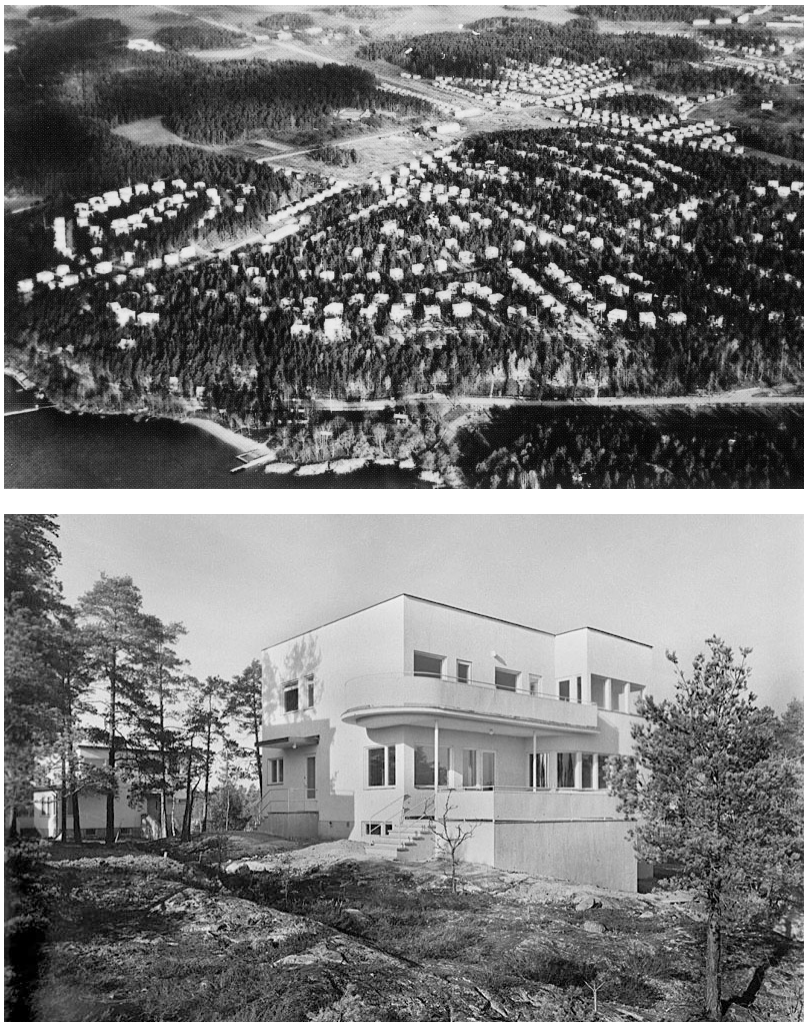
In the same period is built Södra Ängby, to the west of the city, that could be considered the last of the garden cities, which incorporates characteristics of rationalism. Characteristics that show transition into the rationalist period are the the street network that becomes more hierarchical and specialised, and the houses are built in a clear modernist style of white cubic volumes, what has made it to be called the garden city in a functionalistic style (Olofgörs, 2021), even if it has not all the characteristics of the garden city and follows the ideal of the city in the forest of the villa areas, with much more compact design. It has in common with Hammarbyhöjden that is built connected to the forest. It is not as tight and community oriented as Gamla Enskede. With bigger plots, but not as big and dispersed as the villa areas. The services are concentrated in the peripheral entry points to the area schools, sport fields and shops, tram and later on the metro. The streets do not have big sidewalks and do not have planted trees. The houses do not frame the space but have some dialogue with the streets, and grouped close to each other to enhance the community feeling (fig. 4.31).

The Slab-house in the Park - Skivhus i Park (1940s and 1950s)

During the 1940s, 1950s and early 1960s were introduced new typologies aiming to more variation and also more efficiency in the built area ratio. There is an increased detachment between buildings and the street, following a more rationalist object-centred approach. Since the first garden city, the focus moves from how the buildings shape the common space to how the buildings have optimal conditions of sun, views and car access. This is why, even sharing with Hammarbyhöjden the relation with the forest, the non-orthogonal street network and the slab-building as the basic typology, I choose to emphasise from this phase the focus in the object (slab-house in the park), instead of the whole (city in the park). Due to the introduction of different typologies such as the *punkthus* (point houses), it could have been called the object in the park (or in the forest), but I have chosen to address the still more dominant typology.

Hammarbyhöjden is in many ways a particular transition case that incorporates the new language of functionalism with the empiric-romanticism from the previous period,

Figure 4.32
Södra Ängby 1938
Above: Södra Änby from the air. Unknown photographer. Wikimedia Commons Public domain.
Bellow: newly built villain Börjesonsvägen 1. Source: Photograph unknown. Stadsmuseet i Stockholm.
Fotonummer Pose 1112 ; Fotonummer Fa 50500



which can be represented by the participation in the layout of the scheme of the romantic architect Ragnar Östberg. During the 1920s and 1930s there is a cohabitation of elements from different periods, or of different approaches to urban design, that is formalised in the first approach to modernism known as Swedish Grace, which incorporates some decoration motives from classicism in a very austere way, and also other characteristics that relate to classicism such as symmetry. Besides the articulation of the volumes characteristic of the early functionalism, that will disappear in the more rationalist codification of modernism.

During the 1940s functionalism gears towards a dry rationalist repetition. And

following this first wave of rationalism there is an attempt of humanise functionalism, that will be known as New Empircism (Andersson, Monica, 2016; Creagh, 2011; The Architectural Review, 1947 & 1948) introduced in chapter 3. The New Empricism rather than going back to the path initiated by Hammarbyhöjden, it harmonises aspects both of the expressionist-romanticism and of rationalism. Although some characteristics of non-orthogonal street networks and variation in spaces and are recovered, new projects are defined also by the introduction of the car, retail and by rationalist approaches to design that include systematisation of solutions and the recognition of the individual within the mass that spatially is reflected in the repetition of types, but where each type is treated as an individual object, not defined by its relation with other objects, but through its own relation to the sun, views and greenery. From the 1940s we see also the adoption of the centrum that aglutinates all the services and public transport, which was not as present in the original plan for Hammarbyhöjden, the introduction of the centrum comes with a more concentric structure.

Björkhagen was built in the 1940s as an extension of Hammarbyhöjden. In fact, in the records of the municipality meetings where is discussed its construction, Hammarbyhöjden is called Hammarby Norra (northern) and Björkhagen Hammarby Södra (southern) (Kommun-fullmäktigetrycket 1946). It has a non-orthogonal street network, with a main artery that crosses through the development and some cul-de-sac, but here the streets tend to be more straight and the overall scheme more concentric. The streets have smaller sidewalks and less relation to the buildings, with bigger parking areas. Now the centrum is present, with high buildings and concentrating all the services, the school, the church and the commerce, and the small square is not visible from the street, protected from the car traffic that crosses near the centrum (figs. 4.33 and 4.34).

A new typology is introduced, the *punkthus* (point house), it is square in plan and tall, and prioritizes its views, seeking fresh air and sun. Which is in line with the description by Beartiz Colomina (2019) of modern architecture as a medical device. But we also find the individualisation of the relation of the building with the surrounding as in Clarence Perry's neighbourhood unit (2020 [1929]), that has been introduced in chapter 3 as the rationalisation of the garden city. In the footnote of the example provided by Perry for the

“apartment house unit” is emphasised that the design provides with “Interesting Window Vistas, Greater Street Safety” (p. 566) (fig. 3.13).

In Kärrtorp and Bagarmossen from the 1950s we see similar characteristics, and how the car becomes even more present and a defining factor of urban design. Since the 1950s car is a decisive factor in urban design, at first seen as part of that hygienist program that gave access to a life next to the greenery. However, parking lots will increasingly occupy more space and will be introduced a clear separation between the street and the spaces of socialisation. Both housing areas have a clear centrum with all the services, the one in Kärrtorp, built in continuation of Björkhagen, has a size and a scope that aim to serve it. From the centrum stem a series of streets that expand in different directions where the residential slab-buildings are placed. Buildings are separated from the street but look to the forest, and sometimes are sometimes often are grouped to loosely enclose a green areas. The limits are still blurred and there is no perimeter traffic (figs. 4.33 and 4.34).

The Slab-house in the Parking – Skivhus i Parkering (1950s and 1960s)

We have seen how in the 1950s, is increased the importance of the car. Areas as Vällingby, discussed in chapter 3, make reference to qualities of the London New Towns connected to the garden city and a humanised modernism, characteristics present in the previous step. But also the car, that will become the core enemy of the sustainable urbanism, is introduced as a crucial element of urban development that facilitates a healthy life surrounded by fresh air and greenery in contrast with the inner-city, reinforcing the urban-suburban duality (fig. 4.35).

Between 1960 and 1975 the pace of construction is increased exponentially. Large scale developments are built further away from the city in short time, they are bigger in size and also scale of the buildings and urban spaces. Even in a bigger scale, the suburbs are built as a recognisable unit with services organised around a centrum. Slab-typologies are still predominant in multifamily housing areas that lack well defined public spaces. Now they are bigger, built with industrialised concrete elements, following efficiency.

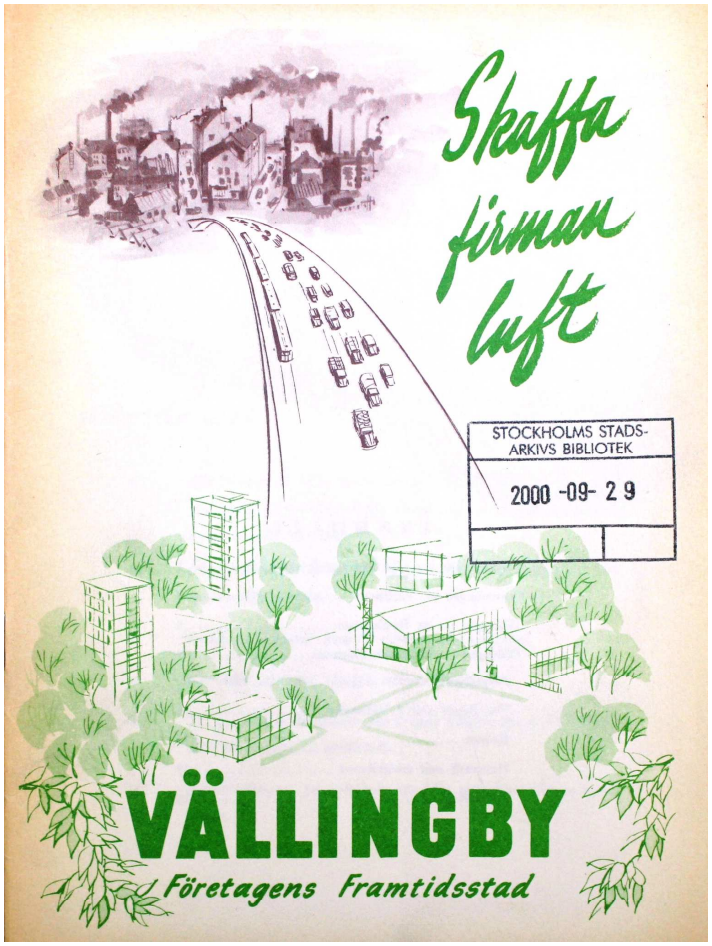
The first phase of the developments built to the south of Järva (fig. 4.36) is

Figure 4.33
Relation building-street.
Hammarbyhöjden. Björkhagen. Kärrtorp.

Figure 4.34
Above:Björkhagen Centrum . Bellow: Kärrtorp Centrum

characterised by orthogonal street scheme, efficiency, increase of construction pace, hierarchy of street types, separation of modes of transportation in different levels, and large areas dedicated to the car. They are built next to motorways, and protected by building higher buildings in that edge. These developments provide both with good access to metro and good access to the car. In a radical rationalistic systematization of the urban design, the space is less designed in detail and less articulated. It is somehow formalised by adding a series of slab-buildings defined by their relation to sun, but denying the street, with large areas dedicated to parking, and the greenery forms a separate system. Now the sequence of parallel slab-buildings instead of being built in the park become surrounded by traffic apparatus and parking areas, while leaving an alternative network of pedestrian green paths.

Figure 4.35
A brocure from Stockholms stads fastighetsnämnd (Stockholm's real estate board) inviting the companies to move to the suburb. 1952
Source Stockholms stadsarkiv SE/SSA/Biblioteket/Ncaaz Västerort/



The Parking in the Block – Parkering i Kvarter (1970s)

In the later mass-housing period of functionalism it is already questioned the loss of well defined urban spaces, shaped by the buildings. The slab typologies start to be grouped to form internal spaces, loosely forming blocks, even though they are still occupied by parking lots to a large extent.

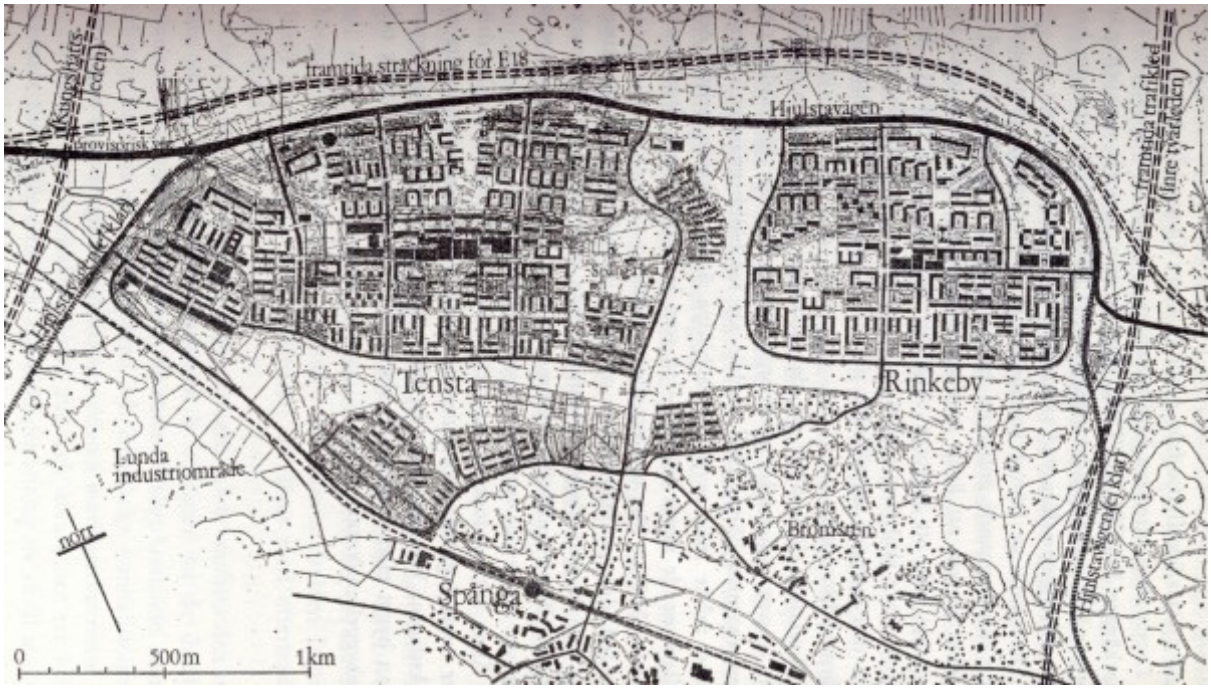
In the second phase of Nörra Järva, built during the early 1970s, Kista, Husby and Akalla follow many of the characteristics found in Södra Järva: well delimited large scale development with predominant concrete volumes, separation of modes of transportation and a central spine with services. It is introduced a large scale shopping centre and a new industrial area will be built next to it. Car traffic is still a leading factor in the design. As discussed in chapter 2, architects and planners within Stockholm municipality start to re-introduce

Figure 4.36

Rinkeby-Tensta

Above: A vision for a new suburb in Södra Järva. Published in the newspaper Aftonbladet 13 january 1965. Artist: Nils Stödberg. Source: Stockholms stadsarkiv SE/SSA/2684/F 1/F 1 a/5.

Bellow: the general plan for Rinkeby-Tensta



the interest in the human scale and in the urban space as a space of socialisation. There is a predominance of the car and the parking areas on surface, but now we find smaller buildings, more variation in size, and they start to be grouped to shape the space, with a common interior and public streets in the outside. In this stage the space that the buildings enclose is still predominantly used for parking in what I am calling the parking in the block.

The Park in the Block – Park i Kvarter (1980s)

From the 1970s are questioned the predominance car and the lack of a well defined urban space. The block built in the four sides aims to recover the street as a space of socialisation, while the contact with the green is recovered by introducing a big garden inside the block. However, I have argued that the formation of the suburban block is less a reintroduction of the traditional perimeter block than a reconfiguration of the slab-typologies, regrouped in the four sides of a block in order to define a street scape in the outer side and contain the green park in the inside. Following the evolution that started in Järva. Instead of building slab-typologies inside the forest or the park, the park will be enclosed by them, in what I am calling 'the park in the block'.

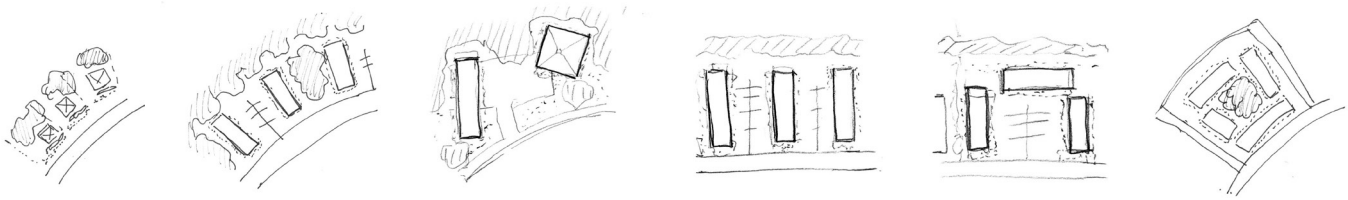
In the late 1970s and 1980s, Kv. Dalen and Skarpnäck, recover the grid as the basic scheme to emphasise the street as social space. The basic typology is still the linear block with one face more domestic and facing greenery and another face more public and facing the street. In Kv. Dalen the slab-building bends on itself embracing the garden. This typology reacts to the experiences of the 1940s and 1950s, while connects with the garden city aiming to recover the relation between building and street. It looks back to the garden city aiming recovering the street as part of the spaces where the community can meet, and not circumscribe it to delimit specific pre-established community spaces. The whole area is conceived as one community. The individual garden is now the shared garden of the block that becomes a transition between the domestic and public, that is open to be crossed by all. The block grouped around the garden, comes with the careful design of the spaces next to the buildings and the different transitions, recovering the territoriality that was lost in the rationalist period when was not clear to who belonged each space, where started the public

and the private. In the evolution in Skarpnäck and Hammarby Sjöstad, rather than one slab bending over it self, the block will be formalised after an orthogonal street layout, and different slab-buildings placed in the sides. In time more commerce is introduced in the bottom floors. Furthermore, in Hammarby Sjöstad the distribution of commerce and services along the whole development, the lack of a clear built border (the borders are the water and the highway), less unity in the design of the blocks, higher privatization of the gardens that do not invite to be crossed, and the absence of a community centre, entails that the idea of the urban area built as a community is substituted by a higher individualisation and a more urban conception of the space, that maintains the community within the block and that comes with more anonymity in the public space.

Summary

During the 1910s and 1920s urbanism focused in single family houses surrounded by greenery, also denominated the house in the park (*hus i park*). In the garden city (*trädgårdstad*) the single family houses frame the space, and generate varied urban space with changes of vistas and sequences of spaces. Multifamily housing associated to white rendered prismatic slab-typologies of functionalism were introduced in the 1930s. Hammarbyhöjden emphasises its connection to the city, by the introduction of multifamily housing and a street structure that crossing through the area, it was known as the city in the park (*stad i park*), which differentiates it from the contrasts with the slab-house in the park (*skivhus i park*) that has more focus in the object and less in the street shaped by the disposition of the buildings (*stadsrum*). Since the 1950s, urban design became dominated by efficiency for the car traffic, by mid 1960s the urban space is occupied by parking lots and road streets, while the slab-building is still the main typology in what I am calling the slab in the parking (*skivhus i parkering*). During the 1970s we have seen how in Rinkeby-Kista we see the slab-buildings aim to be grouped to shape the urban space and more structured blocks, but the space generated is still occupied by the car to a large extent, in a typology that I propose to call the parking in the block (*parkering i kvarter).* Finally, the block will aim to recover the garden and embrace it to form the park in the block (*park i kvarter*).

The cosntruction of the suburb in the 20th century



House in the park *Hus i park*	City in the park *Stad i park*	Slab-house in the park *Skivhus i park*	Slab-house in the parking *Skivhus i parkering*	Slab-house in the block *Kvarter i parkering*	Park in the block *Park i kvarter*
Hygienism Community	Multifamily	Variation Optimisation	Car Mass production	'Cityness'	Suburban block Recover park and street

Figure 4.34

Chapter 5

Proposing: the Suburban Regularisation of the Consolidated Nodes

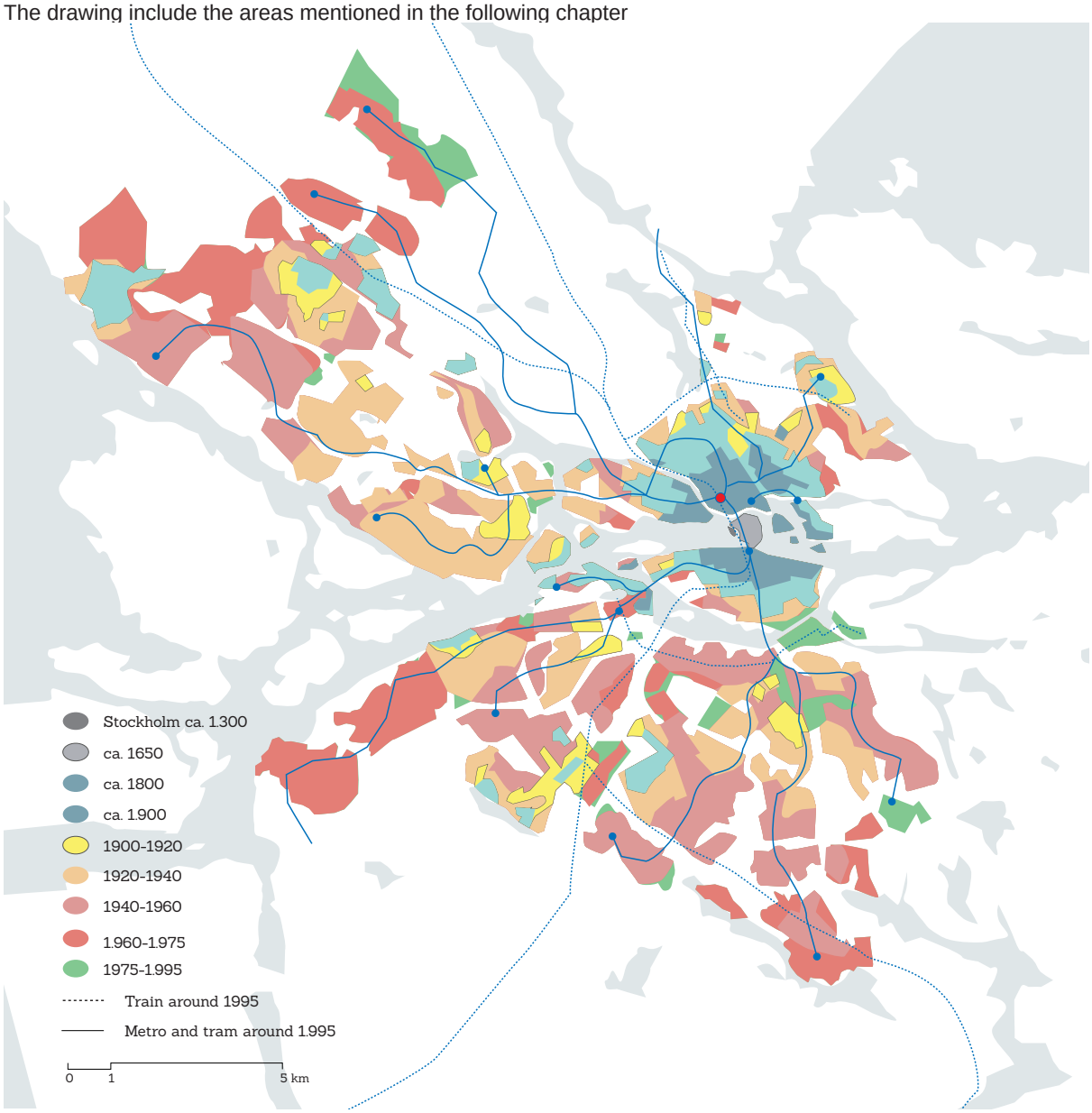
The Suburbs and the Construction of the Web of Towns of the Bureaucratic and Centralised State 1620-1995

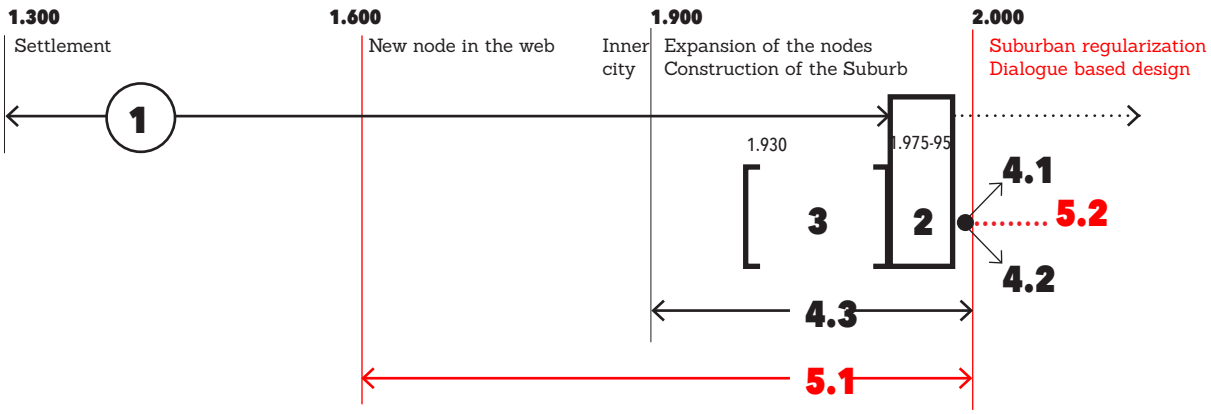
Chapter 3 introduces different approaches to urban design, and chapter 4 proposes an account of the construction of the suburb as a process that stats and ends within the 20th century, which corresponds to the moment of expansion of the urban nodes over the territory introduced in chapter 1. Chapter 5 takes a larger perspective and looks to the whole period of formation, consolidation and expansion of those nodes as part of the construction of the network of towns by the bureaucratic and centralised state that expands between 17th and 20th century (fig. 5.1). This way Hammarby Sjöstad falls in a moment of change of paradigm, not only for being at the end of the process of construction of the suburb, but, also at the end of the construction of the urban structures product of the bureaucratic and centralised state. Here is first proposed a narrative for this period tracing back driving forces, trends introduced previously, to then propose a way to read the suburb as a distinct structure product of this process. The way we read and interpret the city is considered the first step of urban design, in order to project the existing places and processes into the design of the sustainable city, which is argued through the thesis shall not start from the proposition of general models but from the intervention in the existing and how design is conceived and approached. The epilogue will introduce one possible way to address this based on practice.

Figure 5.1

Stockholm functionalism 1400- 1995

The drawing include the areas mentioned in the following chapter





5.1. Tracing Back Approaches To Urban Design: Tying Together Trends, Paths and Driving Forces

During the 17th century, beside the bureaucratic and centralised state, capitalism takes form and emerges as an important driving force in shaping cities. Throughout the period it gains importance in the balance of forces, first harmonised with the bureaucratic and centralised state in the Nation-State, then, as has been argued, becoming liberalisation an crucial force in how urbanism gets formalised. Sustainability gets in conflict with both, centralisation when overlooks the perspective action and of those using the city, bureacuracy when applies solutions disregarding the specific context, and a capitalistic logic of extraction and profit maximisation rooted in the idea of improvement. The proposed narrative aims to trace the evolution of these forces in relation to the paths in which design can be approached.

20th Century Urban Utopias in Relation to Political Structures

Urbanism of the first half of the 20th century was to a large extent a reaction to overcrowded and polluted industrial urban cores and to housing scarcity. This lead to the proposition of alternative urban models in opposition to the traditional dense city. Robert Fishman (1982) in *Urban Utopias in the Twentieth Century* considers that three of these proposals can be considered truly urban utopias conceived as a “complete alternative societies” (p. 7) to be implemented at once. The three utopias studied by Fishman are Ebenezer Howard’s Garden City, Frank Lloyd Wright’s Broadacre City, and Le Corbusier’s Ville Radieuse.

Even if they were not fully implemented they had a big influence in the urbanism of the century. As in the original *Utopia* by Thomas More (1978), first published in 1516, they do not only present a comprehensive design of new cities, they also entail a plan for social reform. They as well lack of context, as they are models to be universally applied, conceived as a unitary definitive solution.

The garden city is a model of urban growth based in the construction of a series of new cities of around 30.000 people. Of the three, it is the more diagrammatic, as it includes a general scheme but not a specific architectural spacial design. The aim for a profound social

transformation is reflected in the title of the book from 1898 were Howard presented his ideas for the first time, *To-morrow: A Peaceful Path to Real Reform*. In the second edition the title was changed to *Garden Cities of To-morrow* (1965 [1902]). With a socialist ground and a strong believe in the community, the ideas presented in the book can be read as an urban model and as a project of social reform, that also provides with an organisation model and an economic plan for how this can be achieved. It does not rely on the action of the government but on the private initiative of individuals that are associated in a collective enterprise, relying in mechanisms of capitalism, as it depends on the increase of the value of the land after it is developed. Howard's book can be read to a large extent as a business plan, where he believes that the excesses of capitalist speculation can be controlled, he trusts that his model for the association and the good will of those taking part will regulate speculation.

Le Corbusier presented the *Contemporary City*, his first plan for an ideal city for three million people, in 1922 in an exhibition on urbanism in the *Salon d'Automen* in Paris.. The Plan Voisin for Paris, from 1925, applies the same ideas in a specific location. And, in 1935, he published the "Ville Radieuse, which retained the most important principles of the Contemporary City: the juxtaposition of a collective realm of order and administration with an individualistic realm of family life and participation" (Fishman, p.226) that reminds us the articulation of the individual within the mass introduced in *Acceptera*, the Swedish functionalist manifesto discussed in previous chapters. The *Ville Radieuse* contains a highly organised and hierarchical urban and social project, with hierarchy of spaces, well differentiated orders of street types and buildings, all clearly defined and rationally distributed in an orthogonal pattern. The buildings, even repetitive in the form, appear as individualised objects surrounded by air and greenery, neglecting the street. In the early formulations even groups of people and social classes are allocated in specific buildings, differentiated by their height and location, while the construction of high rise repetitive buildings construction relies in industrialisation and mass-production. Le Corbusier had grown in a region of skilled artisans in Switzerland, he had lamented the disappearance of that world of crafts at the turn of the century, to then accept the new reality of the machine age. (Fishman, chapter 19; see also Banham, section 4).

Le Corbusier's model is very much reliant in bureaucratic and centralised structures that mirror the French state. Le Corbusier mirrored himself in Jean-Baptitste Colbert "the heroic, all-powerful administrator: rational, indefatigable, authoritative" (Fishman, p.219), Colbert was behind the organisation of the highly bureaucratic and centralised French state in the 17th century. The formalisation of the Ville Radieuse had a strong connection to French rationalism and Cartesian thinking, that will also influence the rationalist city of repetitive blocks that denies the street.

The Broadacre City was developed in the 1920s and was based in Wright's own previous experience with the Usonian communities. As Le Corbusier, Frank Lloyd Wright did not only present his utopia in the form of a book, he produced extensive drawings and plans and detailed large scale three dimensional models of the vision, that evolved through the years. It was first published as a book in 1932 in *The Disappearing City*, and saw its last formulation in 1958 in the *Living city*. Wright proposed from the scratch a new decentralised urban structure that would substitute the old cities. As Le Corbusier, he was lamenting a world that he thought was disappearing, only in his case, the traditional city did never cease to exist. If Le Corbusier aimed to erase the old city, Wright provided an alternative that expanded over the territory, disconnected from the urban cores. The Broadacre city aims to harmonise the rural and the urban, the connection of the individual with the wild and with the civilised. It is highly decentralised and expands over a flat territory, providing each individual a house, one acre of land and the access to the car and to an extensive road system that connects to the facilities and services of civilization distributed in the territory. Influenced among others Henry Geroge by Waldo Emerson Frank Lloyd Wright's proposal is connected to fordism, the liberal evolution of capitalism in the USA, and to individualism, that in the more extreme version will be expressed in the sprawl city of the car and the villa.

Capitalism, that shapes the Garden City, and the bureaucratic centralised state, that inspires the Ville Radieuse, have been introduced in chapter 1 as driving forces leading urban development. The individualism inherent to the Broadacre City is another driving force influencing urban development during the 20th century. It becomes more apparent, but not

only as we see, in the city of the car villa and the urban sprawl, connected in many ways to the Broadacre city, which in this thesis, focused in multifamily suburbs, is not addressed. The other driving force introduced in chapter 1, aggregation, did not produce any utopia in the way Fishman defines them. Somehow, it seems natural that the forces of aggregation did not produce holistic urban utopias, for these forces do not rely in a plan that predefines the urban artefact, from its social arrangement to its physical disposition, product of one mind or one set of thought to be implemented at once. Instead, they are the result of the sum of actions and perspectives, articulated on place. In previous chapters, aggregation has been connected to the pre-modern city in central Europe that precedes the formation of the centralised Nation State, as well as to the first formulation of modernism, and functionalism as a rich and varied movement. Indeed, the formulation of functionalism occurs in the same geographical area dominated by pre-modern independent cities, the central part of Europe that goes from a Vienna that had seen already the dismemberment of the Austro-Hungarian empire to the Netherlands through the German cities, states and principalities. In pre-modern times these cities had a high level of independence, and influence in the development of trade and culture, being unified and centralised after the French Revolution (Praak, 2018). Early modern architecture appears in the vector that goes from the Vienna of Otto Wagner to the Amsterdam of Berlage through Beherns in Germany. Functionalism, modernism and rationalism are codified in Germany with a close relation to the Netherlands.

Processes of aggregation foster peer competition and collaboration when exist voices of different characteristics that enrich debate. According to Bletter (1996, pp. 15-16) this evolution was favoured by the fragmented varied cultural milieu of “exceptionally competitive and pluralistic educational system, established in the 19th century” the difference in Germany is not in the quality, but in the structural variation determined by the country’s history, as opposed to more centralised structures that tend to uniformity and standardisation, such as the French Academié “centralised to preempt the power of the guilds”. She connects the guilds that were not wiped out by a centralised power in Germany to the early Bauhaus that vacillated between to a lodge for artisans and elite academy, facing the paradox of turning them into designers for industry.

Paths for Urban Design in the 19th Century in Relation to Ways to Understand the World

Francoise Choay (1969), in The Modern City: Planning the 19th Century, described two main responses to the problematic of the industrial city. One is the urban regularisation of the existing city. The other, the construction of new communities outside the city mainly around industries, produced following socialism ideas of improving the life of the workers and their families. Choay divides the construction of new communities in three main approaches that can be also ascribed geographically, all of them formed by towns built around industrial areas with an aim for social transformation. The progressive model that produced utopian communities is connected to the work of Robert Owen (Owenitte towns from 1817), but is mostly developed in France by Charles Fourier (Phalanstère 1847), or J. Baptiste Godin (Familistère 1871), who proposed highly structured social arrangements and geometric design that precede the work of Le Corbusier. In England, the cultural model produced suburban villages, very connected to a romantic reading of medieval towns and guild organisations. It is rooted in the arts and crafts and the work of John Ruskin and William Morris. Camilo Sitte and Ebenezer Howard are part of this model, that will evolve into the garden city movement, which, influenced by the work of Unwin and Parker will define an urban environment of winding streets and pintoresque views. At last, Choay (p. 29-30) describes the evolution of the German workers towns as a middle way between the two, as they incorporate the geometry in layout but also the human scale and perception of the space.

Furthermore, we can trace back the French and English spatial definition of these communities to the design of gardens in the 18th century. The plan of Versailles from 1746 near Paris is geometric, with straight lines and symmetry, a clear hierarchy and focus in the central figure of the palace that represents the centralised and bureaucratic state, personalised in this case by the figure of the king. The Kew Gardens from 1759, near London, reproduce idealised nature, inspired in Italian renaissance painting and idealised readings of classic authors. Curved forms, surprise, introduction of oriental motifs. Both gardens represent ways to understand the world and philosophical trends of the time (p. 8), the French rationalism represented by René Descartes (1596-1650) and the English empiricism of, among others,

John Locke (1632-1794). Still, we can consider the evolution of German worker towns as a pragmatic middle way that incorporates into the geometrical order of the French utopian communities the sensory experience, of the English urban villages, in a similar way that the philosophy of the German Inmanuel Kant (1724-1804) “synthesized early modern rationalism and empiricism” (Stanford Encyclopedia of Philosophy, 2024).

This position of Germany as the middle ground that harmonises different tendencies will continue during the 20th century connected to the codification of modernism. The Deutsche Werkwund, developed from the expressionist movement rooted in the English Free architecture, harmonised the arts and crafts with the introduction of order and standardization present in French rationalism (Banham, pp 72-768) and the Bauhaus continued to struggled to incorporate the artisan craft in the industrial design (Bletter, pp. 15-16). Adolf Behne (1923) in his Modern Functional Building saw Germany positioned in-between the East and the West, with the capacity integrating them (pp. 142-45). It has been already discussed how it runs through the whole century a tension between French rationalism associated to the bureaucratic centralised state, and the English romantic-empiricism associated to the development of capitalism, with a German middle way that aims to harmonise both, representing processes of aggregation.

A fourth path, individualism, even already present in the evolution of urbanism as a scientific an rational subject in Europe becomes apparent in the USA, where mirrors the evolution of capitalism into more liberal forms. Louise Sullivan’s *form follows function*, that would be later associated generically to a narrow understanding of functionalsim, shall be rather connected to the pragmatic realism of the Chicago School and to utilitarian ethics than to the early 20th century Central European functionalist ideas (Bletter, 1996, p. 11), discussed in chapter 3, including how in USA, the neighbourhood unit, transformed the garden city through the lens of individualism and utilitarianism, and how the International Style promoted by Philip Johnson and Henry-Rusell Hitchcock intensified the object-centred approach to architecture. In this line, the garden city, in its re-interpretation through the neighbourhood unit and Radburn housing development, becomes more individualistic and

utilitarian, detaching the individual house from the public space. Following the specialisation of the space, the spaces for the community are circumscribed to those specifically assigned for that purpose, instead of considering all the urban space as a continuum.

Driving Forces in Relation to the Paths

Rationalism is manifested in the design through geometrical order, symmetry, axiality and a clear specialisation of street types and functions, making visible the hierarchy of a systematic structure, making evident and present the order, the same way the centralised bureaucratic state is visible and present. Less apparent is the connection of capitalism with English empiricism and the English garden. Capitalism does not make evident its structure or hierarchy, of who or what institutions are ruling, it rather hides itself behind the idea of an invisible hand or self-regulated markets.

Howard's Garden City relies in capitalist mechanisms, and he proposed a diagrammatic structure but he did not proposed a specific spacial definition, form or style. However, the subsequent implementation of the garden city is connected to British empiricism, which results in an urbanism of traditional houses and a urban space of small, with small scale spaces and winding street. In the evolution of the garden city, the connection to medieval or traditional forms is not connected to the reproduction of the social relations and ways of life behind those forms. The picturesque British garden had introduced the sensory experience, an organic design, and elements from other cultures. Ellen Meiksins Wood (2017) connects the origins of capitalism to empiricism through two core concepts, the idea of improvement developed by John Locke, and how it went by hand with the transformation of the landscape of the countryside through the enclosure of communal land, and the idea of relating to the world through perception that will be translated to the empiricist landscape. She goes further in the connection between capitalism and a design of the landscape that aims to reproduce nature, hiding the hand behind, the design the same way capitalism refers to the invisible hand that rules economy.

> What were the characteristic cultural and ideological expressions of English capitalism in the same period? Not Cartesian rationalism and rational planning but the 'invisble hand' of classical political economy and the philosophy of British empiricism. Not the formal garden of Versailles but the irregular, apparently unplanned, 'natural' landscape garden. Even the English state that promoted the early rise of capitalism was far less 'rational' in Weberian terms than was the bureaucratic state of the French ancient regime; and the English legal system based in the common law is to this day less 'rational' than the Napoleonic code that followed the French revolution, or other continental systems based on Roman law. (p. 188)

By now, we can trace back in time those different paths within functionalism that were introduced in chapter 3, and put them in relation to a specific geographical area, to driving forces shaping the space, and to ways to understand the world. First, rationalism is connected to French rationalism represented by Descartes, its strict geometry and hierarchy reflects the order of the bureaucratic centralised sate and follows a tradition that can be traced back to Versailles and that continues in the academicism of N.L Durand, the industrial city of Tony Garnier and the work of Le Corbusier. Second, romanticism is associated to the picturesque British Empiricism, both reflected in the re organisation of the British landscape in large estates and in the landscape design of the gardens. It aims to reproduce an idealised view of the nature, and to make invisible the hand of the man in shaping the landscape. The romantic-empiricist design hides the order, the same way the invisible hand regulates the capitalist market. Stylistically it builds on an imagery of traditional villages and medieval forms connected to a the arts and crafts, whose reflection on medieval production forms and organisations will not be dominant, but formally will influence the codification of the garden city in the work of Raymond Unwin. Third, the German middle way aims to harmonise the rational and the empiric paths, what is also present in the philosophy of Kant. The arts & crafts integrated the means of production and the design, still apparent in the commitment to crafts of the Deutsche Werkbund, that will be formalised in an expressionism that, following Behne, in architecture represent a process of aggregation of decisions and

Figure 5.2
Geographical distribution of rends

FRANCE	GERMANY/DUTCH	ENGLAND	USA
Descartes	Kant	Locke	Waldo Emerson
French garden - Versailles	German garden	English garden – Kew gardens	Central park
Bureaucratic centralized State	Processes of aggregation	Capitalism	Liberalism
Rationalism	Middle ground	Empiricism	Individualism
Academicism	Werkbund	Arts and crafts	Fordism
Utopian communities Regularisation	Workers town Camilo Sitte	Suburban village Garden city 1898 Howard	Neighbourhood Unit
Cité Industrielle	German garden city	English garden city - Unwin	Radburn
Rationalism	Expressionism	Romanticism	Utilitarianism?
1922 Ville Contemporaine	Dutch Elementarism		1932 'The Disappearing City'
1928 Modernism CIAM			1932 International Style
1933 Athens Charter		New Towns	1958 Living City
INFLUENCES IN THE STOCKHOLM THREADS			
Structuralism	New Empiricism	ABC City	SCAFT
Postmodernism	Social Functionalism		

perspectives, following specific needs that define the resultant form. In the evolution of the Bauhaus we see clearly the evolution from the arts and crafts approach inherited from the Werkbund into the introduction of industrial materials and processes. Harmonisation between Academicism, Futurism and expressionism is also present in Dutch Elementarism. Processes of aggregation characterised the structure of Dutch and German pre-modern cities. Finally, he individualism of the Broadacre city of Frank Lloyd Wright is influenced by Waldo Emerson and fordism (Fishman, 1982) and Sullivan's utilitarian understanding of functionalism. British parliamentarism is interpreted in a more liberal way in the USA, the same garden city is reinterpreted in a more liberal and individualist way in the neighbourhood unit.

In figure 5.2 have been listed these influences in relation to the four paths or approaches to design. Note that every classification is a point of departure, it is not complete and neither can explain the problematic in its totality. It serves to organise the concepts introduced, and to start a discussion rather than settling the question

Cities versus communities

The role of Germany and the central part of Europe that follows the Rhine river to the Netherlands mediating and canalising ideas and trends has been described in chapter 1, which is connected to a central region in Europe of fragmented polities surrounded by established centralised states. Peer-polity interaction (Renfrew, 2009), describes how polities of similar range, interact in a dynamic milieu of forces of aggregation that favours, competition, collaboration, innovation and dissemination of ideas. This role of mediation and canalisation of ideas will change with the consolidation of the Nation State in the 19th century, which agglutinates the forces of capitalism and the bureaucratic and centralised state, within this structure, the centres of innovation will move to the industrialised capitals of Europe (see figures 1.17 and 1.19).

Both pre-modern Germany and the Netherlands were characterised by city-states formed by the aggregation of different actors. Civic action of the pre-modern city was exercised in formal and informal ways in matters of governance, welfare, defence, economic association through the guilds, but also through civic engagement in many aspects of daily live. The formations of modern centralised states that arose after the French Revolution and the Napolenic Wars, that, according to Maarten Prak (2018), even though they brought democratic parliamentarism in a state level, reduced the level of direct influence of people in the city. In the Nation State citizenship is connected to the state rather than to the city.

The urbanism of the 20th century is characterised by zoning and separation of functions, which is connected to the 18th century scientific rationalisation, but also to capitalist efficiency and specialisation of labour. This way, suburbs are specialised in housing and family life, that emphasises the building of social communities that aim to reinforce the bonds between neighbours, that, since the first conceptualisation of the neighbourhood unit aim to have uniformity to enhance those bonds.

This idea of community is different from the idea of citizenship in the pre-modern sense exposed by Prak, where there was a continuous negotiation between groups physically close to each other. In the social community is reduced the friction between groups, that,

in chapter 2, has been discussed as a characteristic of urbanity. In the social community are organised local needs and concerns, it is formed a network of support and bonds between individuals, but matters of governance or economic development are transferred to institutions where participation is articulated through voting representatives. In contrast, the representatives of the different estates in the governance of the pre-modern city were members from each neighbourhood, that where closer to decision making and daily engaged in care, politics, economic and urban matters.

The Neighbourhood versus the Neighbourhood Unit

The evolution of functionalism in Sweden moving away from monotony of straight streets and repetitive buildings, incorporating from the old towns perception and sequential spaces, was influenced by Lewis Mumford, who popularised Perry´s neighbourhood unit, and whose book The Culture of Cities from 1938 was translated into Swedish in 1942. Inspired by European medieval towns divided in neighbourhoods, rather than a polynuclear city of satellite towns, Mumford proposed a mononuclear city of connected units (Creagh, 2011).

In another text by Mumford (1954) we find a somehow paradoxical interpretation of the idea of a neighbourhood that makes a translation from the qualities of the medieval neighbourhood into the neighbourhood unit. Mumford defends the medieval disposition of neighbourhoods, placed next to each other making a complex whole. The neighbourhood unit keeps the homogeneity but with two clear differences. First the bonds of the unit are no longer based in the occupation and economic activity of the neighbours, but in the cultural and social background. Second, the unit has no physical continuity with other units, avoiding friction between social groups. The same distinction I made between urban and suburban space, and between the urban and the suburban block, can be applied to the neighbourhood and the neighbourhood unit. Corresponding the first to urban qualities and the second to suburban qualities, understanding both as very different entities that form the overall city, each with its own characteristics, structure, and internal logic. In the urban core consolidated in 1900, neighbourhoods are still in direct continuity with each other, they overlap, and interact directly with each other to form the richness and complexity of the town or city.

The identity of the neighbourhood unit is based in aesthetics and the spacial configuration, focused in residential functions and the family as the centre of the community. The space of socialisation is not the continuous urban space of streets and squares where spontaneous or unplanned meetings occur. In the medieval town different classes were distanced few minutes walking from each other and could meet in a daily basis. In the unit, exchange occurs in predefined spaces designed for the community, while housing is protected from noise and disturbances.

The old neighbourhoods do not have necessarily a sharp defined border, the transition between them can be soft, while in the neighbourhood unit, as originally formulated, goes by hand with car and safety concerns, that play an important role in the definition of clear boundaries and transitions. Following both the garden city and the neighbourhood unit a designed based in perception, the focus of the perception moves from the collective space to the individual space of the house and the garden. Buildings are not grouped to shape the common space, instead they are disposed to obtain best relation to greenery, sun and access to car and to pedestrian core.

This narrative does not mean to discard the values of the community, it rather aims to describe the differences with previous values of citizenship as a first step to propose new ways to define citizenship that build on the existing qualities of the community and not against them.

The Surrender of Urbanism as an Agent of Social Transformation

Fishman (p. 80), in discussing the transition from the ideas of Howard to the actual implementation of the first garden city in Letchworth, that Howard promoted and that was designed by Parker and Unwin, presents the idea that planners, since that very first moment, renounced to the role of urbanism as a means of social reform. In a pragmatic spirit, in order to succeed in building the first garden city, Howard and his associates had to compromise in many of the social aspects. Those who came after him focused more and more in formal and spacial aspects, loosing its commitment to social chane, while compromising with the speculative forces of capitalism.

The second surrender that we can trace through the evolution of the garden city, is the surrender to the car that crystallises in Radburn, and in the formulation of Perryu's neighbourhood unit. For Mehaffy, Prota and Romice (2015) the neighbourhood unit creates a system based on community but also in which segregation is embedded. Traffic efficiency as a leading principle of urbanism has remained uncontested since then.

Before 20th century the growth of cities entailed the assimilation of roads into streets once they had been absorbed by the city, see in Stockholm those urban arteries with the sufix -väg that means path or road and were the old roads leaving the city (chapter 1). In order to create spaces safe to move around while keeping the efficiency of car movement is created a system of thoroughfares for fast traffic that become barriers in the territory, at the same time that define pedestrian friendly islands free of traffic (Koch, 2021).

In the context of Sweden, we can describe a third surrender of urban planning, in the 1980s connected to a reformulation of planning. Helena Mattson (2016), describes the proposals of feminist groups such as BiG (Bo i Gemenskap – living together) as progressive initiatives proposing alter alternative forms of inhabitation. Somehow she opposes them to a postmodernism that was focused in the formal arrangement of the objects. For her, there are two trajectories that around 1980 contested functionalism. "The first stresses formal expressions – like pastiche, play with historical elements, individualized forms – while the other focuses on social organizations, democratic processes and labour conditions" (p.124). This division, where official planning renounced to incorporate social aspects, and social movements dismiss the physical environment, to some extent opposes social aspects and spacial aspects.

Although, from my point of view, they should not be necessarily opposed. Rather than a matter of one or another, the question should be how they are articulated. I have discussed that it is important how the space is arranged to promote or hinder social relations, and how the overall structure of the city defines the role of each area. Also, that not all the production of the 1980s falls into postmodernist "pastiches", some aim to articulate the space from the perspective of the user.

From Mechanism Thinking of the 17th Century to the End of History of Late 20th Century

The process of construction of the suburb has been circumscribed to the 20th century as a moment of expansion of the urban nodes over their own limits, a process that follows the consolidation of the nodes around 1900. One deals with growth experimented by the node until that moment, the other with the growth after that moment. Both are based in the nodes built in the 17th century. The same way hygienism can be situated in the origin of the construction of the suburb and used to characterise the whole period, mechanism thinking can be applied to the larger period of construction, consolidation and expansion of the nodes hat runs between ca. 1650 and 1995 has as unifying element mechanism thinking.

A mindset connected to mechanism thinking, the scientific revolution, rationalism and the Enlightenment, introduce the idea that we can read and learn how nature and society function the same way we can understand the mechanism of a clock, what goes by hand with the production of models and spread of best practices, that characterised production of urban models since 17th century, that aim to control all the elements of design and how people relate to them.

Some of the characteristics attributed to a rationalist functionalism based in order, efficiency and production are rather to be found in scientific revolution and rationalist thinking of the 18th century. Cartesian mathematical control appear in Versailles and in the Industrial City of Tony Garnier. Efficiency and extraction of value are embedded in the idea of improvement. Swedish Urbanism of the 17th century was inspired in ideal cities of the Italian Renaissance and Dutch Neoclassicism. Since then, the city is conceived as a sequence of models built next to each other. This trend is most noticeable from around 1900, when cities start to expand beyond the urban limits in what we can recognise as suburbia (*förorte*r in Swedish: the areas built beyond or next to the town) and we can recognise how in each decade is defined a new urban model. Each new model looks to the past and aims to correct the mistakes of the previous, conceived under the believe that it can be designed a fully functioning (and static) model of city to be replicated.

Environmental, economic and digital crises close to the end of the 20th century questioned this perception of control, and raised awareness of vulnerability, change and uncertainty, opening the way to sustainable and resilience thinking. Nevertheless, even the first sustainable city is rooted in the same idea of producing a model that understands how the city works and solves it (see Hammarby and the Hammarby model). Therefore in this thesis is proposed a reading of the construction of the city that aims to describe not unitary models but to explore parallel threads that get intertwined in different ways in different moments, paths for design approaches and driving forces that have shaped cities. The recognition of such driving forces does not aim to replicate them in a deterministic way, but to consciously integrate in the design process their effect, either to prevent or enhance them.

We can now update the diagram of driving forces depicted in figure 1.20 as shown in figure 5.3. Following are explored and proposed ways to read the city and to approach design that allow to incorporate the knowledge of the past and to remain open for future transformation. Sustainability is not to be approached through models or solutions but through principles, the way we approach design and who is invited in the process of thinking, designing, building and transforming the city.

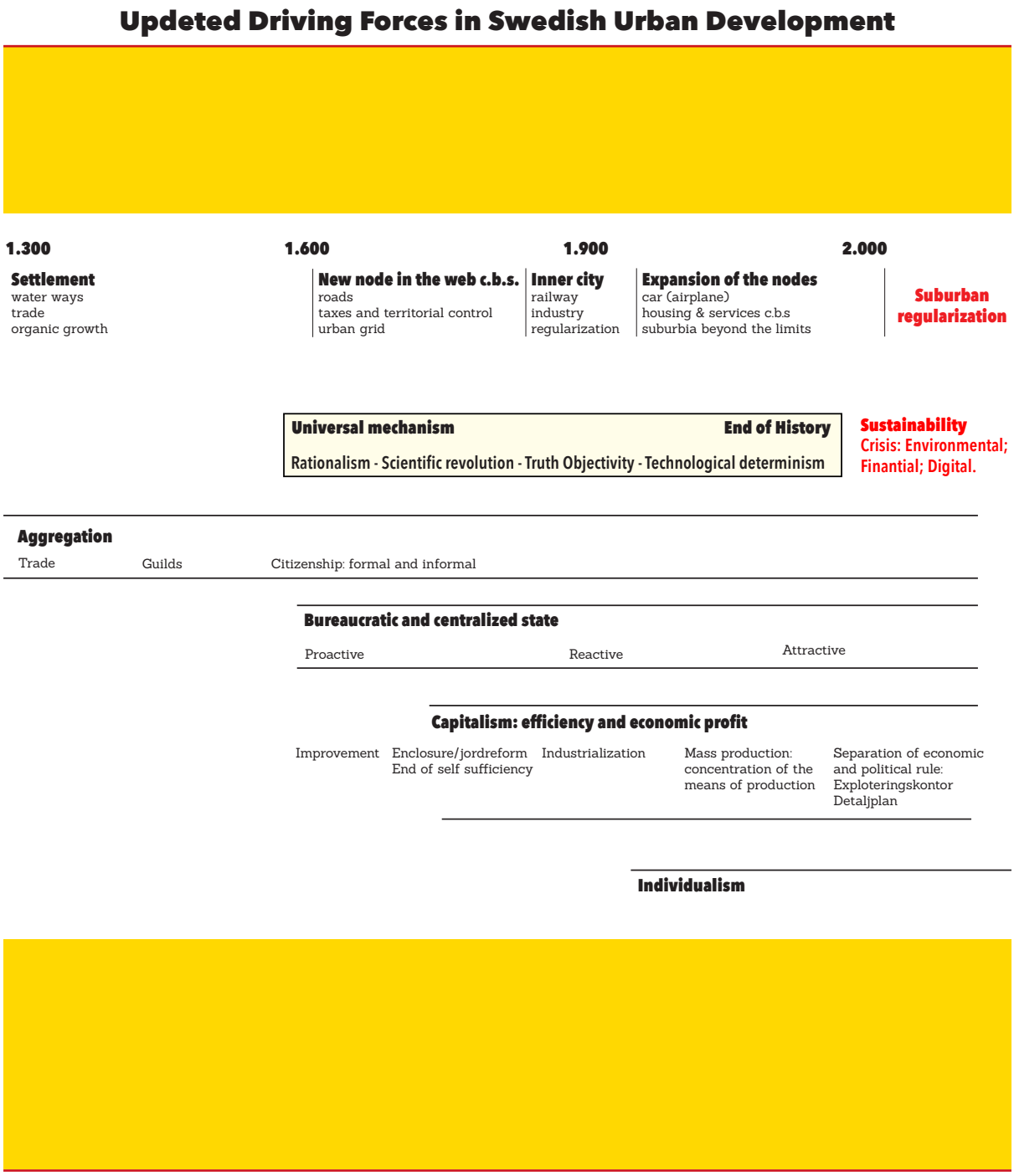


Figure 5.3

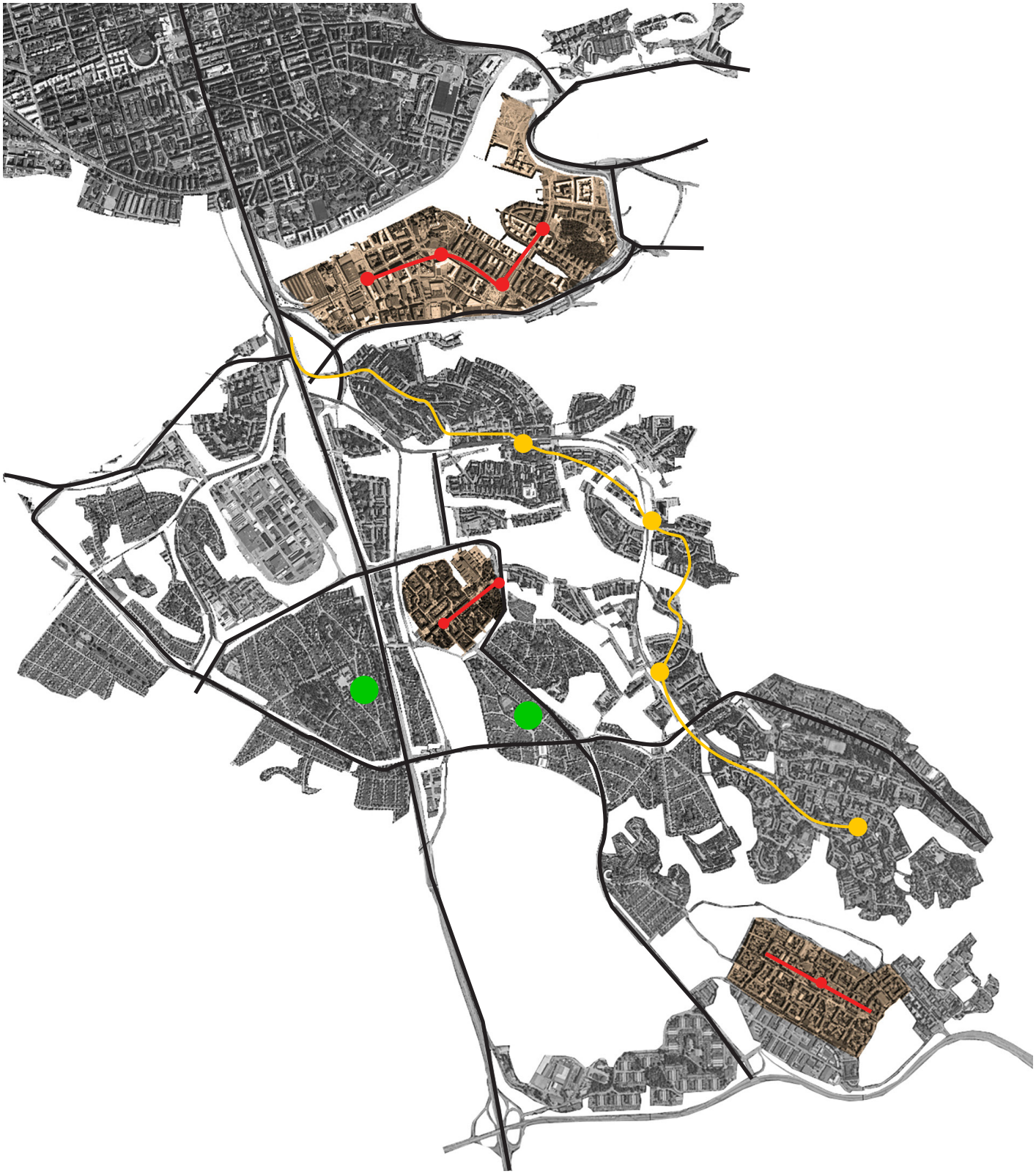
Diagram summarizing the moments of growth and the main forces introduced in chapter 1 Updateig figure 1.20

5.2. Suburban Regularisation. The Suburb as the Space of Reproduction

In chapter 1 were introduced four historical moments that help to explain important changes in urban development. Two of them reflect the construction of new towns. Around 1400, the formalisation of trading settlements along water bodies, formed as processes of aggregation resulting in organic growth patterns. During 17th century is built a network of towns by the recently formed bureaucratic and centralised Swedish state that form a system of territorial control and of extraction and distribution of resources. During this period are founded or re-founded most Swedish cities, that become nodes in a network of towns. Some of these towns substitute the old settlement, sometimes close to the original settlement (see the case of Umeå), sometimes on top of it, even erasing the previous one (see the case Oulu). Other towns are built next to the old city but as a new administrative entity with very distinct character, structure and institutions (see the case of Stockholm). The state, beside building cities, will try to allocate and attract inhabitants, ensuring the presence of all the expertises and backgrounds required (Berglund, Nilsson & Sidén, 2023). Bureaucratic centralised states typically implement the grid as the basic urban structure to organise the process of urbanisation. During the 19th century urban growth occurs within those same nodes, also implementing grid structures, although with a different character. If in the 17th cities are built anew, in the 19th century, the grid responds to the pressure of the growth experimented by those same cities. The gridiron plans implemented correspond to an urban regularisation, they stitch together and integrate already existing parts of the city. This reparative attitude can be found in the plan Haussmann for Paris, where the new boulevards come with a new structural understanding of the city (Choay, p. 16), or in the Plan Cerdá for Barcelona, where the strict repetitive grid is integrating the old medieval city, and pre-existing peripheral towns.

Later on, during the 20th century, those nodes created in the 17th century and intensified in the 19th expand over their limits. Urban growth implies again an expansion over the territory by bureaucratic and centralised structures, but now the state is already built and consolidated, and the expansion occurs in a municipal level. New pieces of town are built, but not as fully functioning planed cities, neither as organic settlements growing by

Figure 5.4
Suburbs along metro lines 17 and 18 as independent enclaves dependant of urban core



aggregation, this expansion will be done as a sequence of independent enclaves specialised in specific uses connected to the core (fig. 5.4). In the 17th century the creation of new nodes came with all the structures and institutions that make a city. Now the new enclaves rely and are dependant on the existing core, thus they do not incorporate the services and institutions that conform the city, they rely and depend on those of the urban core. The dependence in the urban core is what makes them suburban structures, with a different character and internal logic than the urban core. In morphological terms, during the 20th century they are planned at once as total architectural projects that, we have seen, come under a variety of forms, suffering some experimentation that initially moves away from the grid, that is reintroduced in the later period, only reinterpreted.

In the previous section has been argued that the construction, consolidation and expansion of the nodes part of the centralised state is a finished process that has produced a certain type of urban structures. It has been argued that it should be implemented a new paradigm in how urban design is addressed under the lens of sustainability. If we consider that urban structures are built to a large extent, that in the suburb there are aspects of segregation and lack of service and of integration of the exercise of citizenship, and that sustainability should address the impact and problems of the already existing city, in this section is proposed as the next step the regularisation of the suburb, following the spirit of the urban regularisation of the 19th century of stitching together the city, but understanding the suburb in its own terms, so to speak, not translating directly the tools applied in the urban core. Here, the suburban regularisation is discussed in relation to dominant driving forces, in the epilogue is proposed dialogue as one path to address urban design, aiming to aggregate as many perspectives as possible in the different phases of the design process.

Forces of Capitalism

Following Ellen Meiksins Wood (2017), capitalism has been introduced as a key driving force shaping the city. Not only for its impact in the industrial city of the 19th century, considering that the way industrialisation developed is preceded and defined by capitalism, also for the specialisation and optimization of the space, and for how it changes the socio-

economic relations and the relationship with the land, that is viewed through the profit that can be obtained from it, and that is present in the speculative mechanisms embedded in urban growth, where the value of a building relies more in the value and location of the plot it occupies than the quality of its construction.

Capitalism has thus an influence in the spatial distribution of the territory, as occurred in the English countryside through the enclosure, which was replicated in the Swedish countryside during the series of land reforms (*jordreform*) that reorganised properties, how landscape is understood and also the configuration of villages and social relations. The distribution of land in larger estates seeks more efficiency in the production and the extraction of higher profit from it. The villages are not any more both living and production centres, and not all the villagers will be owning and growing the land. Production is concentrated in fewer hands and moved out of the villages, into bigger farms and estates. Early industrial centres were connected to extraction of metals are located also in the countryside in relation to water and communication, while urban centres as Nörrköping and Stockholm introduce new infrastructures, typologies and spaces dedicated to the trading of those metals (Noldus, 2004). Thus, the influence of capitalism in the specialisation, optimisation of land that prioritises profit generation is visible since the reconfiguration of the countryside during the 18th century to the expansion of the nodes over their limits in the 20th century. They can be explained by the following quote by David Graeber (2006), who considers that

> [Capitalism] is the only mode of production to systematically divide homes and workplaces: that is to say that the making of people and the manufacture of things should properly operate by an entirely different logic in places that have nothing to do with each other. (p.62).

Graeber's text goes into an analysis that connects capitalist modes of production with slavery, here I do not pretend to go into that discussion, but make use of his analysis of the relation between modes of production, social relations and spatial distribution. In terms of urbanism this spacial specialisation is known as zoning, but the term does not capture the referred transformation. Tony Garnier proposed the specialised city for the first time in 1907

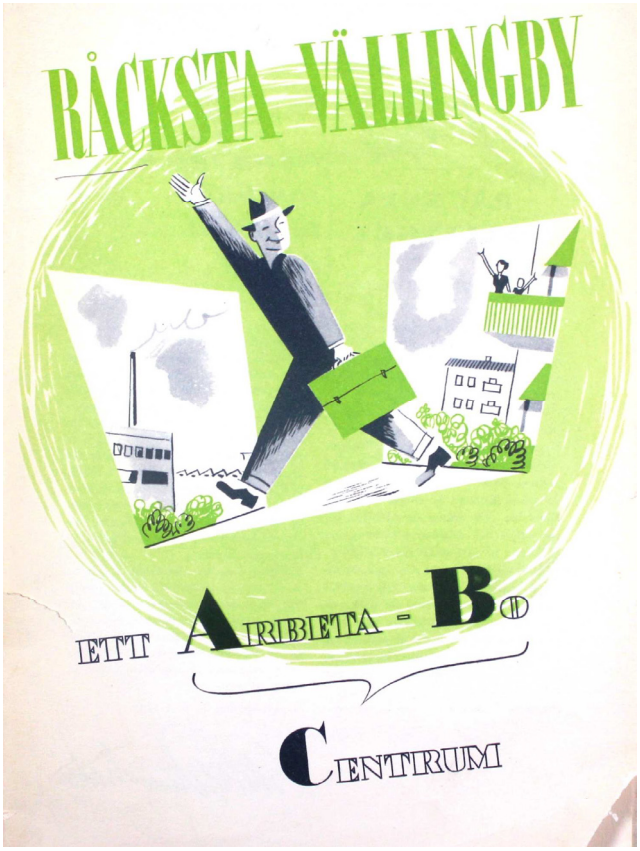
in his *cité industrielle*, ideas that Le Corbusier embraced and expanded. However, I have discussed that the highly hierarchical and predefined city of Le Corbusier represents also the bureaucratic and centralised state. In many ways, the city of the 20th century represents the harmonisation of both driving forces, capitalism and the bureaucratic-centralised state. The growth following a capitalist logic becomes very dependent on the regulation of the state, a relationship that we should not take for granted. In contrast, if we look to the first towns built at the end of 19th century around factories located outside the cores, they often also follow forces of capitalism but without the strong centralisation.

It has been also argued in chapter 1 that, being still tax collection an important impulse for growth, current increase of population is not done through mechanisms of the centralised state as in t 17th century, or from internal pressure of an industrialisation concentrated in the nodes as in the 19th century, now is done trough attraction of segments of population with high incomes through capitalist mechanisms of marketing and status, becoming housing a matter of profit maximisation.

Spaces of Reproduction

Going back to Graeber and the characteristic separation between housing and production, the different enclaves will be defined by the role they play, not only their character, but their spacial configuration will be a direct consequence of it. To understand this, shall allow us to understand better their internal logic and how they function. We tend to talk about working areas and housing areas, using terms that refer to the activity of the individual. However, if we think in terms of the role they play system, the working areas can be defined as the spaces of production, including not only the production of goods, also the production of capital. Then we can rename the housing areas as the spaces of reproduction, dedicated primarily to the reproduction of life and to the care and development of children, including often the care of the elderly too (fig. 5.5). Housing areas typically address the family, often, in a very narrow way, assimilating the family to the growth of children. The spaces that articulate these areas tend to be kindergartens, schools, playgrounds and private gardens addressing children until university, when they move either to specialised campuses

Figure 5.5
Spaces of reproduction
Advertisement brochure for Vällingby and Råcksta from 1952. It is visualised the focus in the family, the distribution of tasks, and the divide between production and reproduction. The father leaves the housing area to go to work, while he mother and the kid stay at home. Source: Artist unknown. Stockholms stadsarkiv SE/SSA/ Biblioteket/Ncaaz Västerort/



or to the urban core, leaving late adolescence and the high-school period in an unplanned grey zone. Children might live in these areas until they go to the university or into the labour market, and will return to a space of reproduction when they form a family.

Suburban Regularisation

One of the conclusions of this thesis is that the suburban spaces should be treated as distinct structures, differentiated from the urban spaces, with different internal logic and structured around different elements. Different role and different relation to the overall system, means that the direct translation of urban forms to the suburbs does not bring the same results. Another conclusion is that the process of the construction through expansion of the suburb in Stockholm is already finished, and that growth and expansion should be questioned from the point of view of sustainability.

Urban development, rather than propose new nodes or new enclaves, should address the existing pieces, and stitch them together. New interventions should improve the existing city in bringing the institutions, uses and service that are missing and also improving the existing areas in terms of sustainability. Trying to learn from the different moments that characterise urban development, rather than looking to growth and expansion, current interventions in cities that are already built and that aim to evolve in a sustainable way can be closer to the urban regularisation which dealt with the already existing structures.

Therefore I propose that the next step is the regularisation of the suburb, which shall follow the spirit of that from the 19th century, but through understanding the specific conditions and internal logic of the suburban areas as spaces of reproduction. It shall not be based in ideal models or generic best practices of what cities should be as has been the pattern since the 19th century, or even further since the ideal cities of the Renaissance. We shall rather understand that, even having elements and patterns in common, each moment, area and situation has its specificities. To recognise the suburb as spaces of reproduction is not about if that is good or bad, it implies to recognise how they actually work, in order to be able to intervene, enhancing its characteristics and adding missing aspects, such as exchange with other areas, or introduction of local commerce, production, services, local administration or enhance the exercise of citizenship understood in a broad sense. In the spirit of Haussmann, as interpreted by Françoise Choay (1969) the suburban regularisation should trace the lines that restructure the city, studying in depth the existing conditions and finding how and where to trace the connections and insert new elements in the city.

Recognising that we inhabit centralised structures, the suburban regularisation should address the dependency on the core, the aim is not to decentralise the existing structures but to enhance suburbs as more complete structures, less dependent on the core. If suburban enclaves have been conceived as units dependent of the urban core, their regularisation entails to look to neighbouring enclaves and to enhance each other. Which also has implications in the dominant means of transport. In the centralised structure of the city, the car and the metro organise the space seeking connection to the core. If we look to local connections, walking and bicycle become dominant.

If the urban space is typically structured around streets and squares, parks and spectacles, institutions, museums and shops, the suburban space is typically structured around a domestic public space, controlled and maintained by the neighbours, access to nature to green, and community spaces such as kindergartens, schools, sport facilities, libraries cultural centres, the *kulturskolan* that offers activities until 21 year old individuals, or the *fritids gård* facilities addressing teenagers after school. In the area of study presented in chapter 4, in south east of Stockholm can still be found *folk-bio* in Kärrtorp and in Årsta, which are locally rooted popular cinemas. The displacement in the local scale is not done by car, is by walking and specially biking that the areas are connected. The transition from one area to another does not necessarily require a continuous urban tissue defined by the continuity of the street scape, they are connected by walking and biking paths, that are often independent from the road system that has a centralised pattern, and preferably crossing or along green infrastructures.

Kv. Dalen and the Suburban Regularisation

Spaces of reproduction are typically conceived around children and, often including the elderly. Often following the neighbourhood unit principles, and traffic safety measures that aim at controlled and safe spaces, gardens and school become the centre of the areas. Kv. Dalen is a good example of this, common gardens do not only offer a green area, they are also offering a safe space controlled by neighbours. Originally, in most of the blocks was located a kindergarten or a daycare, the traffic concentrated in the periphery allows children to move freely from one garden to another, while the services in the *centrum* incorporate a swimming pool, a library and elderly home. In these spaces meet all the non-productive ages. The pedestrian streets, alley and alleyways are not used as meeting spaces as the energy is concentrated in gardens and parks. Nevertheless, Kv. Dalen is less homogeneous and isolated than the prototypical neighbourhood unit, due to its proximity to the urban core and closeness to other areas with which does not have direct continuity but it has a dialogue.

Kv. Dalen was built along Gamla Tyresövägen, the old road going from Stockholm to the municipality of Tyresö. One possible way to address urban growth is to consolidate the road as a street with buildings in both sides, but in the model of suburban enclaves

Figure 5.6

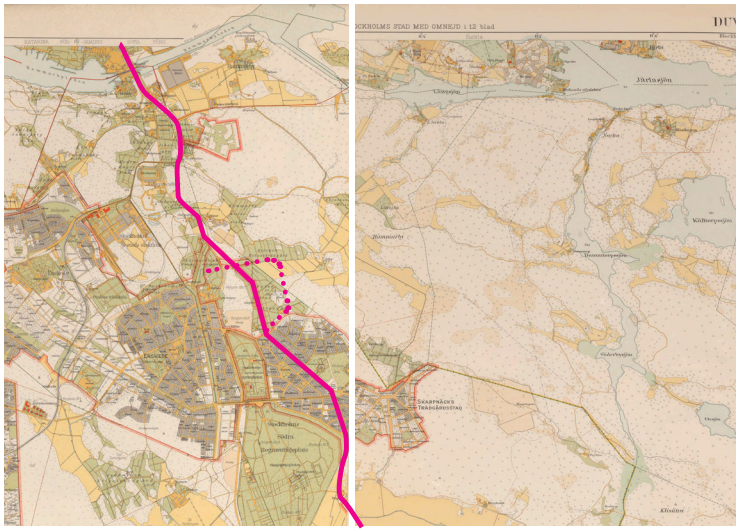
Gamla Tyresövägen (old Road to Tyresö)

In the sequence of maps of Stockholm we see the evolution of Tyresövagen.

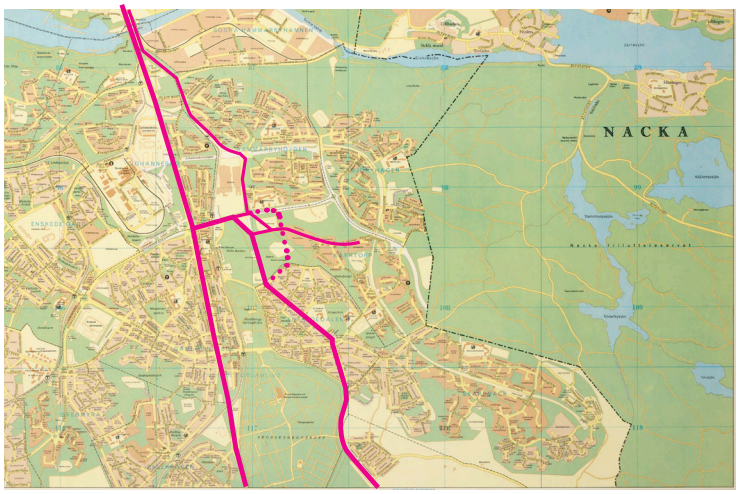
In 1924 is a road going directly into the inner-city, still with the irregular layout of old roads.

In 1954 there is already a highway that absorbs the heavy traffic, Tyresovägen is interrupted and connected to the highway, still going through what will be Kv. Dalen. Another street is planned into the city.

In 1972 Gamla Tyresövägen is diverted to embrace Kv. Dalen and not cross it.



1924. Enskede Stockholm.



1954. Enskede Stockholm.

1972. Enskede Stockholm.

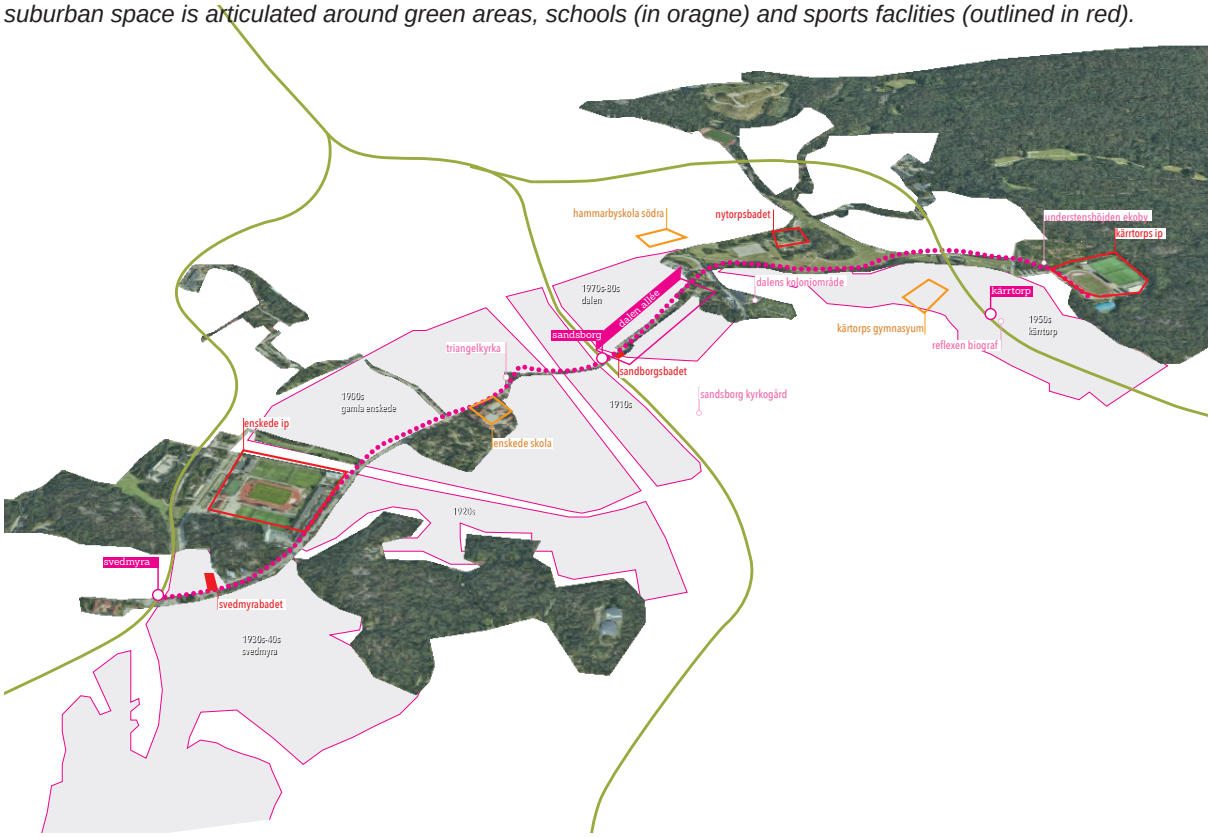
Figure 5.7
The suburbs as independent enclaves connected to the inner-city.
The space is articulated as enclaves along the centralised metro lines.

it prevails the aim to keep speed and traffic efficiency, which comes together the aim to protect the domestic space from the high traffic. Following this pattern, Kv. Dalen does not incorporate Gamla Tyresövägen that was running straight through the area it occupies today, instead the old road is deviated forming a curve that diverts the traffic and embraces the new development, that in the interior is free of traffic (fig. 5.6).

If we look only to the streets designed for cars, we see Kv. Dalen and the neighbouring enclaves as discontinuous islands connected to the centre by car and metro, along which is organised the growth of the city (fig. 5.7). But, in Kv Dalen there is an interesting gesture in the scheme, not only Gamla Tyresövägen is diverted, the main axis of Dalen that forms the central spine or allée is not following the direction of the old road that pointed to the city centre, instead is rotated 90 degrees pointing to the west towards the metro station and to the housing area of Gamla Enskede to the other side of the metro. To the east,

Figure 5.8

The 90 degrees rotation of the axis of Dalen allée (pink) puts it in relation with Gamla Enskede and Kärrtorp. The suburban space is articulated around green areas, schools (in oragne) and sports faclities (outlined in red).



the other end the allée ends in a park and points to the open green field of Nytorpsgärdet that is a local common space shared by several neighbouring areas (Hammarbyhöjden, Kärrtorp and Björkhagen) (fig. 5.8).

Figure 5.9 is an attempt to illustrate this way to look to the suburb as an space of reproduction while tracing the lines that can be the structural lines for the suburban regularisation. Moving from a logic of isolated enclaves dependant to the city centre, to read the suburbs through the spaces that articulate them, the access to green, the community spaces, the schools and the sports fields, that create a structure not of streets and avenues but of pedestrian and bicycle paths. To understand the suburbs as spaces of reproduction would be the first step to propose more nuanced and specific additions that reinforce its qualities and address its lacks and problems, aiming at adding layers of complexity and friction to the suburb, incorporating local administration and production, transforming the suburbs into more complete pieces of cities that promote the exercise of citizenship while reinforcing the sense of community.

Figure 5.9

Suburban regularisation. Community spaces and transversal connections

The suburbs articulated around community spaces, sports, schools and access to greenery

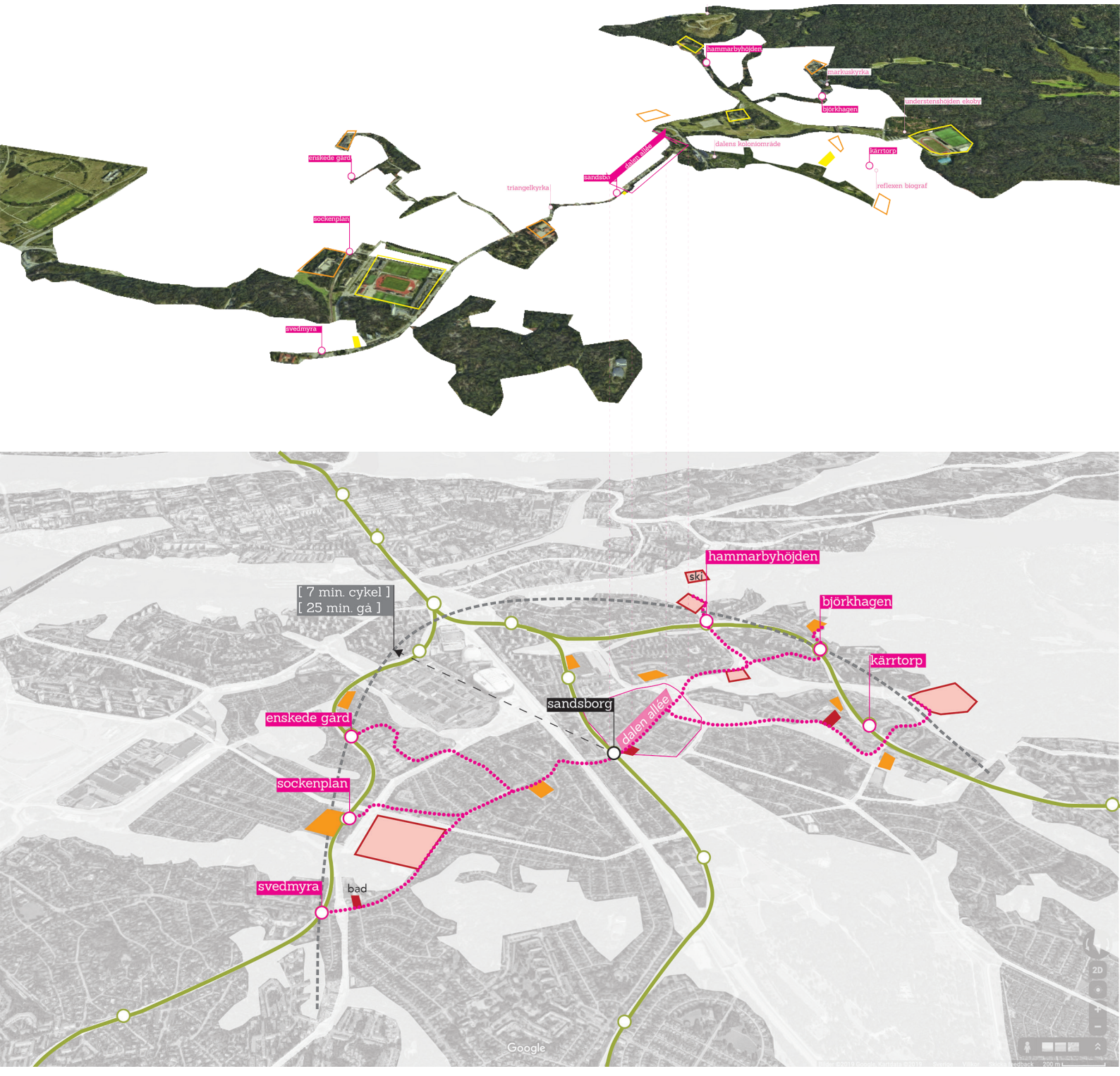


Figure 5.10
The oak tree in Dallén allé photographed from a side alleyway.

To conclude, it is interesting that, in order to show the historical continuity and respect for the existing vegetation, when Gamla Tyresövägen was changed, the trees planted on its both sides where replanted in the new Dalen allée. Furthermore, a big oak street was respected and incorporated to Dalen allée, what breaks the repetition of the otherwise continuous grass surface with the two lanes of transplanted trees. The urban scheme is also adapted to accommodate the oak tree by cutting the corner of two of the blocks to frame it (fig. 5.10). The allée forms a pedestrian edge that changes the reference point from the city centre to the immediate suburbs (fig. 5.11). The pedestrian network is prolonged and continues by crossing under streets, roads and metro rails. There is some discontinuity as tunnels and narrow passages tend to not be inviting to walk, thus the urban design, program and structure need to integrate and enhance them. In order to intervene in the suburbs is needed to understand its own logic, different from that of the urban core.

Suburban regularisation

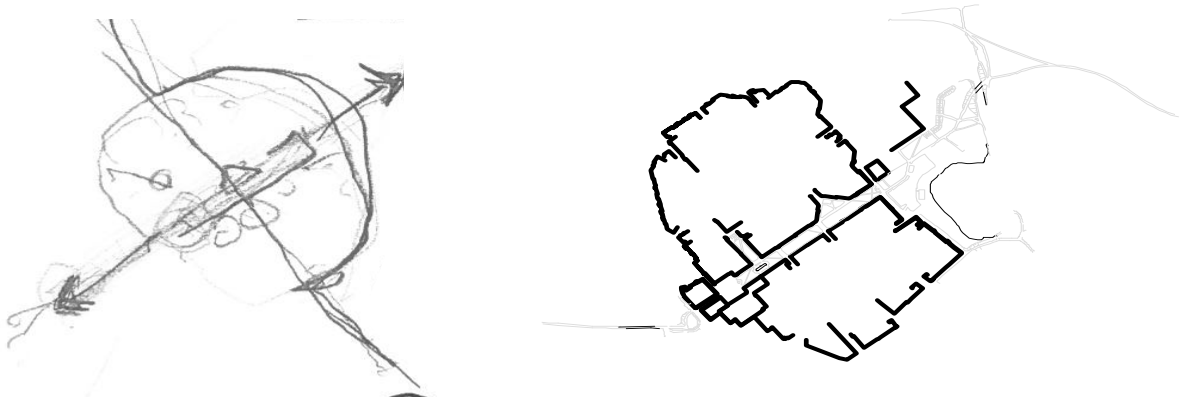


Figure 5.11
Left: Kv. Dalen. Rotation of the axis to point to the suburbs
Right: Kv. Dalen. Streets and roads connecting to the inner center

Conclusions

Key Findings and Contribution of the Thesis

1) Reinterpretation of Suburban Development

This thesis challenges the deterministic view of urban history as a linear progression of ideal models. It reinterprets the **evolution of suburbs**, particularly through the case of Hammarby Sjöstad, showing how suburban development has always been influenced by broader political, social, and environmental contexts. The construction of Stockholm suburb is framed as a process that runs from 1905 to 1995. It is part of a hygienist project and part of the construction of the welfare state, which entailed a project of social transformation.

2) Sustainability Beyond Technical Solutions

The thesis expands the concept of sustainability beyond the usual technical solutions (e.g., emission reductions, efficient infrastructures). It argues that sustainability must be understood not only through technical systems but also spatially, focusing on urban morphology and the ways in which suburban environments can be re-interpreted to foster living spaces that contribute to sustainable urban life. The research adopts a position towards sustainability considering that every intervention should have an impact in the already existing city, and depart who and what perspectives are incorporated in the different stages of the planning and design process.

3) Suburban Regularisation as a Key Step in Urban Design

A key contribution of this research is the proposal of **suburban regularisation** as the next critical step in the evolution of urban planning. The thesis argues for an approach that not only addresses existing urban structures but also recovers active citizenship as a vital component of sustainable city-building. This entails that suburb shall be addressed from its internal logic, for what is provided a reading of the suburb as a first step to define future interventions.

4) The structure we inhabit

The thesis describes two main **city structures of different nature** that have been at place throughout European history: the independent city product of processes of aggregation, and the city part of the bureaucratic and centralised state. Each one has its own morphology and structure, and entail different social arrangements.

Under this lens, in chapter 1, have been localised four historical moments that explain **core transformations of the city**. The first moment corresponds to the formation of the medieval settlement as a process of aggregation product of internal forces. The rest explain the construction of the city as nodes part of the web of towns of the bureaucratic and centralised state. Those nodes follow three stages: their construction, their consolidation as urban core, and their expansion beyond the limits of the core in a suburban pattern. There have been also identified **driving forces** in that influence the form of the city across these moments (aggregation, bureacratic centralised state, capitalism, individualism, sustainability).

5) Challenging Centralised Urban Planning

The study critiques traditional, bureaucratic forms of urban planning by emphasising the importance of **aggregation**: collective processes that engage diverse stakeholders. It highlights how these collective processes can counterbalance the individualism and capitalist tendencies that often shape urban design. Beside this critique, it is also concluded that the bureaucratic and centralised institutions that guide urban planning and design have the capacity to stablish mechanisms and to promote strategies that enhance processes of aggregation that strengthen the exercise of citizenship.

6) Historical Continuity and Design Paths

The thesis identifies and explores various **design paths** (romantic-expressionism, rationalism, a synthesis between them, and utilitarianism), showing how they persist through different historical periods. This analysis reveals the continuity of urban design principles and their relationship to broader political, economic, and philosophical contexts. In 1923, Adolf Behne introduced functionalism as system of thinking manifested under a rich variety of forms. The paths are introduced in chapter 3 based on his work. In chapter 5, the paths are traced before and after 1923, and connected to different ways to understand the world. In the epilogue, it is introduced dialogue as a fifth path to address sustainability.

7) Reinterpreting the Role of Hammarby Sjöstad

Rather than viewing Hammarby Sjöstad as a break from functionalist traditions, the thesis places it as part of the ongoing narrative of suburban construction, arguing that it represents a contemporary iteration of the functionalist project, adapting it to new social and environmental realities. The thesis proposes a conceptualisation of the suburban block as a reorganisation of the linear slab-building that bends over itself to embrace the garden in the inside while recovering the street in the outside.

8) Post-1995 Urban Developments

Among the paradigm shifts occurring in urban planning after 1995, the thesis examines the dismantling of the welfare state and the liberalisation of the housing market. It connects these changes to the emergence of new forms of urban development, which aim to incorporate sustainability while reinforcing individualised, profit-driven urban enclaves.

It is argued that this paradigm shift towards liberalisation explain the problematic of functionalist city better than the discourse of stigmatisation of Miljonprogam areas. These urban areas were built as part of the welfare state, what entails the presence of institutions and social services that are being dismantled. With the privatisation of the housing market, the removal of social services of the periphery, the concentration of unemployment and low rents in specific areas, disappear the social bonds and the networks of support that were on place.

9) Re-thinking the Sustainable City

The thesis questions the concept of the “sustainable city” as a replicable model, arguing that no single development can be wholly sustainable. Instead, sustainability must be seen as a set of principles and practices: such as aggregation, dialogue, and long-term adaptability - that guide urban design processes.

The thesis shows how the production of models has been constant in the construction of the suburb during the 20th century. An approach rooted in the ideal city of the Renaissance, and in the production of what we call now ‘best practices’ based in mechanism thinking. It thus questions its own title as it has not been posible to define a piece of city as sustainable. Rather than defining a sustainable city we can define in what aspects a project or an area is sustainable or not. In terms of urban design practice, it means to define in what ways a specific intervention contributes to sustainability.

Contribution to the Field

This research contributes to urban studies by offering a nuanced, historical perspective on suburban development and sustainability. By focusing on the evolution of urban form and the role of political and social forces, it provides a deeper understanding of how the concept of sustainability has evolved in urban design in Sweden. Furthermore, it proposes new frameworks for addressing contemporary urban challenges, advocating for more inclusive, participatory, and context-sensitive design approaches.

The methodology explores how disciplines related to history can be used to inform the practice of urban design. Drawing on different disciplines it offers a reading of urban and suburban areas not as isolated total architecture projects but as the result of the interaction between: the style in which they are expressed; the path from where design is approached; and the driving forces that influence each case.

The thesis connects economy not only to urban processes but to specific urban form and components since chapter 1. Taxation is manifested in the construction of fences, gates and roads. Later, in the production of the pleasant sustainable city as a marketing tool to attract tax payers. Improvement is connected to the size and distribution of properties, specialisation of areas (zoning), plot division, concentration of the process in fewer developers and builders, and to speculation.

An important contribution is a coherent narrative of the construction of the suburb by proposing a terminology that refers to core qualities of urban types, by coining the park in the block (park i kvarter) to explain the suburban block in relation to the evolution of the suburb. They are introduced in chapter 2 and expanded in chapter 5.

Continuation of the Research

The continuation of the thesis entails to systematise and expand the study of the suburban regularisation. And to study urban developments that follow Hammarby Sjöstad using the proposed conjunction of styles, paths and driving forces.

The compared studies through to four key moments of transformation, have a strong potential to be expanded to other European cities, or pairs of cities. Not only to understand general patterns, the specifics of each geographical location, and how trends are distributed, also to propose what can be the following steps in the evolution of those cities.

The thesis has focused in the dominant urban structure we inhabit. But also has been argued that there have existed other formations through history, some of them that still coexist with the dominant web of towns. An important addition would be to include the study of small towns or rural settlements that have their own structure and social arrangement, but that also form part of the web and can contribute to connect the city with the territory.

The previous opens research in two directions. On the one hand the historical study of how has been formed and disseminated the current urban structure that can be traced back to ancient Greece and Summer. On the other hand, to study alternative arrangements without continuity in history. What can help us to not take for granted current urban structures and arrangements, and to imagine new ways to organise the city.

At last, in relation to the shift towards liberalisation, further development of the thesis implies to understand and map how evolves the spacial distribution of the spaces of the welfare state through the 20th century.

Approaches to Desing: Mapping Styles, Strands and Driving Forces

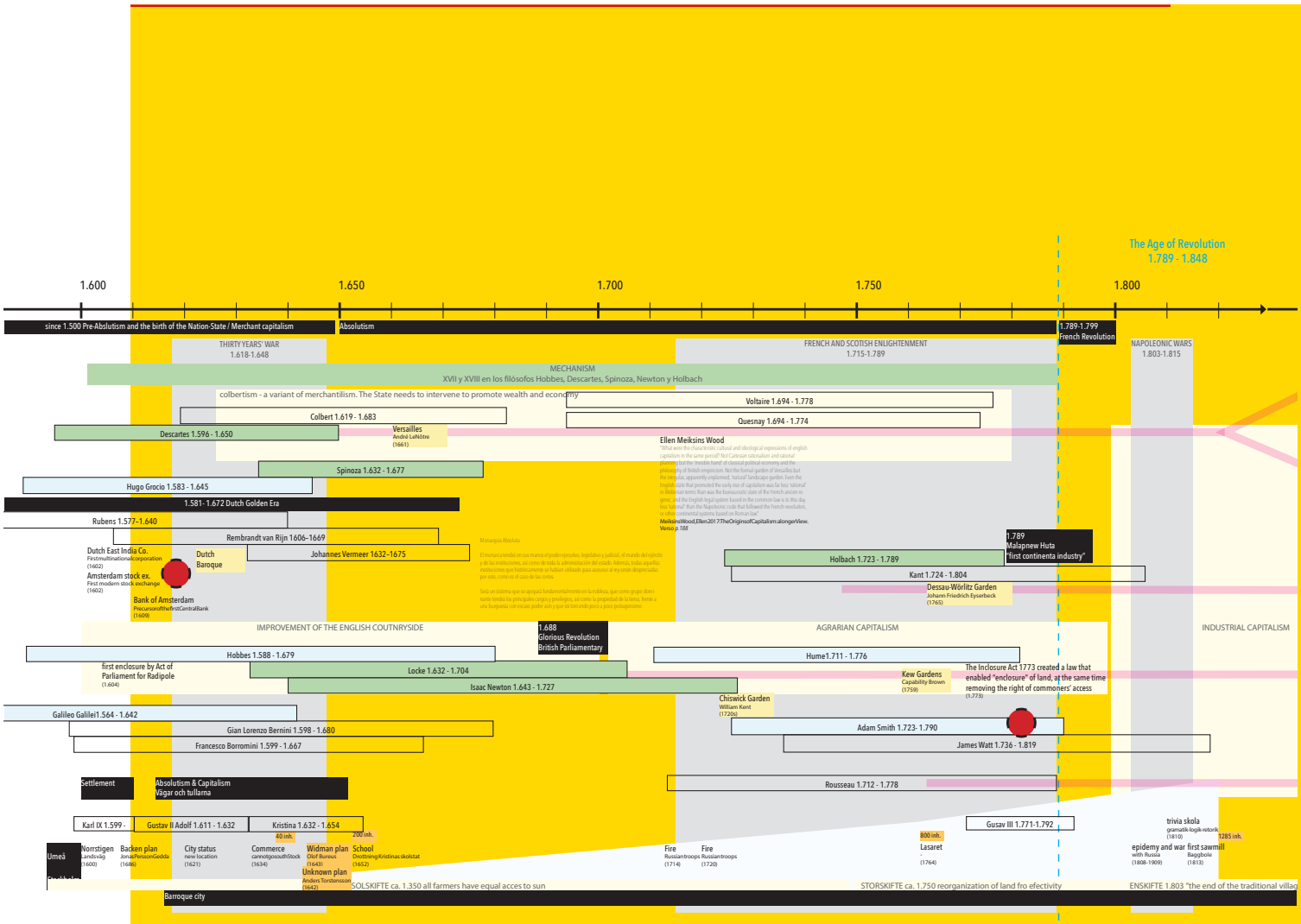


Figure 6.1

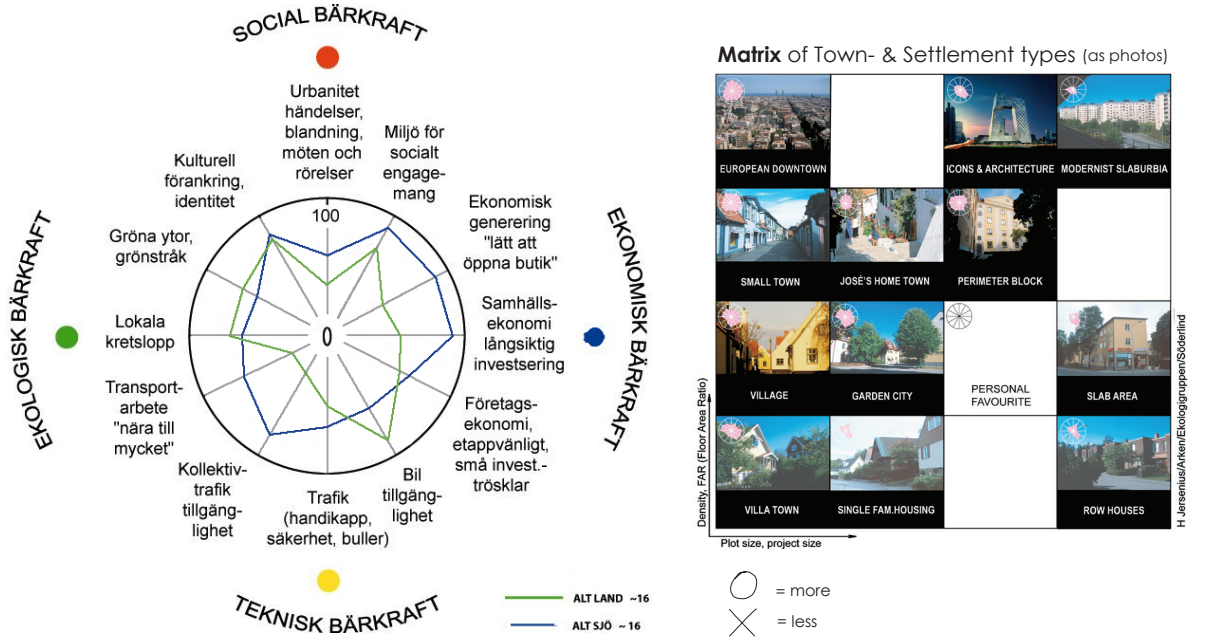
Mapping trends, styles and driving forces

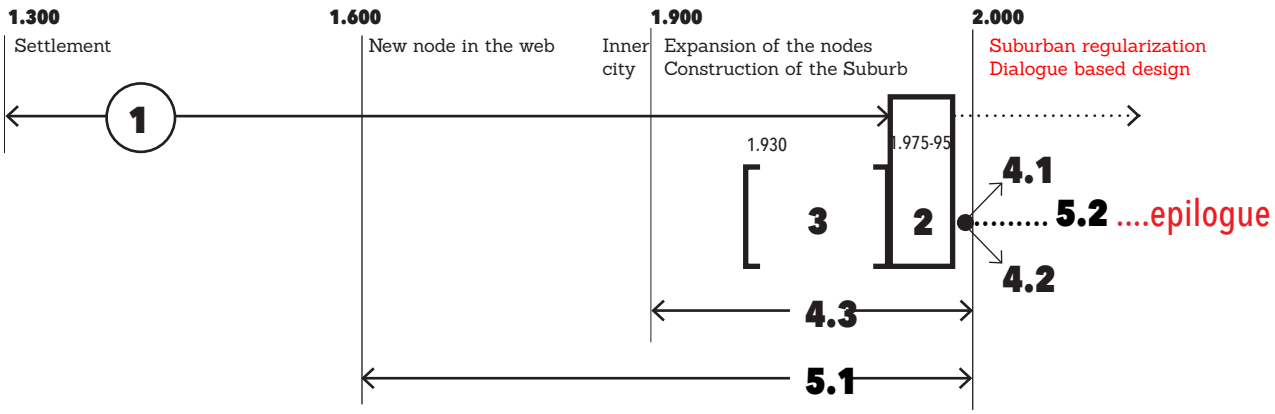
Epilogue: a Path for Sustainable Design

Dialogue as an Urban Design Principle: the Urban STEP Method, and Ralph Erskine's Feeling of the Meeting.

To consider dialogue as a principle governing urban design allows to articulate under a common term different phases of complex processes extended in time. Participation understood as dialogue goes beyond direct consultation, it fosters to aggregate multiple perspectives that get integrated in the formalisation of design proposals to be implemented. Not only the perspectives of those participating actively in the process, also of those who cannot participate, including vulnerable groups, future users of the city, perspectives of sustainability, and non-human perspectives. Dialogue is discussed in this chapter as a working methodology, as embedded knowledge, and as a design principle, by introducing respectively: a participatory urban design method called Urban Step, and developed by Arken arkitkekter (fig 7.1); Ralph Erskine's philosophy 'the feeling of the meeting' that aims at a collective way to approach design whose result is not the sum of individual voices but a new reality distilled from the conversation; and the integrated grid as as one possible principle for the design of long term sustainable urban structures. The connection of Arken founding members to Erskine, and the relation of Erskine with Team 10 allows to trace a genealogy of practices that react to an object centred, dogmatic modernism, putting the emphasis in the relation between objects and of the user with the built environment. Finally, moving away from a top-down bottom-up dichotomy, is discussed the need to aggregate multiple perspectives into the formalisation of design proposals articulated around notions of maintenance and care, and to expand the notion of community into a wider exercise of citizenship.

Figure 7.1
Urban Step as a dialogue method for Sustainable Urban Design
Tools for the workshops
Source: Arken arkitekter





Participation and Sustainable Urbanism

Urban Step is a participatory urban planing and design method developed by the Swedish firm Arken arkitekter to incorporate citizen dialogue in the design of sustainable urban structures. Arken founding members where influenced by the practice and philosophy of Ralph Erskine, at whose architectural practice they had worked for many years. Beyond specific projects that pioneered the architect-user dialogue, collaborators recall Erskine referring to the “the feeling of the meeting” to designate the convenience of creating an atmosphere that favours the continuous exercise of open dialogue and collaboration, the projects would not be the result of one view, or the sum of individual ideas, but a coherent proposal distilled from a collective conversation.

Sustainable urban design is often discussed in relation to the selection of solutions and technologies to be implemented in a project. Which are the optimal ones depends on each particular situation and can change in time. The selection will depend on what aspects are considered, and who is participating of the discussion. Therefore there is a fundamental moment that precedes the choice of solutions, technologies and models, when sustainability is discussed around design methodologies, approaches and principles that allow to integrate all the perspectives relevant for a project into operative design proposals. However, participation can mean many things and take many forms depending on each situation: the specific focus of this chapter is the long term design of urban structures The argument unfolds as follows:

(1) Sustainability has different implications in different circumstances and in different disciplines. In relation to urban design, rather than questioning if a project is sustainable or not in absolute terms, we shall ask in what ways and to what extent a project contributes to sustainability in the specific context the project it is anchored.

(2) If designers are trained in giving shape to proposals that respond to specific problems, usually defined in the form of design briefs, then the discussion on sustainable design is not about providing with fixed outcomes or models to be applied, but about how are framed the questions that the design will respond to in each particular case. If we answer the questions we make, the process of formulating those questions becomes a primary moment of sustainable design.

(3) The questions formulated will depend on who participates both in the formulation of those questions, and in the subsequent response in the form of a design proposals.

(4) Here, participation is understood as a dialogue where the resultant proposal is not result of the simple addition of individual voices raised in a meeting, but a new reality distilled from a collective conversation continued in time, through processes of change, transformation and adaptation: from early ideas to their formulation, modification, implementation and beyond, into the transformation of the already built environment.

(5) Under this perspective, the first objective of the dialogue is not to provide with a static solution, but to aggregate relevant perspectives in the different stages of the process. The aggregation of perspectives includes those who can raise their voice, but also those human and non human actors who do not have a voice, those who do not have the possibility or the ability to make it heard, those future users that cannot be predicted, and, nonetheless, the responsibility of integrating perspectives of sustainability, justice, maintenance and care in the project.

(6) The fundamental discussion about long term sustainability starts with the definition of methodologies, approaches and attitudes towards design, that articulate the dialogue and integration of perspectives since early stages.

(7) Arken's Urban Step method is introduced as one dialogue method that addresses participatory urban design, and Erskine's "feeling of the meeting" as one philosophy or attitude towards design understood as a collective effort. Under the premise that there is no panacea, no formula or methodology to be universally applied, they shall be considered as a contribution to a larger discussion on possible methods and attitudes from which we can learn in order to define the practice accordingly in each specific situation and project.

Contextualisation of Urban STEP

Arken arkitekter is an architecture and urbanism office based in Stockholm, founded in 1981 (fig.7.2) by a group of around 14 former collaborators of Ralph Erskine (1914-2015). The makeup of the studio varied over time, and in 2007 it finally split into in three studios. It can be distinguished between Arken, referring to the period before, and Arken SE for the

period after 2007, when it operated under the leadership of two of the original founders, Peer-Ove Skånes (1928–2023) and Torbjörn Einarsson (1945-).[1] This text refers to the later period when Urban Step was developed.

The chapter is based on direct experience working with Arken. I had an active role in the project Kajer mot det Gröna that illustrates this chapter and took part in more than 10 public workshops, including both the application and development of Urban Step; on the revision of the reports resulting from those and previous workshops, some available on the Arken SE website[2], others consulted in their archive; and on conversations with Einarsson and Skånes about their practice and their years in the office of Ralph Erskine. The evaluation of the results of the different workshops is not the focus of text, nor does it discuss the practice and architecture of Arken as a whole, it rather tries to learn form their ideas and experience developing and applying the method. The specific tools can be changed, adapted or substituted in other contexts and kinds of project, therefore the interest is to understand what they intend to do and why. An overall aim is to reflect on the possibilities of integrating and articulating user participation and dialogue, in order to explore possible paths for the practice of urban design.

It is worth to note that Arken's genealogy engages with a wider discussion of practices that, from the end of 1950s, react to the effects of mass housing, zoning and car-oriented design, characteristic of rationalistic planning of the after-war period. This reaction aimed to situate people and their interaction with the built environment at the centre of urban design. Although he was not a core member, Erskine did have close connections to Team 10, which during the 1950s and 1960s articulated an influential response to the more dogmatic aspects of CIAM and the Athens Charter. Team 10 members considered that the Modern

1 In the 1981 brochure presenting the foundation of Arken titled 'Nu Seglar Arken' (Now the Ark Sails), appear as delegates: Bengt Ahlqvist, Boris Culjat, Torbjörn Einarsson, Lars Estlander, Ingemar Fundin, Janus Halkiewicz, Mike Linnet, Lena Pålsson, Christian Schlumpf, Peer Ove Skånes, Klas Tham, Nils Viking, and building engineers Dave Hill and Eric Mühlbach. The landscape architect Pär Gustafsson is also named as important collaborator. Of all of them, Pålsson, Einarsson and Skånes were still delegates of Arken in 2007, when the office, was divided in three: Arken SE directed by Einarsson and Skånes; Alma arkitekter by Lena Pålsson and Nils Söderlund arkitektkontor.

2 https://www.arken-se-arkitekter.se

Figure 7.2
Nu Seglar Arken (Now the Ark Sails)
First brochure of presenting Arken's office. Ca. 1981
Source: Torbjörn Einarsson personal archive

Movement had reduced functionalism to a style and become too focused on the architectural object as a finished and self-contained product. In contrast, they held up ideas such as the relation between objects (which could be considered a dialogue between buildings and their surroundings), the habitat (a dialogue between people and the environment), and levels of association (a dialogue across scales). Arken did not have a direct contact with Team 10, neither an explicit influence, but participates of the same discussion and milieu.

The work of Heidi Svenningsen Kajita (2022) about The Byker development in Newcastle by the office of Ralph Erskine, and of Annie Pedret (2013) about the formation of Team 10, have served as inspiration to contextualise public participation in the different stages of design through the notion of dialogue, and to advocate for the outcomes of urban planning and design that reach beyond the bureaucratic production of plans and documents, highlighting the importance of the knowledge embedded in the community, and of incorporating what Svenningseng Kajita calls "minor matters", discussed in face to face situations. It is no accident that both authors have explored archives, acquiring an insight into actual conversations and dialogues.

Moments for Participation

We can broadly identify four ways public participation can influence urban design in a direct way in different moments of the process: (1) consultation during the decision-making, engaging in meetings, workshops, surveys, or public consultation; (2) taking part in the actual design where, even when the process is guided by specialists due to complexity and a need for specialised knowledge, the image of the architect-designer controlling all the decisions should be left behind, to favour instead the conception of design as collective action; (3) active engagement in the making or construction of the city, for example through processes of commonoing, of cocreation of space,[3] or engaging in collective building[4]; (4) intervention in the already built environment, where designers have the skills and responsibility to incorporate design solutions and strategies that enhance, promote and allow, but also do not hinder, the participation of current and future users both in the making, and in the every day use of the city.

Urban Step workshops are part of the second moment and can be used in different stages, from taking part in the design of urban structures, to the definition of the implementation project. Beside, the projects should promote or allow the third moment, the active making of the city, and have a crucial influence in the fourth moment, the future interaction of the people with the built environment, which implies that the city is subject to continuous transformation.

Participation as dialogue

Public participation in urban planning and design faces the challenge of having continuity in processes that take place over extended periods of time and that are usually divided into different phases, often independent from one another. Moreover, while participation entails a dialogue between different parts, once that dialogue is translated into a written or graphic document, it has the risk of becoming locked into a static, closed product, the methods, approaches and principles of design discussed here address the production of

3 See for example: Petrescu, Petcou and Baibarac (2016); Urban Commons Research Collective (2022).

4 For examples in Sweden visit http://byggemenskap.se/; https://socialtbyggande.se/.

such documents to integrate continuous dialogue and adaptation. At last, however important are the documents produced, equally important is the engagement of stakeholders, the mutual recognition between the different parts, the knowledge that gets embedded in the community, and the understanding of why and how the decisions are taken in order to adapt, contest or reassert them in the future.

Specific moments designated for participation need to be understood as part of a larger sequence, and the resultant design should be able to evolve and integrate new perspectives and needs. At the same time, it needs to contain clear guidelines and principles that should be possible to trace back in order to understand how those decisions were taken and formulated.

Urban design can have different approaches and components depending the project scale, scope or moment of the process, some more immediate and specific, others long term and general. The challenge is how the documents, plans and drawings produced can integrate multiple perspectives, dialogue in different scales and are able to evolve through the process, incorporating new perspectives and needs.

In the dialogue each participant contributes with own expertise and knowledge, and each part does not try to impose its voice, instead, all together look for a way to harmonise the different perspectives incorporated in the process. The designer, far from being an expert in all the aspects of urbanism, becomes a choreographer that integrates these perspectives into operative design proposals that need to be drawn to be articulated within the planning process.

To adopt the notion of dialogue as a principle governing urban design: (a) offers an umbrella term that provides a unitary understanding of the process as a whole, from how design is approached, to working methodologies or design proposals; (b) helps to articulate multiple perspectives into a coherent design proposal; (c) deals with the integration of users and stakeholders in the actual design; and (d) implies the recognition of the value of the face to face contact as an outcome of urban design processes, alongside the administrative documents resulting from the different instances of the planning process. Given this

perspective, dialogue is discussed from different angles in the following sections of the chapter:

1. as a working method, introducing the case study of Urban Step;
2. as knowledge embedded in the community, introducing “the feeling of the meeting”;
3. and as a design principle guiding the definition of the spatial configuration of the city, discussing the integrated urban grid as applied in the Urban Step method;
4. finishing with a discussion about the need to expand dialogue beyond the realm of the community of neighbours, into a process of aggregation of sensibilities and the active exercise of citizenship.

1) Dialogue as a Working Method: Urban Step

Although it can be adapted to many circumstances, it is worth noting that Urban Step has been developed and implemented in a context of urban growth in Sweden in the late 20th and early 21st centuries, reacting to the effects of inertias inherited from rationalistic urbanism. It aims to integrate principles of sustainability, responding to specific problems that face suburban housing enclaves physically segregated from the existing city. Enclaves that lack the services of a complete city and do not offer spaces for social interaction. Urban structures that are car dependant, occupy excessive land, and disrupt green structures, harming the natural environment and incrementing the impact of urbanisation on the territory (Einarsson, 2015, p. 20).

Creating a Common Vocabulary

The method is based in workshops where are represented as many interests and stakeholders as possible, often organised by municipalities. The workshops are seen not as an isolated event in the planning process, the proposals produced respond to preceding moments of the process and aim to evolve and influence the subsequent stages. In the development of the method was important the collaboration in these workshops of Arken with the uran ecologists and landscape architects from the firm Ekologigruppen ab and the traffic engineers

Figure 7.3
The round table with the tool kit for the model work.
Project: Kajer mot det Gröna. Workshop 2. 8th and 9th of April 2013.Source: Photo by the author.

from Trivector ab, a firm with an emphasis on sustainable mobility integrated into urban design. These three consultants address basic aspects of any urban plan. Other consultants, or experts from the municipality, are incorporated into each project.

According to Torbjörn Einarsson, the need to achieve a mutual understanding between different consultants lies at the origin of the method. It goes back to the 1990s, when he took part in a number of projects with Krister Sernbo, urban ecologist then at Ekologigruppen. The first obstacle they detected was the different vocabulary used in naming the elements of the project. The second was defining priorities. The third, to incorporate working tools that could put everyone in a similar level, because it was observed that using paper and pen meant that those professionals with drawing skills took over the dialogue. To achieve this, Arken complemented their methodology of working with physical models on top of aerial photos by incorporating visual tools to enhance the integration in the project of urban qualities and perspectives of sustainability. Three are the core tools of the method: the Round Table; the Matrix of Town Types; and the Value Rose.

The Round Table

Participants sit around tables, which display aerial photos of the area of intervention superimposed with thin lines that define streets, buildings, ownership, and topography. Most people can read aerial photos better than plans because they recognise buildings, parks, trees, etc. An additional benefit of working with physical models is that they provide with a playful way of working, which facilitates to engage a diverse range of personalities and backgrounds. A proposal is developed on top of the photos by distributing model pieces that represent buildings and elements of the landscape. Participants can move pieces around, change their distribution, and revert back to previous proposals while they explain their motivations, wishes, to one another. The choice of the model pieces in the toolkit (fig. 7.3) is important, since it provides a starting point for the introduction of the elements of design. Besides houses and public transport, the systematisation of the model pieces used to represent relevant elements of the landscape—namely water, grass, forests, fields—was incorporated following discussions on the initiative of the landscape architects.[5]

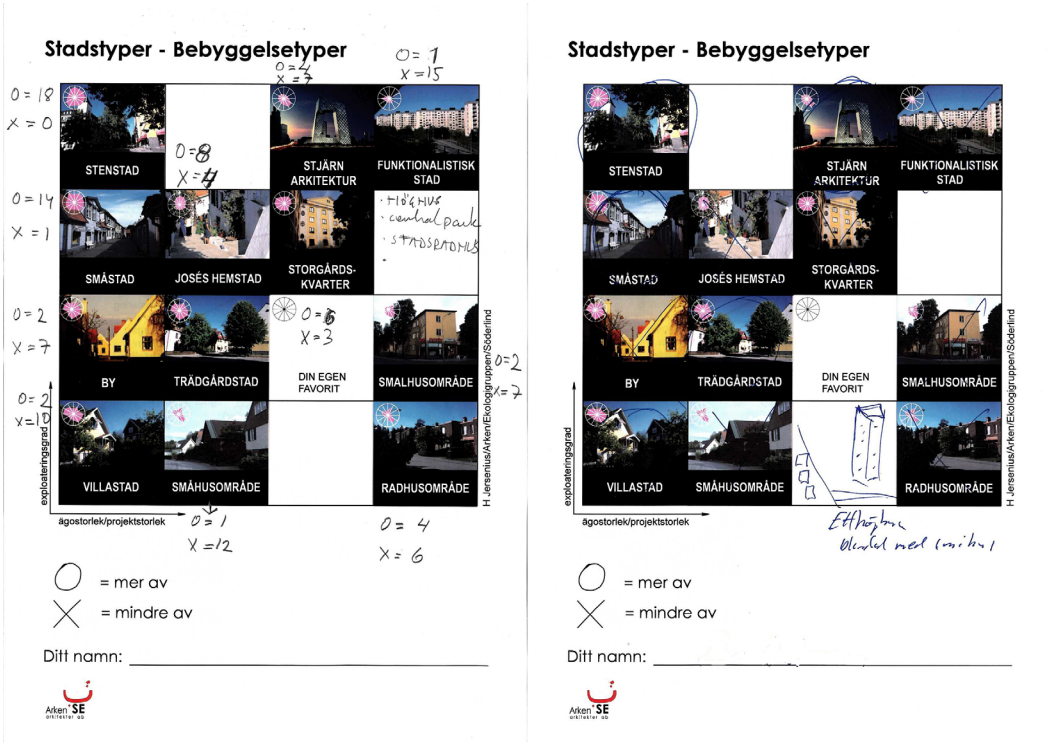
Several tables are set up. The more varied the members of each table, the better. Each table represents a different scenario, either by addressing different topics (car free, carbon neutral, etc.) or, more commonly, by assigning a different number of building units to test the possibilities and limitations of each scenario. Even for trained professionals, it is difficult to understand the implications of building certain number of housing units in terms of urban qualities. By testing different scenarios is better understood if too few units fail to improve services or collective traffic, or if too many hinder a respectful relationship with the landscape. One person is responsible for writing down the main points discussed at each table.

The Matrix of Town Types

The role of the matrix of town types is to shift the discussion away from styles and tastes to introduce instead the perspective of the performance and qualities of different urban

5 The first workshop to systematically incorporate specific model pieces representing the landscape is “Kajer mot det gröna. Järfälla Kommun. Delrapport från workshop 2”. 8th and 9th April 2013.

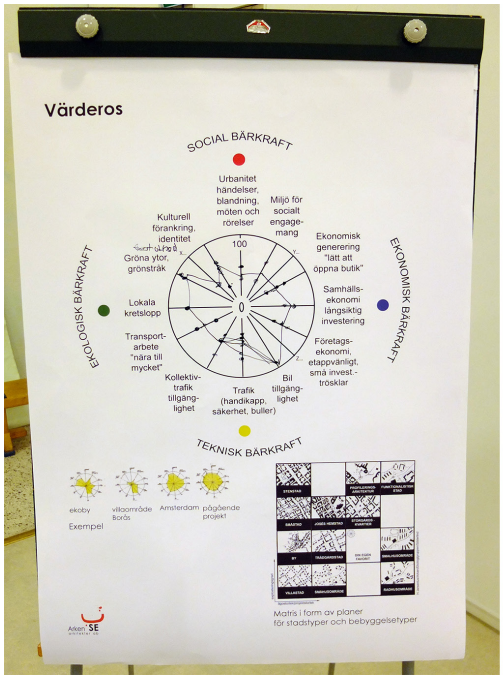
Figure 7.4
Matrix of town types
Filled during a workshop with politicians and municipal workers to discuss ideas on the town centre of Bålsta municipality. 12th of September 2012. The town types included in the matrix from left to right and up to bottom are: gridiron plan – starchitecture - functionalistic city; small city - José's home city - blocks of big gardens; village - garden city - narrow blocks; villa area - small houses - row houses. Source: Arken arkitketker.

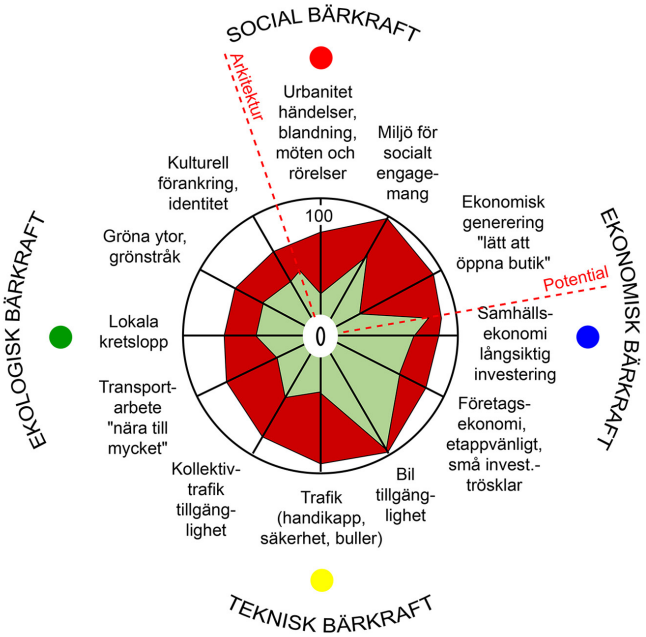


structures, and how they can be integrated with each other. It provides a name and an image for different town types that are normally found in the context of the workshop area, as an example it has been adapted to the context of Sri Lanka. The matrix used in the workshops analysed here (fig. 7.4), depicts common urban types found in the Swedish context, and is based on a classification by Johan Rådberg and Anders Friberg (1996). Participants mark which types they would like to introduce and which types should be avoided. The voting serves as a jumping off point for the discussion because it allows participants to question each other about their likes and dislikes, and to question the characteristics of different urban types. The task is not to choose one 'best' type to be implemented, instead, it is introduced in the discussion the idea of mixing town types with different characteristics that can complement the deficiencies of the existing ones.

The Value Rose

Figure 7.5
The value rose filled at the beginning of the workshop (left), and one value rose for one of the proposals at the end of the workshop.
Bålsta municipality. 12th of September 2012. The parameters included are divided in four areas. Social: identity and cultural rooting - urbanity, opportunities to meet - spaces for social engagement. Economic: facilities to open local shops - long term investments - attraction of business. Mobility: car traffic - accessibility, safety, noise - public transport. Ecological: proximity to work and services - local cycles - green areas. Source: Arken arkitketker.





The value rose (fig. 7.5) introduces the perspective of sustainability in the workshop and in the subsequent process. It contains parameters divided into four areas: economic, social, environmental and technical, introducing the last one aspects of mobility. The parameters are limited to a handful number of 12 terms, 3 under each of the above mentioned areas of sustainability. The chosen parameters are result of a trial and error process of applying the method, However, value roses can be adapted to different contexts or different interests.[6]

The participants in the workshop assign together a value between 0 and 100 to each parameter based on their own ideas about the area of the intervention. These values are a reference for the project, and more important than the final number is the discussion where everyone explains their understanding of each of the parameters and why should be the

6 Other examples of value roses are: Ekolgigruppen's value rose with a focus on ecology https://www.ekologigruppen.se/blogg/ekoguide/3826/; or Bokalders and Block (2023, 437) who present a value rose with 72 parameters for a holistic view on sustainability.

assigned higher or lower value. This way, the value rose gives name and presence to specific perspectives of sustainability, and a visual representation of what the participants think needs to be improved and what is working well. The rose is used again at the end of the workshop to depict and discuss which parameters from the first rose have improved or worsened in each of the proposals.

An important aspect of both the matrix and the value rose is that they incorporate the possibility of adding new urban types or new parameters relevant to the specific workshop. Any participant can propose new items and explain to the group why they think they are relevant.

Planning is Choosing

> And what are the best answers?
>
> None of them is best without the others.
>
> So there's no panacea.
>
> How can there be?
>
> (Huxley, 2005 [1962]), p. 68)

If "planning is choosing", then every choice in the form of project proposal has a series of advantages that should be promoted and a series of disadvantages that need to be explicitly stated so they can be dealt with (Einarsson, 2012). At the end of the workshop, the participants go through the proposals, and each group explains the conclusions of their work. The discussion should not revolve around who has made the best proposal, but rather around its characteristics, what can be learned, in what aspects is successful, in what aspects it could be improved, what should be incorporated and developed further in the process, and what should be avoided.

After the workshop, a first report is drawn up containing the original background and the purpose, as well as the different proposals produced by the participants. It combines the photos of the models produced, with quotes from the participants that summarise those

aspects considered to be the most important characteristics of each proposal. This report is distributed by the municipality among the participants to make sure that it reflects the spirit of the workshop and that no important points are left out. This initial report needs to be widely accessible, visualising the discussions that took place during the workshop. The project team includes at the end conclusions about how resulted the workshop, what they consider most relevant, and what the next steps will be.

The first analytical report and the feedback from the participants is followed by a synthesis proposal by the project team. This proposal produced after the workshop is not a direct translation of the desires of each participant into the plan. The task is to articulate the different perspectives into a new complex reality. As an important integral part of the proposal, the project team offers a reasoning for the ideas included in the plan, and for those that were not incorporated. The differentiation between analysis and synthesis, is important in order to make it possible to review and trace back the ideas in the future (fig. 7.6).

Transparency

Participation is not tantamount to neutrality or to a lack of agenda: rather, it demands transparency in the framework, the preconditions and how the decisions are taken. A democratic process does not consist of incorporating indiscriminately all the wills and wishes into a plan, which may thus become unstructured and impossible to manage. The plan requires its own coherence; at the same time to be open to contributions in later phases. Furthermore, the role and responsibility of the organisers of the workshop is to find ways to include the perspectives of those groups that did not attend, and which tend to be the more vulnerable ones. In this respect, the agenda of producing long-term sustainable urban structures that address climate change, integration or justice, needs to be explicit from the beginning.

Before a workshop starts, it is necessary to make clear to the participants the possibilities and limitations for the intervention, if there are any decisions that are already taken, or if there are aspects that cannot be influenced within the frame of the project. Moreover, to formulate the framework makes possible to challenge it during the workshop,

Figure 7.6
Project Kajer mot det Gröna, Järfalla municipality.
Top: one of the proposals from the workshop on 20th of February 2013.
Botom: the developed proposal by the project team.
Source: Arken arkitketker.

and consequently to incorporate critiques and reservations in the report.

Another key question to communicate is to what extent the results of a workshop are binding, and how they will be used. One cause of failure is when the institution or partner in charge does not keep the promise of implementing the results of a workshop, or when a proposal is dismissed because it does not meet some unspoken requirements. Participants will feel cheated and that they have wasted their time. Intentions, needs and aims may change during the planning process, but the exercise of transparency implies that the motivation behind those changes shall be explained and reasoned.

2) Dialogue as Embedded Knowledge: 'the Feeling of the Meeting'

Ralph Erskine has been defined as a humane architect (Egelius, 1988, p. 6) for his interest in architecture's effect on people, in how space is structured and perceived, and how buildings are grouped to generate social conditions. He understood architecture in terms of "the relation of architecture to its environment and its users", and his experiences with participation date back to the factory town of Gästrike-Hammarby in the late 1940s (Caldenby, 2014, p. 235). For his better known participatory project, the Byker State in Newcastle upon Tyne from 1968, Erskine opened an office on site where the team of architects met with local residents to discuss and adapt the design. However, it was not just a matter of following their petitions directly but of establishing a two-way dialogue:

> The direct conversational contact…meant both that the architects were better informed and that local people felt their individual voices were being heard…it did not mean that each family could design its own house, but the debate and dialogue enriched the shared social content (Blundell, 2014, p.211).

Heidi Svenningsen Kajita (2022) has delved into the archives of the Byker, studying plans that contain in the margins the architects' annotations during their conversations with local residents. The annotations reveal how the architects explained the project to the residents and how they collected feedback. She highlights the importance of the "minor matters" that were discussed in those encounters in order to integrate user perspectives,

dealing both with big and small issues, “small issues raised in residents’ complaints were dealt with specifically in each case, as well as in view of overall concerns” (p. 497).

Such design process recognises people as experts in the use of the space. In the long run, by being part of the process, the inhabitants have a more intimate relation with the dwellings because they understand how and why decisions were taken. Kajita imagines “how architects can reorient the conversation about the bureaucratic apparatus of social housing from positions of neutrality to subjective positions that actively inscribe residents’ place-based accounts into their design work” (p. 4).

In a similar spirit, Urban Step aims to influence the often rigid and bureaucratic planning system, moving the discussion away from norms and restrictions towards fundamental questions related to the specific people and site. In other words, rather than adapting the residents’ wills and needs to the norm, it looks for a way to accommodate the planning process so it can integrate those wills and needs.

The collective craft

Einarsson and Skånes explain how, in the everyday practice of the studio, Erskine tried to generate what he called “the feeling of the meeting”: an atmosphere of discursive conversation, where different points of view and perspectives could be manifested. Ideas or proposals would not be the product of one specific view but rather a coherent proposal harmonising multiple insights, distilled from conversation, debate and dialogue. His education in a Quaker school influenced Erskine´s view of the individual as part of a community. The disposition of the Quaker religious services is non-hierarchical, all the members sit on the same level, and anyone can speak if they feel they want to share something, generating an ongoing conversation within the community (Egelius, 1988, p. 52). The feeling of the meeting generates a climate of sharing, where everyone is heard, but also takes responsibility for their work and their ideas. In Urban Step, this philosophy is translated into collective action where groups of people with different backgrounds and expertise can test, hands-on, different configurations, explaining and discussing them, and then trying new ones, incorporating and excluding ideas in each new iteration.

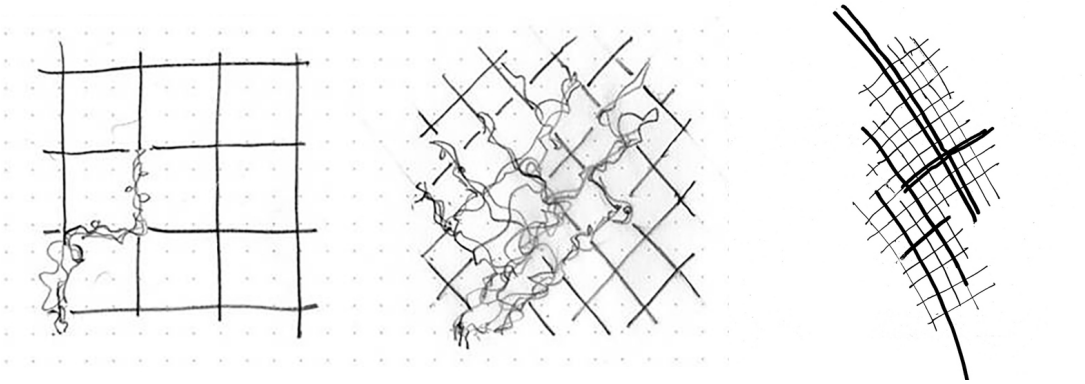
Per-Ove Skånes belonged to a tradition in which architecture is neither a systematic science nor an art rooted in inspiration; it is closer to a craft formalised in the process of making. Learnt and shared through everyday experience. One could sit next to him and he would offer a convincing explanation for the disposition of each line drawn in a given solution. The next day he would draw an opposite solution and give equally good reasons for the disposition of those lines. Architecture and urban design get formalised through this dialectic contraposition of ideas, which leads not to finding the 'best' solution but to taking conscious and informed choices, becoming aware of the strengths but also the weakness of each solution, in a way that can only be done by working together hands-on in each option. If "planning is choosing", methods such as Step allow us to test different scenarios before making informed and reasoned choices and exclusions as a group.

This process can be mirrored to speculative pragmatism as discussed by Isabelle Stengers and Didier Debaise (2017). A way of exploring possible futures, their consequences and possibilities. The attempt to "exclude nothing" beforehand that avoids getting locked into pre-defined solutions, where each speculation is "located, embedded in the situation from which it emerges and which gives it meaning". Multiplicity does not imply a lack of selection; rather it implies being able to make exclusions once the possible futures are explored, to define what is important, to take critically informed decisions, and to remain accountable for those decisions.

3) The Integrated Grid: a Structure to be Inhabited

This section reflects about how can be translated and articulated the dialogue into specific proposals. The components of urban design differ depending on the scale, the scope and the stage of the intervention. Urban Step workshops often address the design of long term urban structures. The first task is to move the discussion away from pure quantitative densification that focuses in the implementation of a number of housing units. By shifting the discussion towards how those units are organised in order to give form to an integrated grid with spacial qualities that complement the already existing urban structures in dialogue with the landscape.

Figure 7.7
Integrated grid as an espalier colonized by vegetation (left and center). Differentiated grid (right).
Source: Torbjörn Einarsson. Arken arkitketker.



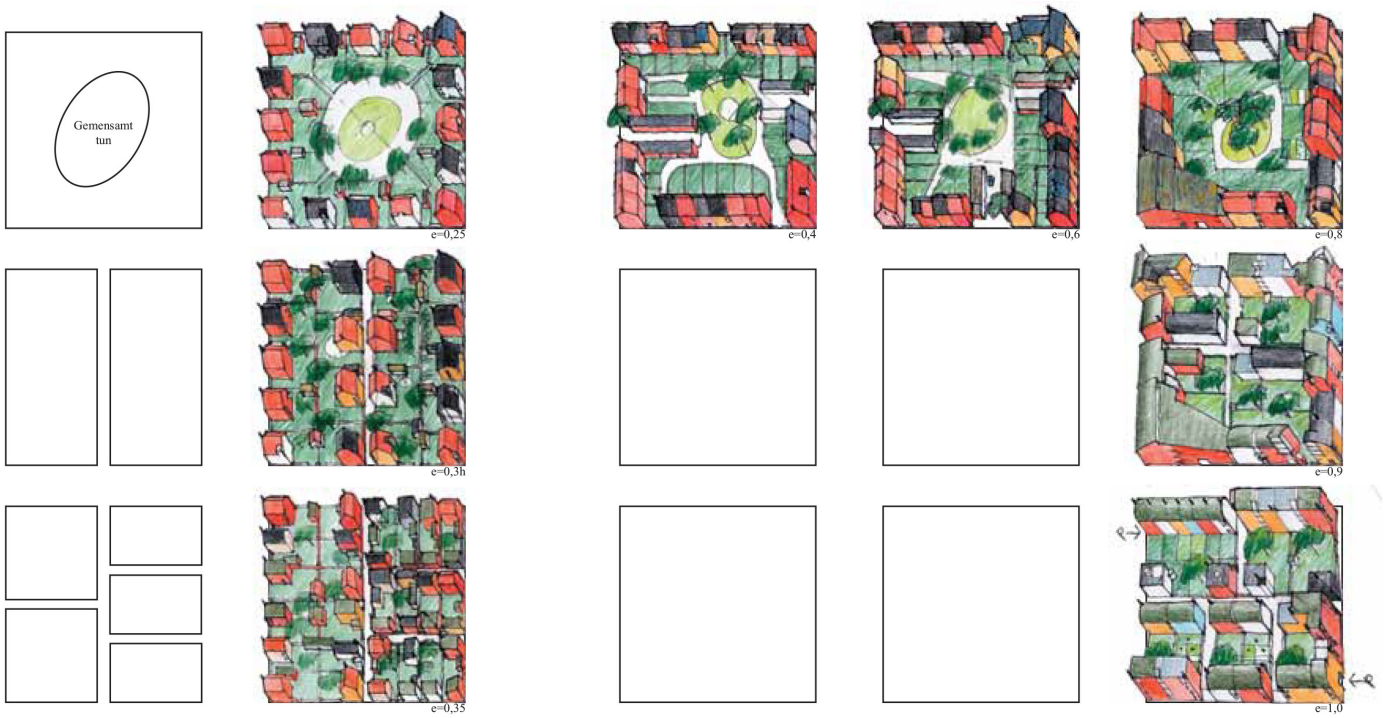
Annie Pedret (2013) emphasizes the role of Dutch architect Jap Bakema in the formation of Team 10, and in introducing the idea of town planning based on the relations between objects and between man and object, which shall substitute the object-centred approach that prevailed in the previous generation of architects participating in the CIAM. The idea of habitat, "represented to them [Team 10] an approach to modern architecture and planning based in relationships – social, physical, and formal – integration, articulation of differences, and change over time" (p. 83). Not having a direct influence from them, Arken SE in applying Urban Step deals with similar topics and concerns that can be recognised in "Team 10's aim that planning provide an architectural framework within which life could happen" (p. 212).

In a similar fashion, the integrated grid aims to provide with a spacial framework to be inhabited. In a diagram by Torbjörn Einarsson the grid is compared to an espalier inviting the greenery to grow freely within the frame of the basic rules of play it offers. Learning from Stephen Marshall (2004), to avoid monotony and repetition and to generate different situations that invite to allocate different services and functions, the grid is also differentiated: the different sides of a block will meet different kinds of streets, generating variety of spacial conditions (fig. 7.7).

The integrated grid is explained through qualities and relationships, it defines a grammar where the block is the basic unit of the urban structure, and the plot the basic

Figure 7.8
Block structure complementing existing villa areas.
Fragments of the project “Kajer mot det Gröna”.Järfalla municipality 2013 -2015.
Top: model from the workshop.
Bottom: drawing defining the block structure.
Source: Arken arkitketker.

Figure 7.9
Evolutive blocks.
The block structure can work with different configurations, levels of exploitations and accommodate different uses and it is open to change over time.
Source: Peer Ove Skånes. Arken arkitekter.



unit of user intervention. Figure 7.8 shows the model proposal of a project adapted by the architects after the workshop. The size and characteristics of the plot and how is defined the transition between public and private will influence who and how can intervene in the built environment. Once defined the blocks according to the overall structure, each block can be distributed in different ways and incorporate different densities, even evolve in time, but should always respond to the qualities of the grid and of the direct relation between building and public space (fig. 7.9). The urban space is thus shaped by the arrangement of the blocks and its character defined by the direct relationship of the buildings with the limit of the block, which generates a dialogue with the public space. The internal configuration of the blocks (housing types, styles and heights) its uses and functions, are not pre-established, these can change during the process and evolve during the inhabitation of the city.

The integrated grid avoids an orthogonal scheme of similar blocks imposed in the territory. The scheme is twisted and deformed, but not in an arbitrary way. In an expressionist

fashion, it is adapted to the existing landscape, both natural and artificial, to accommodate a hill or to emphasise a view, to continue or complete the street network, or to point to particular elements of the territory. The forms are not repetitive, avoiding long, monotonous streets to favour the richness of the experience from the pedestrian point of view, but also avoids complicated shapes for the traffic, and the junctions are kept at angles close to 90 degrees to facilitate construction (fig. 7.10). What reminds Adolf Behne's aim to introduce some rationalist order in expressionism.

Urban Design and Community

Erskine (1982) was interested in how buildings could be arranged to define spaces that foster encounter and meeting. A good example of how Erskine's careful design can provide with spaces for housing encounter is the development of Brittgården, in Tibro (Kajita, 2023). For him "architecture is the art of building communities", however, he lamented "that whilst I have been fortunate enough to design small communities...it has not yet been possible to achieve fully the weave of functions of which I speak" (Erskine, 1980, pp. 645-647). Functioning well internally, the communities remained to a large extent "mono-functional housing areas".

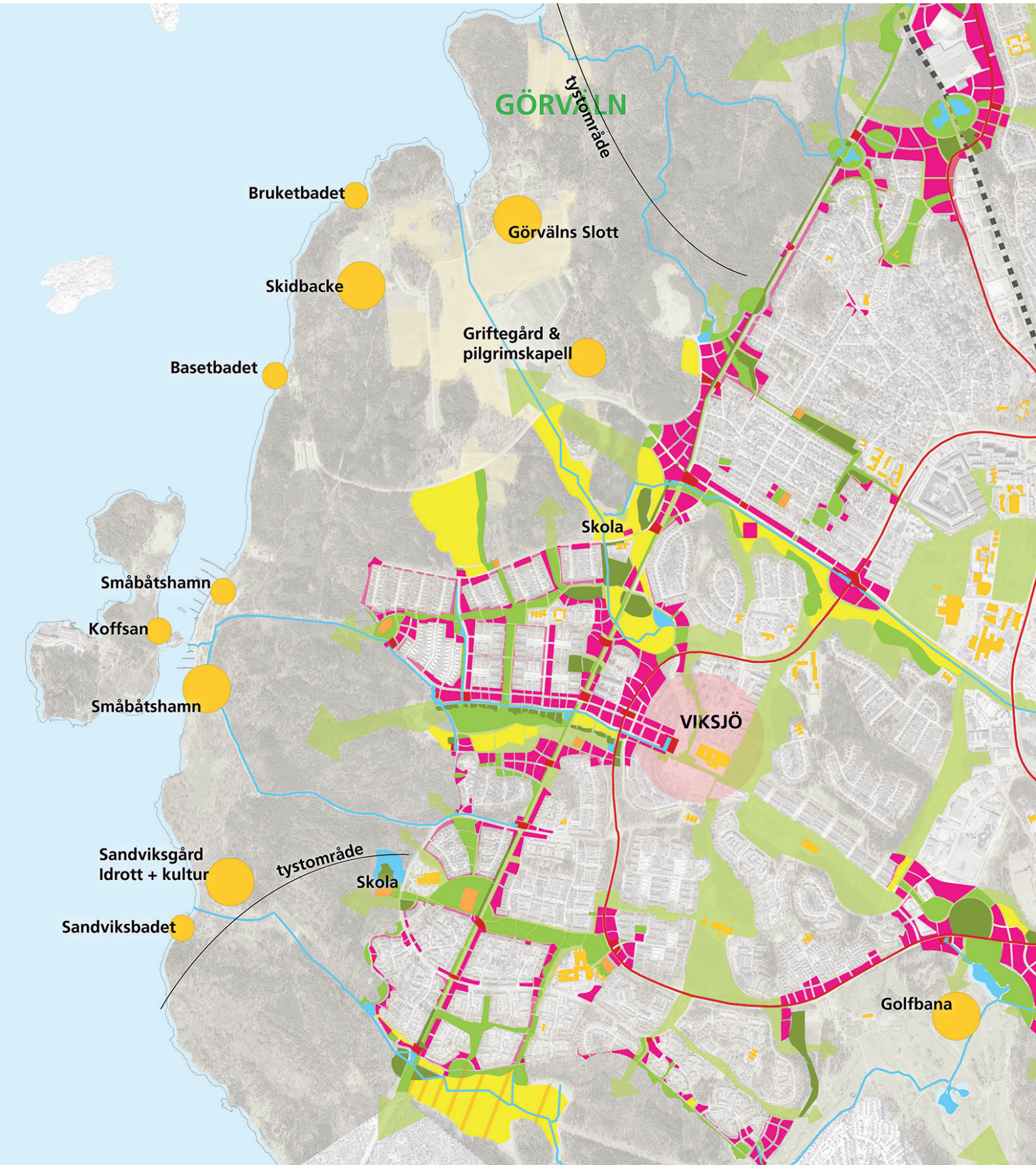
The problems described by Erskine are not derived from his skilled design of the space, but from how the developments are connected to larger scales, and from how the city is structured (or unstructured) as a whole. Arken in defining the integrated grid aims to translate the qualities of the community from the block onto the urban scale, a grid that can be inserted in, adapted to, complement, and repair, the existing urban structures and the existing landscape.

4) Aggregation and Citizenship

It has been defended the need to incorporate more perspectives into the realisation of coherent urban design proposals. The inclusion of such perspectives is not a neutral action, it also requires to adopt a position or point of view, which also needs to be made explicit to introduce the dialogue on shared values and needs to be addressed.

Figure 7.10

The grid as developed in the studio by the architects in dialogue with the project group, drawn with precision. One fragment of the project “Kajer mot det Gröna”, Järfalla municipality 2013 -2015. An example of a resultant grid that complements the existing structure, formalised by blocks integrated with the existing urban structures and with the landscape, drawn with precision to be incorporated it in the planning process.
Source: Arken arkitketker.



Sustainability is a very general aim that does not provide with a point of departure to address design, and it is often divided in different dimensions that are treated separately, solving technical aspects from one perspective, social aspects from another and the natural environmental from another. Dialogue has been introduced to address this, including examples of specific tools that aim to incorporate dialogue in design: the Urban Step (design method), the feeling of the meeting (attitude towards design), and the integrated grid (design principles).

Aggregation

Urban planning and design is inherently a dialogic practice since it deals with the spatial articulation of different needs and interests that coexist in the city. It responds to the formulation of needs, desires and questions that depend on the actors invited into the dialogue, and the perspectives put on the table by those participating in the project. If the resulting city depends on the possibilities of what we can imagine, then, if we do not consciously include multiple perspectives, it becomes what is possible from the inertias of the centralised bureaucratic structures that are in charge of planning. Such structures are capable to deal with large-scale problems and serve large sectors of the population by addressing welfare services, mechanisms of maintenance, proper standards, and services. At the same time, bureaucratic and centralised organisational apparatus tend to address issues through predefined methodologies, or by relying on generic solutions applied by dominant actors. The dialogue, when centralised and in hands of few, tends to turn towards a generic debate on models, formulas, parameters, technical solutions and best practices, which can easily result in idealised visions of what cities should be, detached from the specific place, context and people.

Dialogue does not necessarily inhabit the dichotomy between top-down and bottom-up. Decisions operate on different scales and at different paces, encompassing from long-term large structural questions to immediate *minor matters*. The categories used by David Graeber and David Wengrow (2022) of aggregate versus heroic societies, which I borrow and adapt, seem to be more applicable. Heroic societies are hierarchical, in origin organised under the

leadership of strong and charismatic leaders, visions or believes. In aggregate societies, that are less hierarchical, a series of individuals or communities organise around shared interests and multiple actors have an agency.

Dialogue is a continuous practice, it is not a one time action, people and institutions need to get used to it by exercising it. Graeber and Wengrow defend that societies can organise according different social arrangements. Without idealising them, we can learn from certain aspects of specific social arrangements that promote the aggregation of more voices in the community, as an opening to start imagining new social arrangements and processes of construction of the common realm. A good description that reflects the feeling of the meeting and how dialogue gets embedded through practice in the community can be found in the accounts by French Jesuits missionaries describing the indigenous communities of the north-west coast of America, whom they encountered for the first time in the 17th century, as egalitarian societies where “councils, held almost everyday in the villages, and on almost all matters, improve their capacity of talking”. Observing a rhetorical facility in all members of the community, a Jesuit was “surprised and impressed by his hosts’ eloquence and powers of reasoned argument, skills honed by near-daily public discussion of communal affairs” (pp. 39-45). In short, dialogue is learnt in time and trained by exercising it. At the same time, we need to be aware that some can take control over the processes, thus the importance of transparency and of expanding the notion of participation beyond those specific personas who can attend the meetings, aiming at the integration of different perspectives and of the responsibilities we have towards the environment and the more vulnerable.

Both trends, aggregate and heroic, can coexist. However, it tends to dominate the fascination on heroic figures or gestures, and of overarching models, that too often steer decisions and dominate the narratives we produce about the city. A well-known example from the 1960s of the collision between aggregate and heroic in the sphere of urban planning is the opposition of the activism of Jane Jacobs to the infrastructural projects of Robert Moses, urban planner and public official of New York, that would have implied the demolition of parts of consolidated neighbourhoods. The city defended by Jacobs (1961) can be defined as

a city of aggregation, the sum of individuals whose daily actions are what make up the city. Moses represented the heroic large-scale infrastructural gestures that prioritise efficiency and innovation over the effects they might have.

Far from associating heroic to top-down, and aggregate to bottom-up, our centralised and bureaucratic structures have the possibility to arrange in different ways and take different approaches to design in order to avoid heroic imposition, and to promote instead the aggregation of multiple perspectives in different levels, even when dealing with large scale projects. As Steinar Aas (2023) has shown in the case of the Planning of towns in Norway during early 20th century where the effort was put in realising “minor utopias” at the scale of the resident, Planning is not necessarily addressed through large-scale utopias of idealised visions. The question, then, would be how democratic, centralised and bureaucratic systems can enhance, promote, and enable aggregation processes in which more individuals and perspectives are implicated in the design, making, transformation and maintenance of the city.

Citizenship

In the work of Heidi Svenningsen Kajita and Annie Pedret, the narratives produced about the city do matter. So does the value of dialogue in itself as an outcome of the planning process, as well as the need to search for methods of drawing and writing that introduce more nuanced perspectives into planning documents. The aggregation of more perspectives and individuals and processes of commonoing, would be reinforced by the exercise of a citizenship understood beyond formal recognition, as the exercise of a wide set of practices and civic action (Prak 2018), expanding beyond the definition of communities articulated through the social contact among neighbours. Nevertheless, social communities are important as they create bonds and generate a base of support and mutual care, but they should be extended into a wider exercise of citizenship projected into the whole city and all the functions of life, which entails political and civic engagement in the making of the city through proximity to social services, the distribution of decision making across scales, increasing agency and responsibility over the formalization, transformation and adaptation of the built environment.

Final Remark

Implied in the argument is a vindication of the discipline of design that evolves through its exercise, face to face discussion, trial and error, sharing ideas, exploring futures, and integrating others in the project. This approach moves away from the idea of the isolated architect-creator; and also from the dry addition of parameters in a checklist used to formulate proposals directly from logarithms or parametric tools, that should be integrated in the process as analytical tools to reinforce the dialogue. The collective exploration of possible futures and participation of many does not entail a dissolution of the decision-making process, instead, it requires the formulation of concrete proposals to be discussed. Concrete proposals are a necessary step to deal with complexity by developing new iterations of the proposals after each discussion. Dialogue on each iteration allows to understand the positive and negative implications of the different proposals, to take informed decisions of what to develop further and what to dismiss, while engaging more parts in the understanding and the reasoning behind the adopted design, and in taking responsibility over it.

Sustainability is not a quality or a path, it should be rather considered as a driving force shaping urban design. Dialogue, as introduced here is a path that promotes sustainability. If we put in common all the driving forces and paths introduced before, we can end with a short recapitulation:

- Aggregation is expressionist, as it results from addition of actions.
- Bureaucratic and centralised structures are rationalist, as they seek controlled order
- Capitalism is romantic, as the mechanisms of control hide behind forms that aim to replicate nature or seemingly timeless forms of the past.
- Individualism is utilitarian, as it focus in narrow functions.
- Sustainability is dialogic and is enhanced by aggregation.

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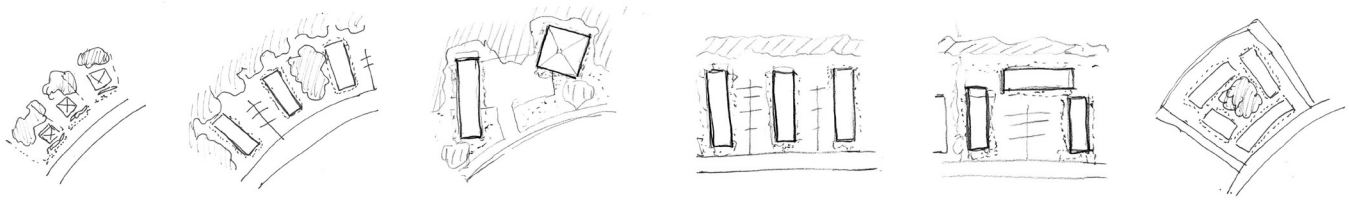

Tesis doctoral. 2025

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Programa 03E6 -Doctorado En Sostenibilidad Y Regeneracion Urbana