DIN BOENDE MILJÖ

DRÖM ELLER VERKLIGHET

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UTFÖRT AV NEWTON ENKEL.

CHALMERS TEKNISKA HÖGSKOLA.
SEKTIONEN FÖR ARKITEKTUR.
AVDELNINGEN FÖR FORMLÄRA.

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Introduction

Columbia lectures of Raymond Unwin.

Between the years 1936-1939 Raymond Unwin (1863-1940) gave a series of lectures about housing and town planning at the Columbia University in America. His first lecture on the 1st of October, 1936 was entitled, "The Nature of Man, His Life, in the Family and Society, Afford the Best Basis for Good Housing and Planning". During this lecture he said the following:

"An important consideration in housing and planning is the constant change in what is considered, from one generation to another, the minimum accommodation for decent living. Once again we see the link between housing and the human element. In an early English cottage, for example, we may find an old woman sitting comfortably in a small porch. All through the history of English housing the cottage has been tied up with human life, human desires, needs, and habits as well as man's mere physical necessities."

"Suddenly in the 19th century we seemed to break away from all this, to forget the human element. We went in for wholesale housing - houses built in quantity without regard for human life. The number of houses built seemed to be most important, not whether the people could live in them happily. Many an English slum has resulted from such building."

This I feel, could equally well have been said today, or at least during the 1960's. It seems that each new generation of architects and planners are blind to the past and forget that people have to live in the houses and environments they create; they forget the human element.

W.R. Lethaby.

W.R. Lethaby (1857-1931) said, "To forget the past would be as foolish as to ignore the future. Behind is custom as in front is adventure."

Later in the fore-mentioned lecture that Unwin gave in October 1936, he pointed out that at the beginning of the Industrial Age in England "Standards in family life deteriorated rather than progressed". So before starting a project dealing with a housing environment problem today, I would like to look back upon the development of town planning and housing in England, from about the beginning of the Industrial Revolution and some years further forward in time.

Deteriorating standards.

The Industrial Revolution

One usually associates the invention of the steam engine (about 1775), with the start of the industrial age. It was no longer necessary to build factories which needed a source of power beside flowing water-ways; instead, they could be built almost anywhere; and with a more powerful source of energy, (steam), they could be built on a much larger scale than before.

Location of factories

At first new factories were located where cheap transport systems could be found. This was necessary for the delivery of fuel (coal) and raw materials, and for the transportation of finished goods. As railways and canal systems were extended the location of factories became much less restricted, but in most cases they were built in, or close to, existing towns, where there was plenty of labour available.

Expanding industrial towns

There are a great number of examples of rapidly expanding industrial towns of this time, and of the consequences of this. However, the bad living conditions that developed industrial towns during the period 1760-1900, cannot entirely be explained by the technical and economic changes that took place; at about this time England experienced a population explosion that was quite unique in the world.

growth of population

The population of England about the year 1800 was less than nine millions, by 1851 it had risen to eighteen millions and by 1900 it had risen again, to about thirtytwo millions.

During forty years the population rose in number the same as it had during the previous four hundred years. It is very difficult to give reasons for this, but it must have been the result of many different factors, one being the advances being made in medicine and the control of illnesses.

growth of industry.

It is not quite so difficult to explain the growth of industry during this period, again, it was a result of many factors. England was a strong sea and military power, and the country had experienced political and social stability for many years; this meant that England was a very rich country and was able to make large investments in industry. The British Empire gave cheap raw materials and safe markets for the sale of products, and technological developments, access to cheap labour, and the rise in population, also played their parts.

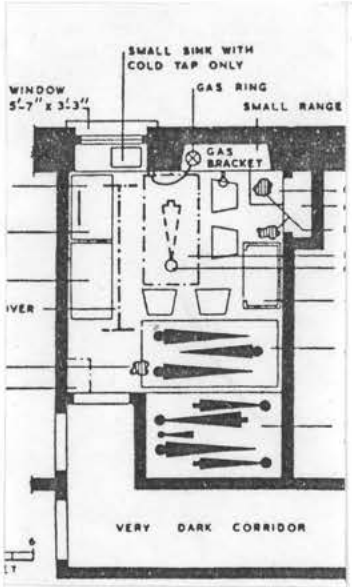
agricultural depression.

If one also takes into account the fact that agriculture in England experienced a depression about 1870, due to a change from crop growing to sheep breeding, (to supply industry with wool); it is clear that the majority of the expanding population found their way into the growing industrial towns.

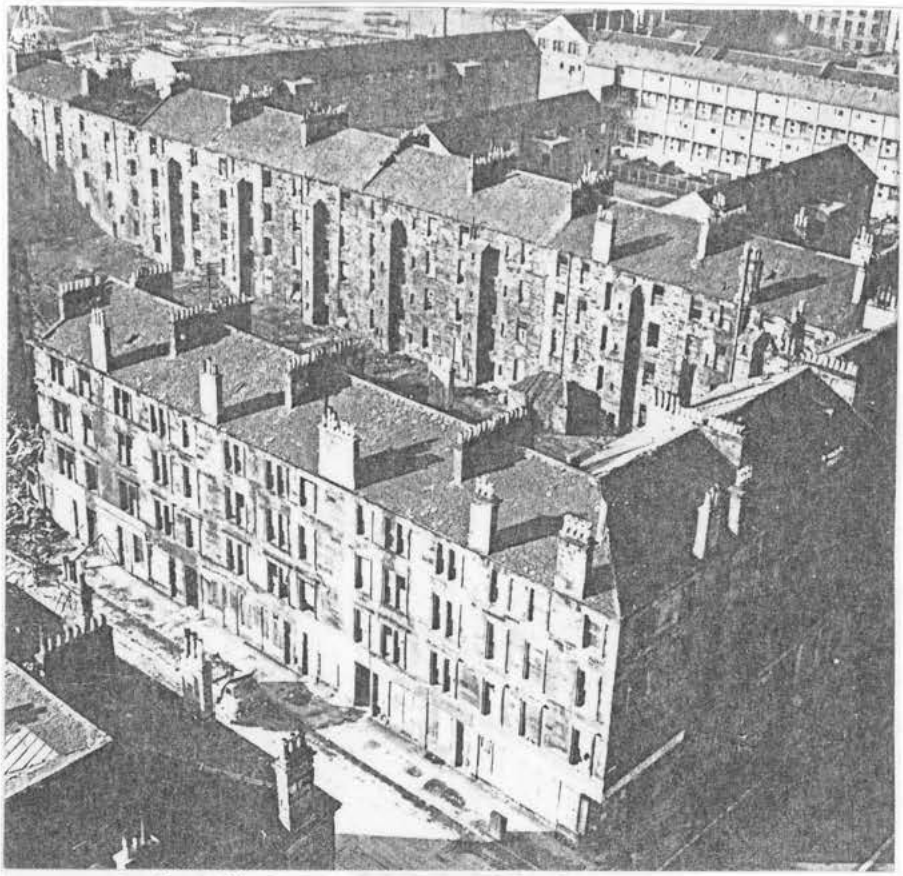
Everything happened so quickly that I do not think one can speak about "steering powers". Such an expansion had never been experienced anywhere before so no one could have had experience or knowledge of these matters, consequently, no one had learnt to steer, or to control, the developments which were then taking place.

growth of towns

To begin with industrial towns expanded without any planning taking place. Streets and whole areas seemed to grow on their own, and no one steered. Planning departments did not exist, and town councils, if there were any, just couldn't cope with the enormous, rapid expansions that were taking place. Local authorities did eventually get some control over the situation, but it is difficult to say if this improved matters or not. However, more about this follows later.



Typical single roomed apartment, still in use 1948.



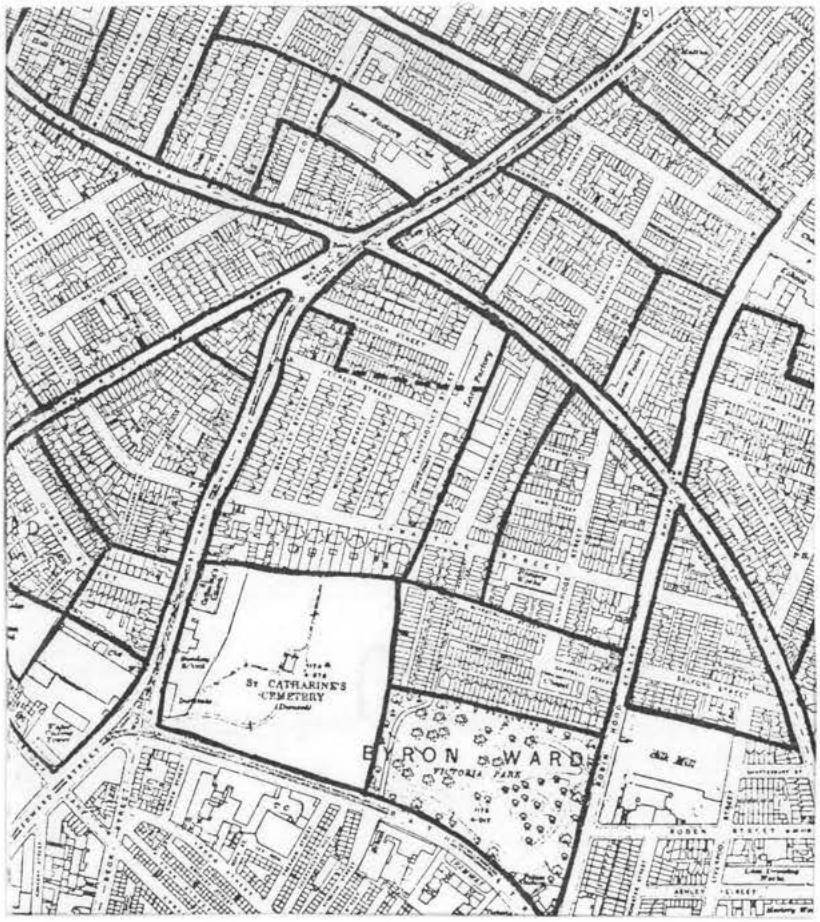
The Gorbals, Glasgow. Tenement blocks

Glasgow

One of the towns which expanded most was Glasgow, which in 1850 had three hundred and twenty thousand inhabitants. Around 1920 the population had grown to over one million, and the town was the third largest in Europe. At the time Unwin advocated a population density of twelve families per acre, some areas in Glasgow housed as many as seventy-four families per acre. Even today Glasgow contains twenty per cent of the total number of slum houses in the whole of Great Britain.

Nottingham.

Some industrial towns could not expand their territory; Nottingham, for example, could not expand because of the land ownership situation outside the town's boundaries. Therefore man exploited every open space within the town, and Nottingham changed, in three generations, from being one of England's more beautiful towns, to one containing some of the worst slum areas to be found in England. After the passing of the Enclosure Acts, around 1845, the ownership of the land outside Nottingham became regulated.



Housing development in Nottingham after the "Enclosures"

The black lines show the boundaries of the allotments made over to private owners by the Enclosure Commissioners. There were about 400 of these and most were developed immediately by their new owners.

Slum

There were also several factors that together gave rise to the building of slums. The word "slum" was first used in 1820, and it came from the word "slump", meaning "wet mire". As the speculative building of houses was usually carried out on the worst land, without drainage, etc., it is not hard to imagine that the streets did usually look like "wet mires".

England at war.

From 1793 and for the next twenty years, England was at war, mainly with France. In England this caused a shortage of timber from the Scandinavian countries. Prices went up, rates of interest rose, and land prices rose. As a result of this, houses had to be built smaller and more cheaply so that working class people could afford to pay the rents. One recognises the arguments of today's motivation for cheap shoddy houses.

In literature about the history of town planning in England, one often finds that Titus Salt and Robert Owen are named the first to show an interest for their employees welfare and living conditions. But I think one has to go further back in English history to find the origins of this, and the reasons for the building of Garden Villages and Towns.

The English Heritage

English landscape.

In England there are very old traditions in the field of landscape gardening; one speaks about the English landscape being largely the work of man. There are, of course, large unspoilt natural areas, but, on the other hand, there are whole counties which have been given their character through the work of man in one way or another.

Stability-wealth.

Over hundreds of years England experienced political and social stability mainly due to the country being an island. From the 1500's onwards England had strong naval forces and was able to conduct trade in many parts of the world; so by the eighteenth century, the country was a very rich one, and these riches increased during the Industrial Age.

Aristocracy

To begin with, the aristocracy owned most of the country's wealth, they also owned much of the land, and with the help of new laws, they were able to confiscate large parts of the common land as well (this process is still going on today). This did mean, however, that large sums of money were invested in the land. In some areas this was done on such a scale that whole counties could be re-formed, as was the case with the county of Kent which covers an area of about four thousand square kilometres, and today is called the "Garden of England".

Investments in agriculture.

Large sums of money were also invested in agriculture. Man drained fields, planted hedges and woods, built walls, and built up pedigree stocks, etc. One can say that the country today is still benefiting from the investments that were made at this time.

Tree planting.

It was also during the 17-1800's that tree planting in England was carried out on an extensive scale. (The original forests had been cut down or burnt to provide space for farming land and timber for building ships.) The great majority of these trees were planted for aesthetic reasons; rich men planted them to make the countryside more beautiful, they were planted to make roads more beautiful, to create parks, to protect against wind, and to give privacy. A few men understood though, even in those times, the importance of trees in the field of ecology. One of these men, John Evelyn, in his paper "Sylva" (1664), pleaded for afforestation. Many landowners seriously heeded his call, and tree planting was carried out as never before.

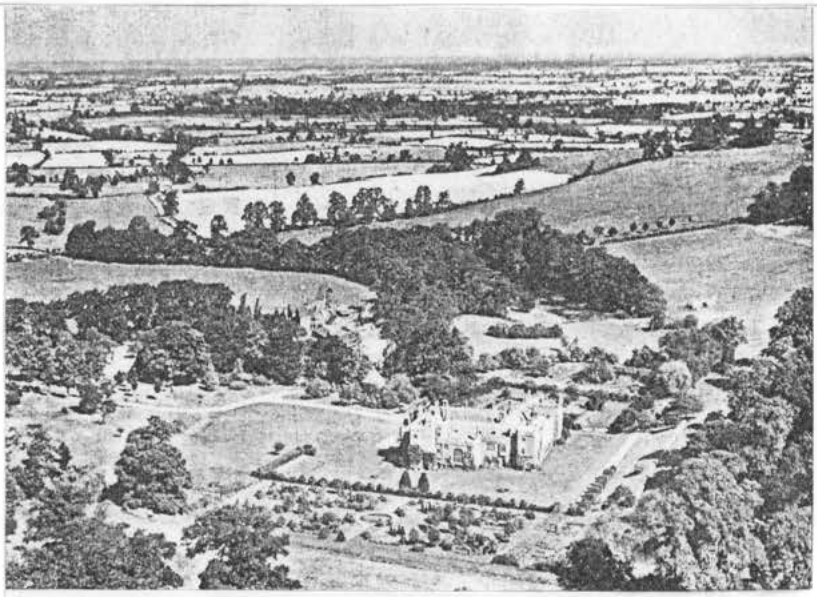
Beckford.

A man called Beckford, who built Fonthill Abbey, is supposed to have planted over a million trees. Again these investments are of great value for following generations, and many of these trees remain today. Many of the landowners of that time of course, had economic gain as motives for their investments, but very many did actually plan their actions with the future landscape ideal in mind.

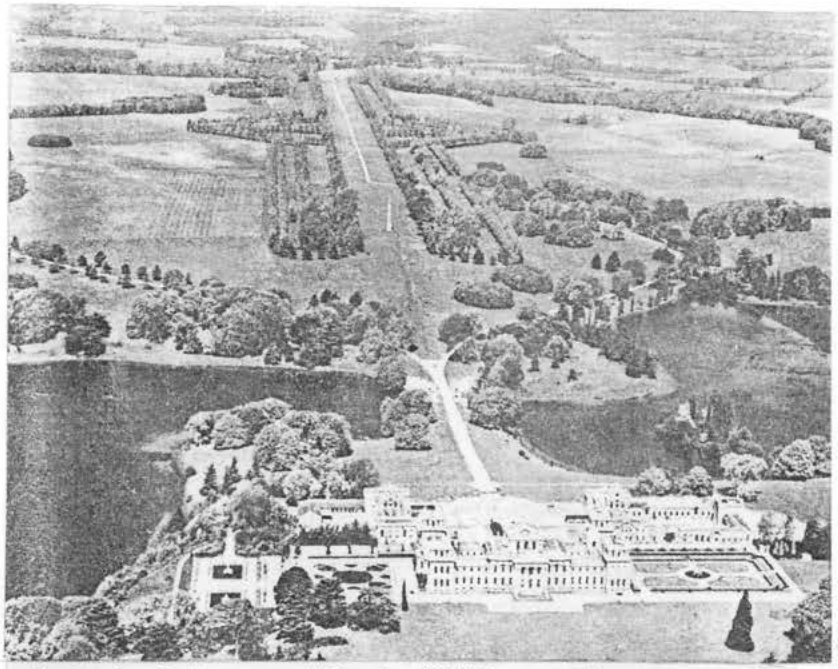
The nouveau-riche.

The nouveau-riche owners of industry followed the example set by the aristocracy; with their growing wealth they bought themselves into the aristocracy and bought up tracts of land as investments. From 1500 onwards many large country houses were built and the lands around them were frequently changed into parkland. The larges of these estates were created during the reign of Elizabeth I by rich statesmen.

It was not only these large houses and the grounds surrounding them that benefited from the investments made, nearby villages and the houses of the estates' employees also received a share. Farm workers were usually given cottages to live in, and many landowners took an interest in their employees well-being. It is said that in some cases landowners would go to nearby villages and give the inhabitants flower seeds and fruit trees to plant to make the views from their estates more beautiful.



Compton Wynyates, Warwickshire. Built during Henry Vlll's reign. In 1510 2000 acres were closed off to form parkland.



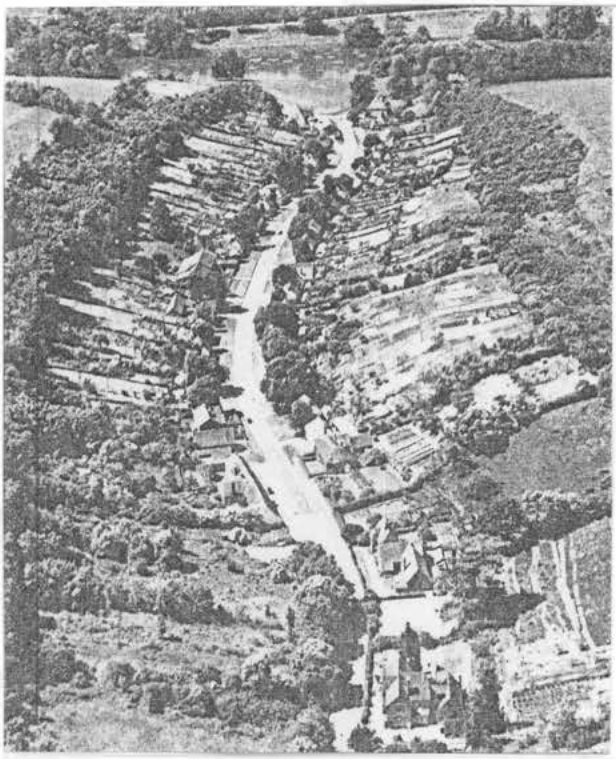
Blenheim Palace and Park,(2700 acres). Landscaped by "Capability" Brown.

Model villages.

In extreme cases landowners would sometimes move whole villages just to create more beautiful views for themselves. The village of Wimpole in Cambridgeshire is one example of a rebuilt model village, but perhaps the most wellknown example is that of Milton Abbas in Dorset.

Milton Abbas, Dorset.

The old village of Milton Abbas stood below the ruins of an old abbey; but when the area was bought by the Earl of Dorchester in 1752, he wanted to build a house where the abbey ruins lay; so he ordered the ruins and the village to be demolished. He built his house, and in 1786-7 the village was rebuilt a few kilometres further away. The houses were built semi-detached and chestnut trees were planted between them; a new church and a public house were also built. The village was planned by "Capability" Brown.



The village of Milton Abbas.

Lancelot "Capability" Brown.

Lancelot (Capability) Brown (1715-1783), was perhaps England's greatest landscape architect. He was responsible for changing the appearance of enormous areas of countryside. He created lakes, changed the flow of rivers, changed the topography, and planted millions of trees; he also had the ability to create harmony between the art of building and the art of landscape gardening.

William Kent.

Humphrey Repton.

Brown followed in the footsteps of William Kent, (1685-1748), who was probably the true founder of English landscape gardening; and Brown, in his turn, was succeeded by Humphrey Repton (1752-1818).

The English love of the countryside can also be attributed to two other factors: -
1. The Saxon dislike of towns.
2. The Saxon taste and cleverness in the art of building.

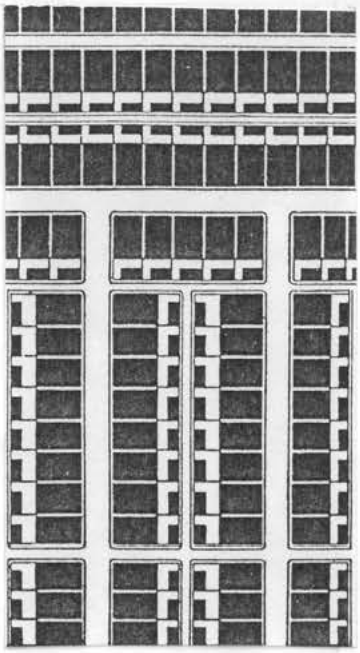
The Saxon peoples.

The Saxon peoples were mainly farmers and seamen who lived in small villages, so it is ironical that today the descendants of these people live in one of the most urbanised countries in Europe. Saxon skills and tastes however, seemed to survive the intermingling with other cultures that took place over the centuries, and they were passed on from generation to generation.

Village Street, Dunster, Somersetshire.

The nouveau-riche.

Therefore when England entered the Industrial Age a new class of rich men was born, but, what they did with their money was partly determined by history and tradition. Some, of course, went their own ways, blinded by their newly acquired riches, but very many did show a great and seriuous interest in the country, and for the health and welfare of their employees.



Bye-Law streets.

Housing Reforms?

As towns expanded, local authorities were forced to act to cope with the most acute problems. Town authorities started to build water, sewerage, and drainage systems; they also started to prescribe minimum widths for streets, minimum sizes for houses, and various other standards. When speaking of this Raymond Unwin described it as the "paving, lighting and cleansing mentality".

What went wrong with this way of thinking was that authorities forgot the real reason for building houses, that is, for people and families to live in. Local authorities came to take the attitude of "bye-law bureaucrats", and many speculative builders did not hesitate to misuse this situation. Just as today, minimum standards became maximum standards, and this resulted in row upon row, and mile after mile, of what became known as "bye-law streets".

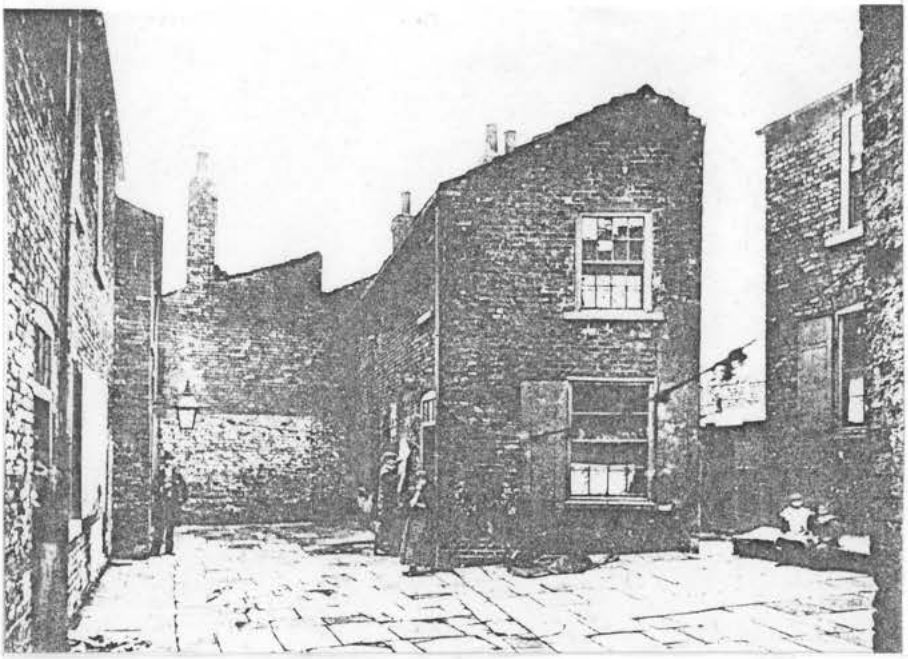
Bye-Law streets, Bournbrook, Birmingham. With dimensions according to the Public Health Acts of 1872-75.

"Bye-law streets" were of course physically healthy places, but they must have been very boring places to live in. Prior to the building reforms, (1872-75), housing and street environments at least were built to a human scale.

Old street system.

The old street systems consisted of endless numbers of cul-de-sacs and courts, most of which did not connect with each other, and through traffic was not possible in these areas. Houses and back yards were very small so people used the street as an extra room. They met in the street to talk to each other and to pass the time of day, children played in the streets, and housewives hung their washing in the street, etc., which they could do undisturbed as there was no through traffic.

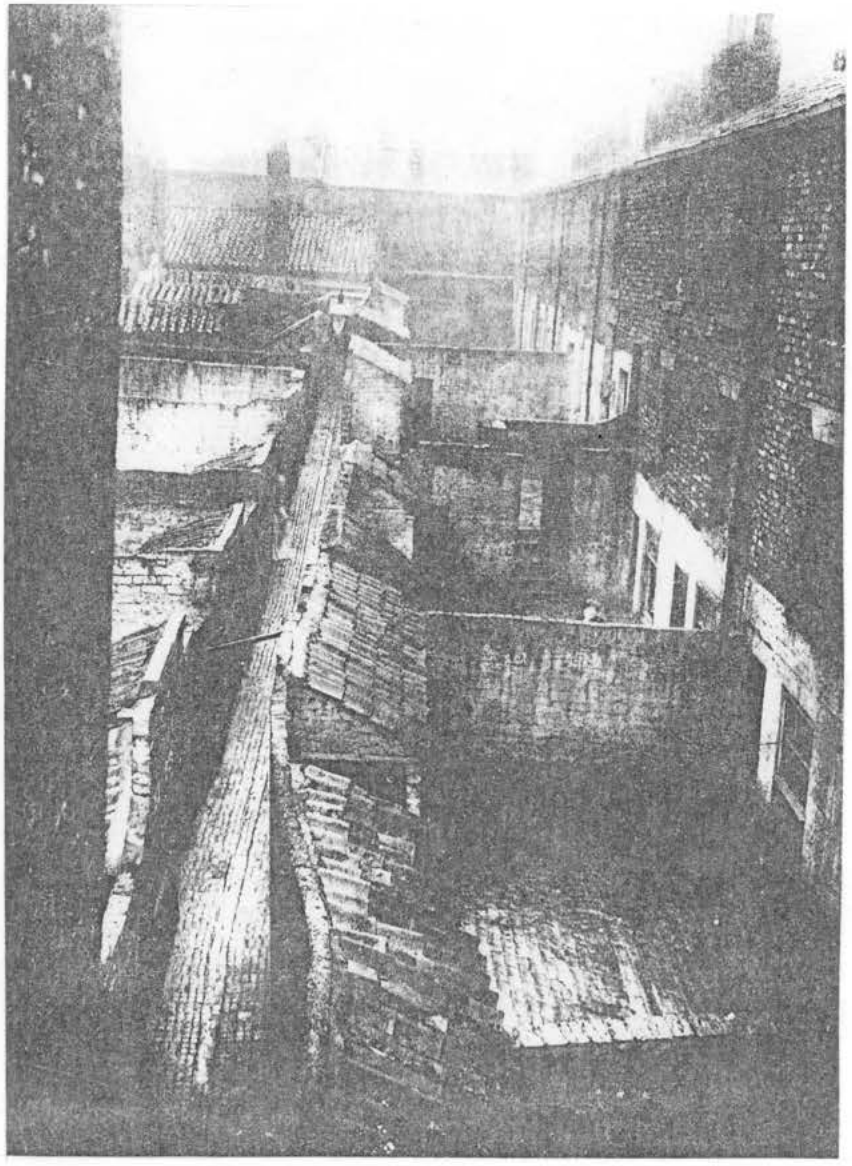
Washing hung in the street in the Hunslet District, Leeds.



Woodhead's Yard, Leeds. 1820.

Low standards.

Of course the streets were very poor, and the houses of low standard, but people did bring up families in them, and I think one would say they were friendly places; neighbours helped each other, and they looked after the sick members of one anothers' families, etc. With the introduction of "bye-law streets" families became much more isolated socially. Streets became long, wide, and straight and connected with one another, allowing through traffic. The street was no longer an extension of the home, it was a barren, cold, and sterile space, completely lacking personality. Another fault with the bureaucratic "bye-law mentality" was that it led authorities into housing working class people in tenement houses for greater economy.



Olive Street backs, Middlesbrough.

High-rise
Low-rise.

It was at this time the debate began about high-rise versus low-rise housing. It seems that today, finally, authorities realise that high-rise blocks of flats do not promote human living. But I do not think the high-rise enthusiasts have given up, they have gone in for high density, low-rise housing schemes instead, which I am sure will show negative results in the near future. People just do not wish to live on top of each other; planners and architects however continue to force them to do so. When will they learn that this just does not work. Man has to go back to housing environments that we know work, and if this costs a lot of money then society will have to reconsider its' priorities.

Declining standards.

As I have tried to explain, it is not easy to point to specific causes for the decline in the standards of family life, and in housing, during the first stages of the Industrial Age. Many factors together brought about the changes. Nevertheless one must admire considerably those men who really did try to better the living conditions and social welfare of their employees, and of England's population as a whole.

Clark Street, Saynor Lane, Hunslet District, Leeds. 1850-60. Back to back housing. One room downstairs, two upstairs. Sanitary conveniences at the end of the row.

Social reforms.

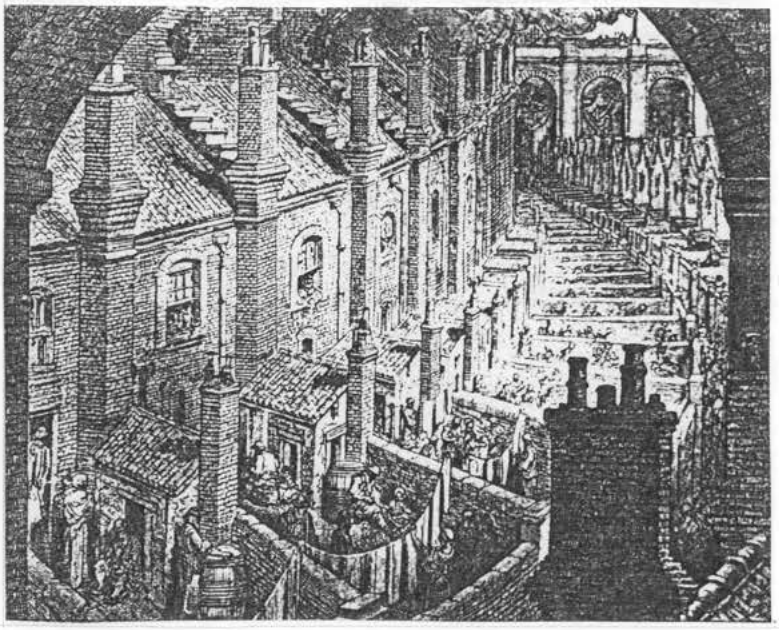
John Ruskin

John Ruskin (1819-1900) was a writer and lecturer, and a highly regarded art critic. He used this position in his work to bring about social reforms, and it was largely his work that brought about the revival of the fine English craftsmanship that nearly vanished during the Industrial Revolution. He wrote in 1849 a book called "The Seven Lamps of Architecture". He also influenced many other reformers, one being Ebenezer Howard, who, in his book of 1898, "Tomorrow a Peaceful Path to Real Reform", cited a piece from Ruskins article of 1868, "Sesame and Lilies". The citation is the following: -

Citation from, "Sesame and Lilies"

"Thorough sanitary and remedial action in the houses that we have; and then the building of more, strongly, beautifully, and in groups of limited extent, kept in proportion to their streams and walled around, so that there may be no festering and wretched suburb anywhere, but clean and busy street within and the open country without, with a belt of beautiful garden and orchard round the walls, so that from any part of the city perfectly fresh air and grass and sight of far horizon might be reachable in a few minutes' walk. This is the final aim."

For many, who at the time the article was written, worked and lived in overcrowded cities, the above citation must have sounded like a description of paradise.



London 1870. A drawing by Gustave Dore'

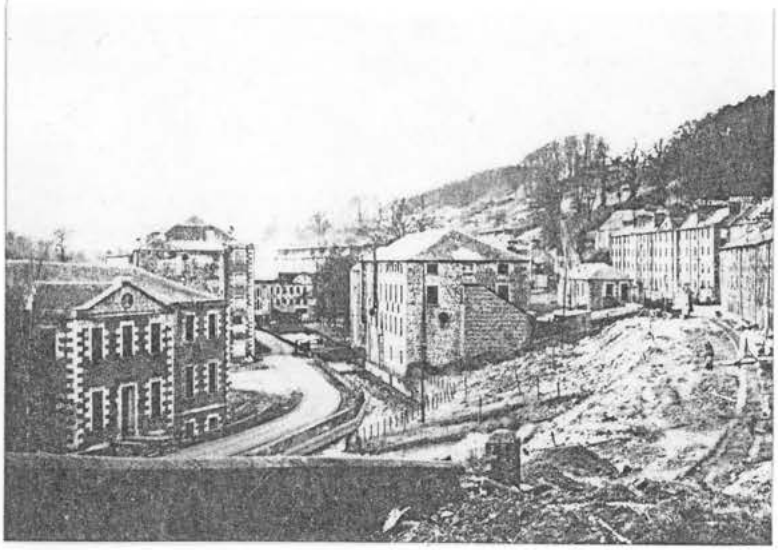
Robert Owen

As early as 1813, an English social reformer, Robert Owen (1771-1858), had written an article "A New View of Society", in which he wrote how children could grow up into good, wise, and happy people, by the creation of the right physical, moral, and social conditions for their upbringing.

New Lanark.

In 1800 Owen became a director of a large cotton mill in New Lanark in Scotland. In 1813 he formed a new company in which he put his own theories into practice; he improved working and living conditions for his employees and their families by, paying higher wages, shortening their working hours, reducing the work done by children, and improving housing conditions, etc.

New Lanark, tenement houses.



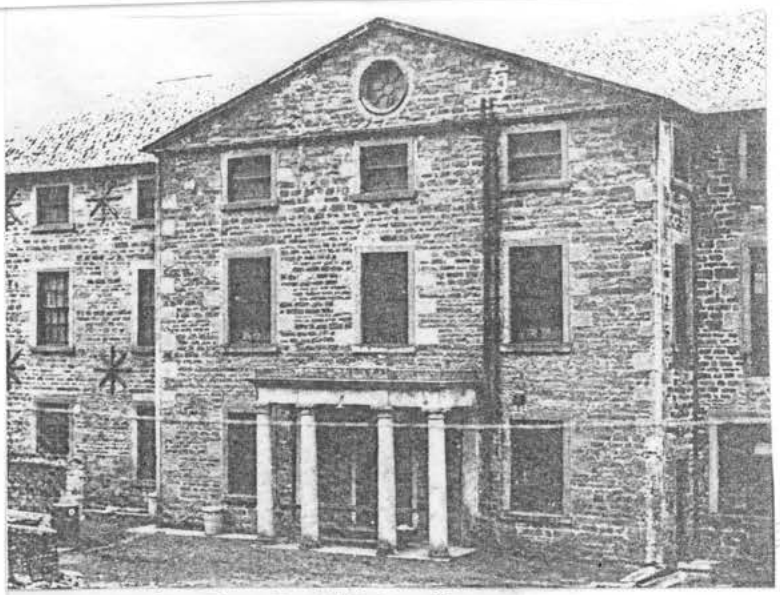
New Lanark. Along the restricted Clyde. Tenements to the right, the mill to the left.

Tenements

Owen built four-storied tenement blocks in which to house his workers; as living accommodation for families these were not suitable. Owen however, did not intend whole families to live in them; it was not his intention just to provide living accommodation for his employees, he had theories about re-forming their characters, and those of their families.

Ideal Societies.

These theories were developed by Owen to include so-called "Ideal Societies, Villages of Unity and Mutual Co-operation"; in these societies, children were to be taken from their parents at the age of three to be brought up by the community.



New Lanark. The Institute for the Formation of Character.

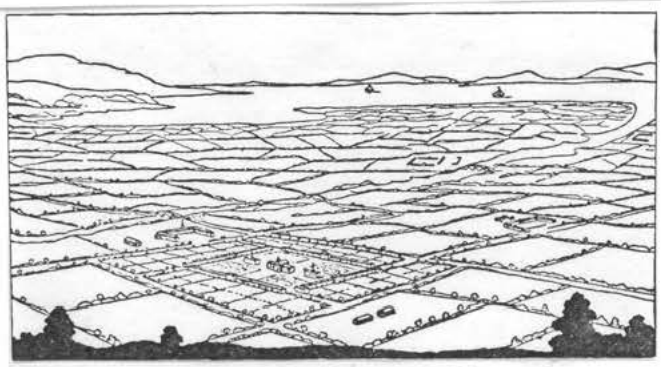
The Institution.

In the village of New Lanark, Owen opened in the year 1816, "The Institution", which was the educational centre of the village, his institution for the re-forming of characters. This building had many rooms which were used, or intended to be used, for many different purposes, including a school, a lecture hall, recreation rooms of various types, a chapel, a communal kitchen and dining room, and dormitories and play rooms for children.

The rooms were also to be open in the evenings for the education of youths and adults who lived in the vicinity but did not work in his factory. Owen also had in his village, accommodation for the elederly, a co-operative shop, and an infirmary. The village grew more like an institution than a housing environment for working class families.

Owen's move to America.

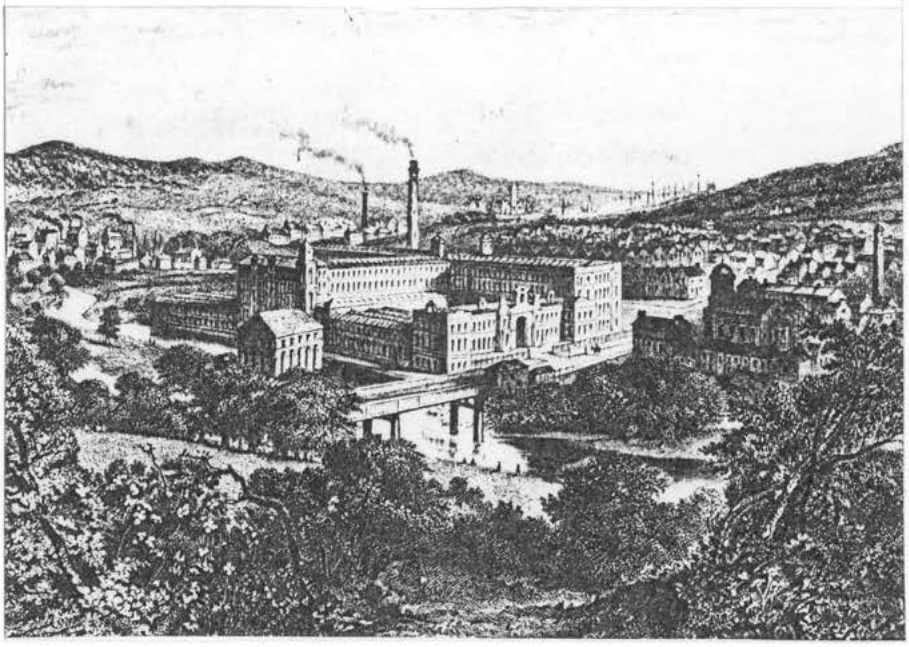
Owen's new Utopia in New Lanark did not work, so in 1825 he moved to America, where he bought land and tried to start more villages; these also failed. One cannot force people to live collectively. He returned to England in 1828 where he continued to write about, and to agitate for his ideas.



View of Owen's Ideal Community.

Saltaire

After Owens' experiments in New Lanark, Saltaire, in Yorkshire, became the most well-known example of the creation of a model village for working class families.



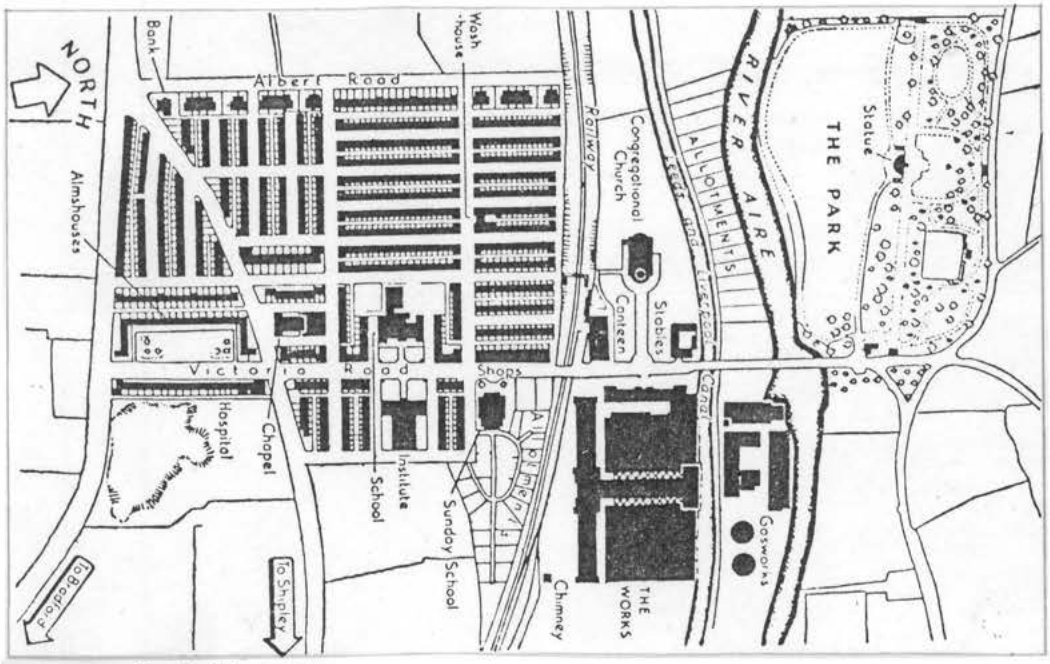
Saltaire factory and village from Saltaire Park.

Titus Salt.

About 1850 Titus Salt decided to move his factory to a new site outside the town of Bradford; he engaged the architects Lockwood and Mawson. The factory was built first, followed by houses for the employees; it was Salt's ambition that the village should be independent, so it contained schools, a hospital, a church, houses for the elederly, etc.

Standard of housing. Facilities

Every employee was given the chance to rent a house with a living-room and kitchen on the ground floor, and two, three, or four bedrooms on the upper floor. Each house had a small back garden with a toilet. The houses of the workers did not have gardens in front of the house, but those of foremen, etc., did, and these were situated on separate streets.



Plan of Saltaire.

Salt also wished to ensure his employees' health, and to provide for them cultural and recreational activities. He was himself a teetotaller so his village did not have a public house, but there was a hall for social activities.

Neat and Tidy

He liked everything to be neat and tidy; the streets of the village were well kept, and washing lines were forbidden to be put up where they could be seen; to make this possible Salt built a laundry which could wash, dry, and pack washing in an hour.

Saltaire: Titus street and
Congregationalist Church.

Saltaire, Boarding houses on Caroline Street.

The village functioned for about a hundred years, and had many good points, but it's planning was too rigorous and strict. The design and layout of Port Sunlight, on the other hand, was not so rigid as that of Saltaire.

W.H. Lever.

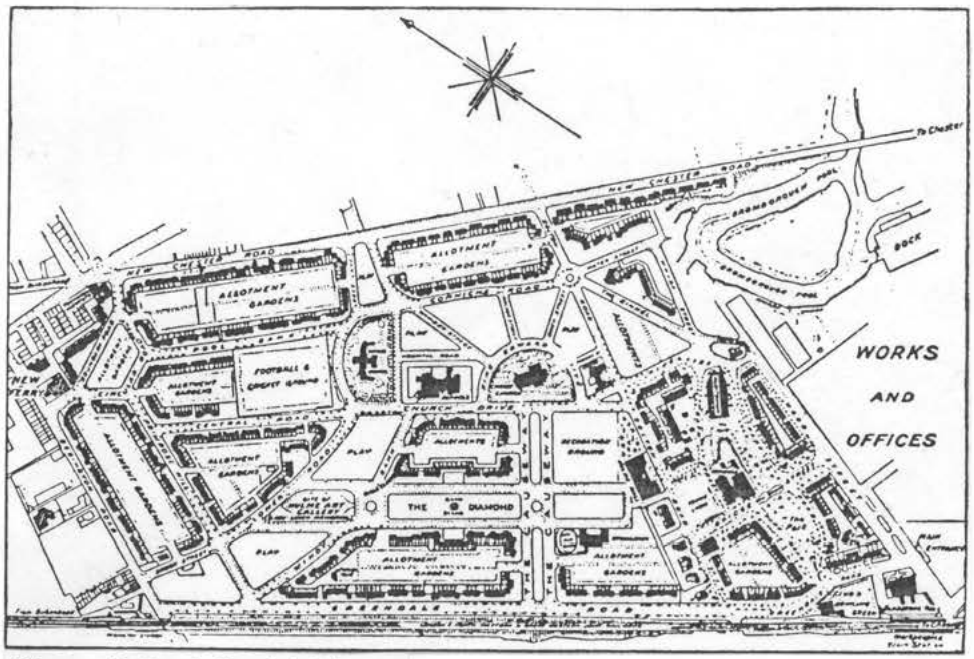
Port Sunlight

In 1888, when his existing premises in Warrington became too small, W.H. Lever built a new factory for his soap manufacturing business; the year after, he started to build a village for his employees. Lever, together with his architect William Owen, had chosen the site for the complex mainly because the land was cheap, it lay near to cheap transport, it had good water frontage, and there was plenty of labour available who lived within travelling distance. Unlike other sites chosen for model villages, the site for Port Sunlight was flat, and one corner of it was a little marshy.

W.H. Lever.

Service alley
Port Sunlight

The houses were built around large open areas, which were used by the tenants as allotments. Each home had a small back garden, through which, in the larger blocks, each family had access to a service alley which encircled the allotment area. Lever paid for the upkeep of the gardens in front of the houses and the allotments were rented by those interested in gardening.



Plan of Port Sunlight.

Gardening.

In housing estates being planned around this time there was a tendency to reserve land areas for growing vegetables. Competitions were arranged for the best fruit and vegetables, and the results of these competitions were used to find the average yields of gardens, and then compare these with the average yields for farm land. The yields of the gardens were in all cases better than those of the farm land, and Lever never wearied of quoting these statistics to support his arguments for better, healthier living.

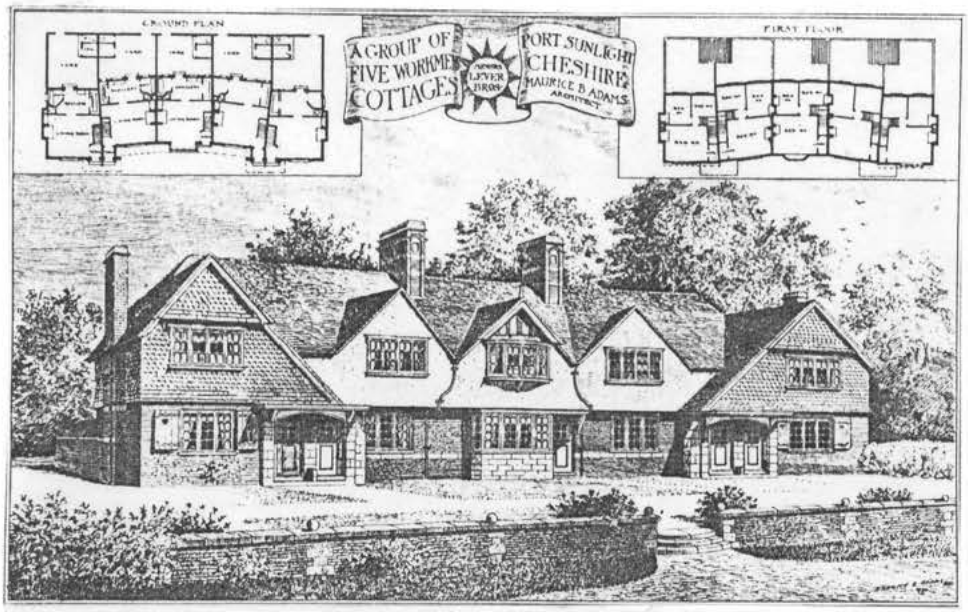
Lower Road group.

Working conditions.

William Lever often spoke of how factory work was becoming far too specialised, and how this created monotonous working conditions. To compensate for this he wanted his employees to participate in garden work as a hobby, this would provide them with relaxation, and cheap vegetables.

Housing standards.

The houses had a high space standard and the surrounding areas were nicely planned. Within every block there were up to ten different styles of houses, with variations in materials and colours, but even so the total effect was completely harmonious. Lever frequently said that an effective society did not necessarily have to overlook aesthetic values.



Port Sunlight. Five workmen's cottages. M.B. Adams 1904

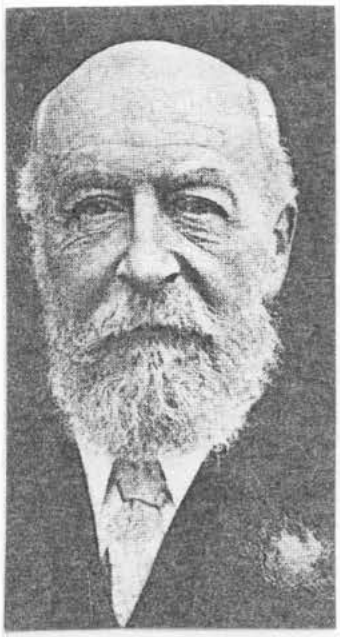
"High-rise building.

In 1898 Lever advocated that towns should buy up the land which surrounded them and give this, free of charge to private builders to develop with low-rise housing. He was against "high-rise" buildings and said of them "Corporations, and notably Liverpool, have built blocks of workmens' dwellings - so-called - and anything more hideous, more undesirable for the rearing of a family, or more wasteful of the public money, it would be impossible to find." I agree with this. He also said that every "improvement" carried out by town authorities, slum clearing, widening of streets, etc., only contributed to worsen the overcrowded living conditions of the working class. This is also true today.

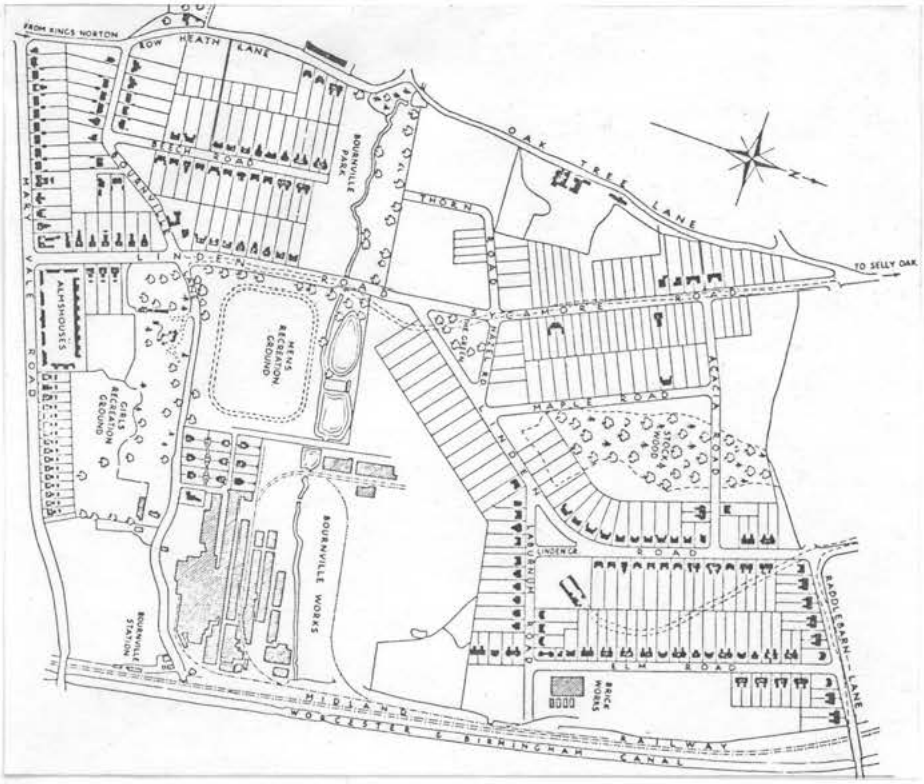
Bournville .

The Cadbury brothers.

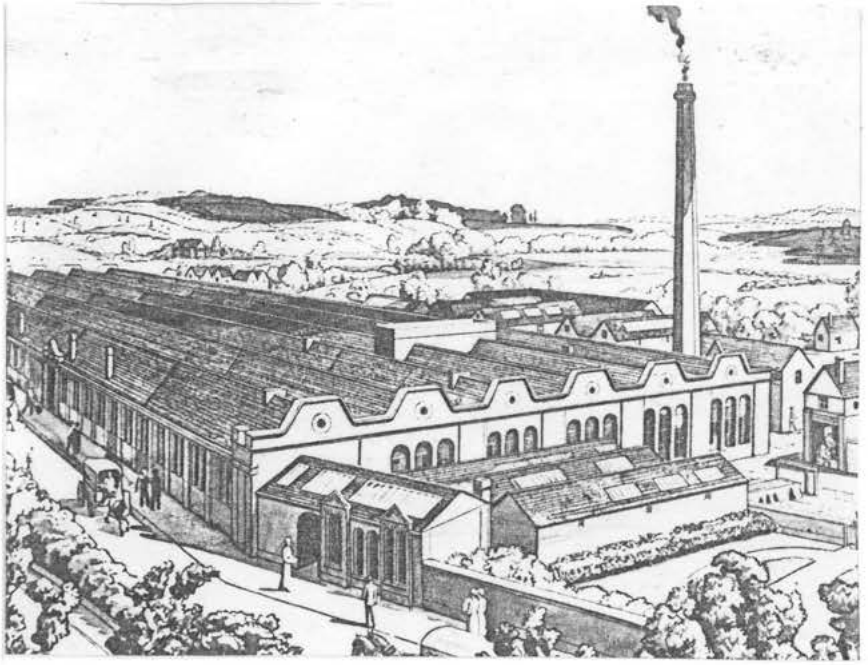
When, in 1878, the Cadbury brothers moved their chocolate factory to a new location outside Birmingham, they proceeded more cautiously with the building of Bournville , their model village for their employees, than Lever had done with Port Sunlight.



George Cadbury.



Plan of Bournville.



Bournville.
The factory, in 1879.

Social integration.

George Cadbury formed a trust, independent from the company, and employed Alexander Harvey as his architect. He tried to attract tenants from different social groups to Bournville, and he succeeded with this because of the town's geographical position. Besides Cadbury's own employees, "middle class" families also lived in the village and commuted to their jobs in Birmingham. One can say that Bournville became, more than any other village, a socially integrated society. Every family lived in the same type of house, in the same streets, so, due in part to the architecture, it was impossible to differentiate between factory workers' and office workers' houses.

Bournville. Backs along Elm Road.

Bournville, Elm Road. W.A. Harvey 1898-1905. The width etc. follows the Bye-Law type of Birmingham, but the houses are set back.

George Cadbury.

Cadbury had many ideas which coincided with those of Lever. Cadbury wanted people to be surrounded by beauty, he understood that the increasing demands of specialisation that were being forced upon the factory workers, must be compensated for in some way or another. He believed that monotonous workshop routines could be compensated for, by, among other things, gardening as a hobby. Cadbury was himself a vegetarian, so he tried in every way to interest his employees in growing vegetables. He was also a Quaker and a pacifist, and he thought that by lowering living densities, and providing houses with large gardens, he could create a healthier nation. In support of this he pointed out, that in 1900, in the Manchester district, there were ten thousand men who wanted to enlist in the army, but, only ten per cent of these were regarded as physically fit enough to be engaged.

Bournville, Weoley Hill District. Samuel A. Wilmot, 1914. In this later section the roads follow more naturally the contours of the land.

Cadbury also believed that children needed gardens, so they could be exposed to beauty from an early age; and he said, too, that if men worked in their gardens, it would keep them from going to the pub, and this would promote a closer family life. He was so convinced of the value of gardens that he financed courses in gardening, and put gardening experts at the disposal of those who required help. In the gardens which were large enough to contain both vegetable and flower plots, he also paid for the planting of flowering trees.

Bournville. shops at The Green.

William Miller and gardens at Bournville

When an American horticulturist, Wilhelm Miller, visited England to study gardening, he found that the upkeep of the gardens in Bournville was possibly the best to be found in the world at this time. Miller wrote a book, "What England Can Teach Us About Gardening", in which he wrote of the seven lessons of Bournville, these included: -

1. Planting smaller ornamental trees and dwarf bushes to suit the scale of the homes and street of towns.
2. The use of only one kind of tree to each street.
3. The seasonal modification of the environment which well chosen trees and plants can confer.
4. The decorative effects that climbing plants can give to inexpensive architecture.

Ebenezer Howard

Ebenezer Howard.

In several countries, many others had shown an interest in building villages and collective institutions for working class families. The leader, however, for the new Garden City Movement in England, was, of course, Ebenezer Howard (1850-1928).

Howard came from a "middle class" family, and between the years 1872-76 he worked in an office in Chicago, after failing in his attempts to be a farmer in Nebraska. He was a thinker and an idealist but he talked and wrote a lot of common sense. He believed in collectivism and co-operation, but he did not believe that this could be forced on to people against their will; Ebenezer Howard believed in a better society based on the goodness of man and his ability to accept responsibility. Many thought his ideas to be romantic dreams, because during this period (1898-1903) in England, life for many was very difficult. Howard, not being himself an intellectual, was subjected to a lot of criticism from so-called intellectuals of the day. They discredited his book and called it "Utopian". The contemporary critic, W.H. Eden, said in an essay, that Howards failing was that he couldn't tell the difference between what people wanted and what was, in actual fact, best for them.

W.H. Eden.

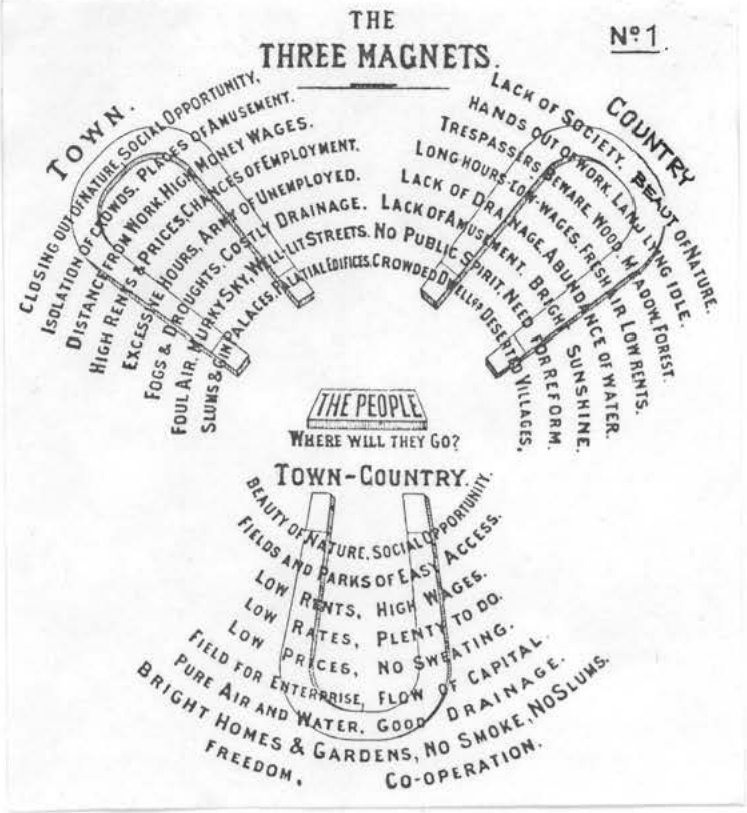
In Edens' words we recognise an arrogant attitude which still exists in many "intellectuals" even today: - Shall we give people what they want, or shall we force upon them what we ourselves think best for them? This was the reason for the failures of such men as Owen and Fourier and their followers; the self-contained economic communities these men conceived were far too rigid, and did not allow for individual enterprise.

Influences on Howard.

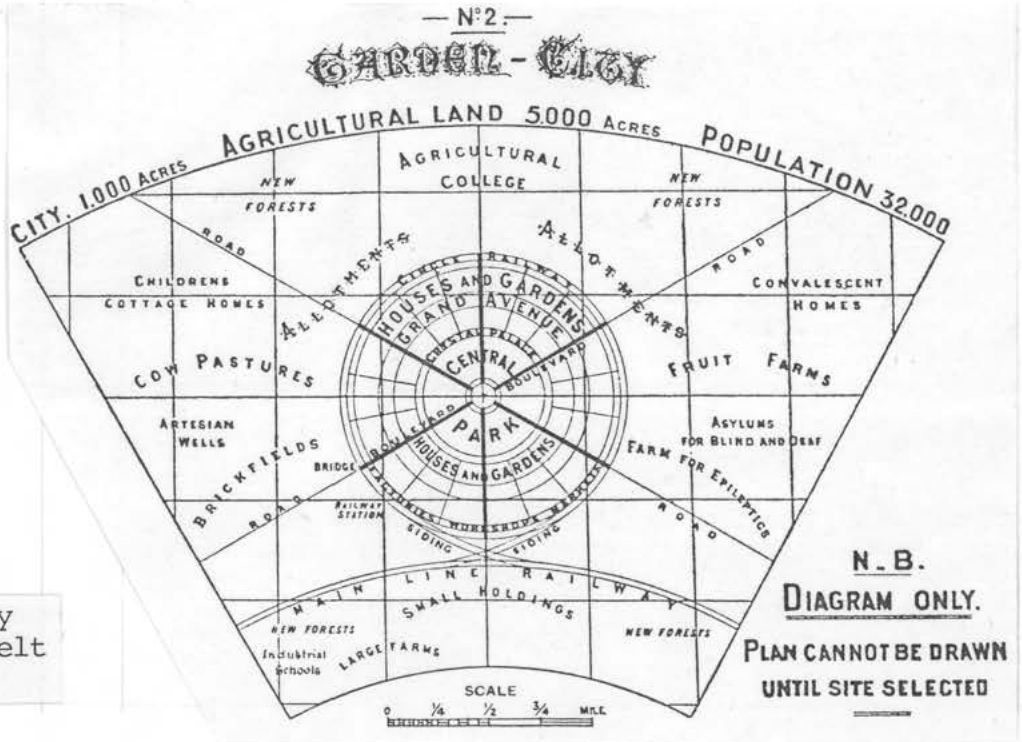
Ebenezer Howard was, self-admittedly, influenced by Edward Bellamy's book about a Utopian Boston, that he read in 1888. William Morris wrote articles in the press, more as a joke, under the title "News from Nowhere". These articles were widely discussed and came to be used as a text book by young socialist-politicians, -economists, and -moralists, of the time.

Howards book.
"Garden Cities ....."

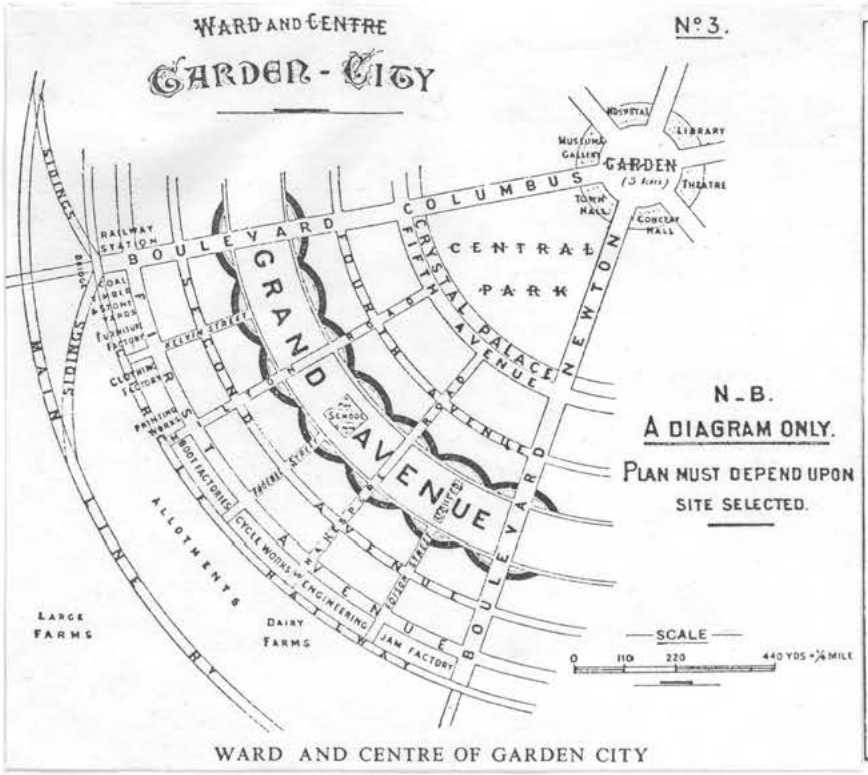
In 1898 Howard wrote a book, "To-Morrow: A Peaceful Path to Real Reform", later in 1902, re-named "Garden Cities of To-Morrow". In this he wrote about his ideas, illustrating them with small simple diagrams. These ideas still make sense today.



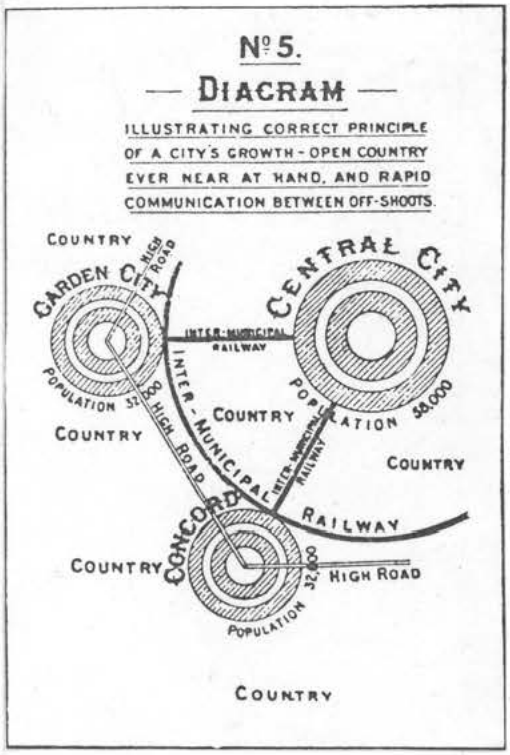
The Three Magnets, by which Howard described how people were attracted to live in towns or in the country. The best magnet was the "Town-Country" magnet. "Town and Country must be married, and out of this joyous union will spring a new hope, a new life, a new civilization".



Plan of Garden City with surrounding belt of countryside.



WARD AND CENTRE OF GARDEN CITY



More of Howard's small diagrams.

A Garden City.

"A Garden City is a town designed for healthy living and industry, of a size that makes possible a full measure of social life but not larger; surrounded by a rural belt; the whole of the land being in public ownership or held in trust by the community." This is a resolution adopted in 1919 by the Garden Cities and Town Planning Association.

Garden City Association.

Howard formed the Garden Cities Association in 1899, which soon increased in strength. The first members of the association were like Howard, not very well known or rich, but they travelled all over the country holding meetings, giving talks, and writing about their ideas in newspapers, and magazines, etc. By 1909 more influential people had joined the association and the chairman was Ralph Neville K.C. It was in 1901 the association organised a conference in Cadbury's Bourneville, and another, a year later, in Lever's Port Sunlight. These conferences were very well attended by local authority and government officials, architects, politicians, and writers etc. Two of the participants in particular were Raymond Unwin and George Bernard Shaw.

Conferences at Bournville and Port Sunlight.

Bourneville and Port Sunlight were good examples of Garden Villages that showed such communities did actually work in reality. They contained good houses with large gardens, they functioned well socially, and they stood beside modern factories; so one must not underestimate the importance that these two villages had on the development of the Garden City movement.

Howard's theories.

Howard's ideas included also that towns should have a limited area and number of inhabitants, but that they should have a varied commercial and industrial life. They should be large enough to provide acceptable services; Howard thought a population of about thirty-two to fifty-eight thousands would be sufficient. He said too that towns should have control of the use of land in and around them. Fifty years later Reith's New Town Committee, after extensive research and consultations, came to the conclusion that they should build a town of the size thirty to fifty thousand inhabitants. Nearly exactly the same figures that Howard had arrived at.

Howard's proposals for London.

Another of Howards' proposals was that the population of London should be divided into units. Each unit would consist of a central town with fifty-eight thousand inhabitants, and around this would be a "ring" of Garden Cities, each containing thirty-two thousand inhabitants; the population of each complete unit would be two hundred and fifty thousands, and these would form self-sufficient entities in the countryside. Unlike many others, Howard understood his limitations, and never actually tried to plan or build these towns; he only talked and wrote about his ideas.

Howard and the Garden Cities Association received a lot of backing, and it is certain that Letchworth, the first Garden City, would never have been built, had it not been for Howard's support, his honesty, and his persuasive manner.

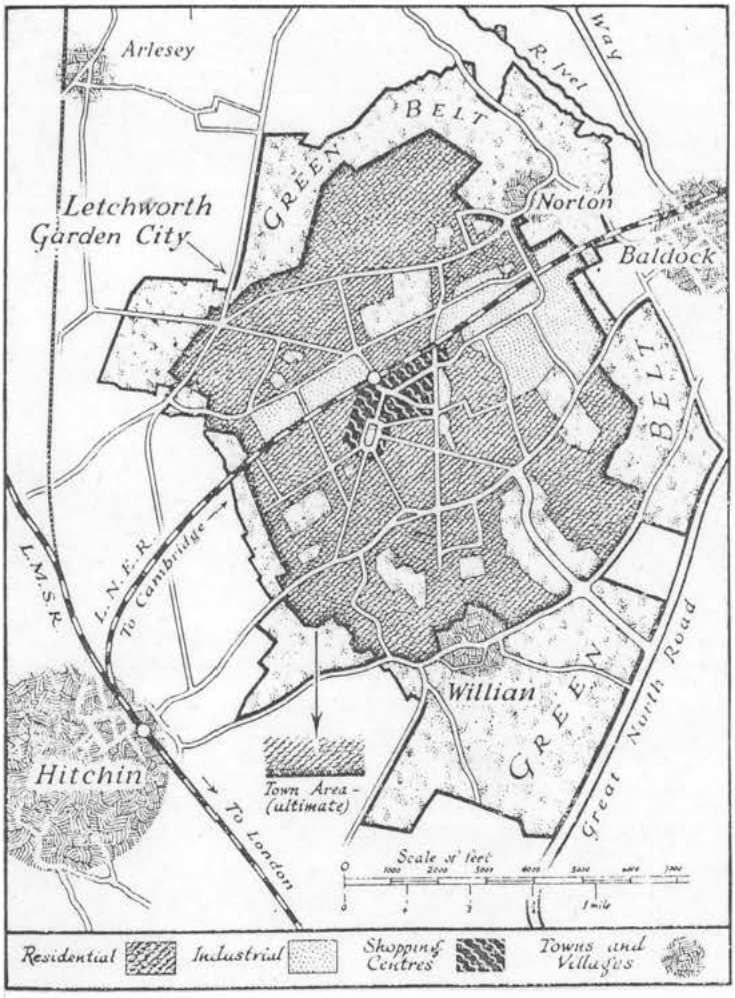
Letchworth

The first Garden City.

Due to the efforts of Howard, and of the capable and influential men around him, the first "Garden City Limited" was formed, in 1903, to build Letchworth. It was thought that investors in the company would receive four to five per cent interest on invested capital, and after seven years the town would then take over it's own finances and guide it's own affairs.

Buxton, Parker and Unwin.

The company managed to get enough financial and political support for their scheme, and in 1903 they arranged a competition for the lay-out of Letchworth. The firm of Buxton, Parker and Unwin were given the job of planning the first Garden City; it was an excellent choice. Parker and Unwin based their plan on the natural characteristics of the site. They made use of existing field boundaries and hedgerows, and it is said that they only had to cut down one tree in the process of building the town.



Plan of Letchworth.

Letchworth, Aerial view of the centre 1930-35.

Land usage

It was planned that houses would not take up more than one sixth of the area of the site on which they stood; and instead of one house per plot, the houses were arranged in groups of four to six, so more space could be left between them. Through these spaces it was intended that people should have nice views of gardens, the countryside, and interesting buildings, etc. The architects wanted the towns' inhabitants to experience the beauties of nature. Some critics though were of the opinion that there were perhaps too many of natures' beauties in Letchworth.

Letchworth, Rushby mead. Houses built by a society for rental 1908.

Letchworth, Norton Way South 1910.

The use of trees.

Houses vanished behind trees, hedges, etc., and there were large disturbing constrasts between light and shade. In the original plan of Letchworth there were forty-five streets, and it was planned by the architects, that each street should be lined with only one species of tree. They wanted in this way to create a means by which people could easily orientate themselves in their surroundings, and Unwin even went so far as to suggest, that through the choice of trees, one could persuade people to vary their routes home from work, depending on which street was the most attractive at different times of the year - with early flowering trees, spring greens, or late autumn colours, etc.

Letchworth, Norton Way South 1960 with trees grown to maturity. The inhabitants complain that the trees give too much shadow.

Belt of countryside

Howard wanted the surrounding belt of countryside to be five times the town's area, but it eventually became to be less than three times it's size; the houses built became to be fairly expensive, and the company, which was underfinanced, didn't have enough money to build the town centre. So there were of course problems, but the town soon developed a remarkable social and mental energy; there were no commercial entertainments, so people formed clubs and societies with a great variety of interests. The Garden City developed a very friendly atmosphere where everybody seemed to know everybody else, and newcomers were made welcome and soon became part of the community.

One can say that the town was a success, and it proved that a town, while depending on industry, could be economically and socially viable. In 1962 the population had risen to twenty-six thousands, with one hundred factories, two hundred shops, sixteen schools, twenty churches, and many public buildings and meeting places.

Letchworth, The Broadway, lined with Lime trees.

The ideals of the Garden City movement were spread the world over through The International Garden City Association, with Howard as it's president. This gave Letchworth worldwide fame and it became a study object for planners from nearly every country.

Health record

Letchworth had a very good health record, but it was surpassed by Welwyn Garden City, which was the second Garden City that was built, in 1919, again as a result of Howard's personal initiative. But the social and health record successes of Letchworth must be attributed to a great extent to the architects Parker and Unwin.

Social costs.

Parker and Unwin, who put into practice what Howard and others wrote about, were of the opinion that if a community would pay extra for the establishment of a good living environment, they would reap the benefit of this in lower social costs. This is something that town authorities today just do not understand. They look much too narrowly at the initial costs of the town complex, and not to what this will mean in social costs after the town has been built.

Letchworth, Garden City Museum.

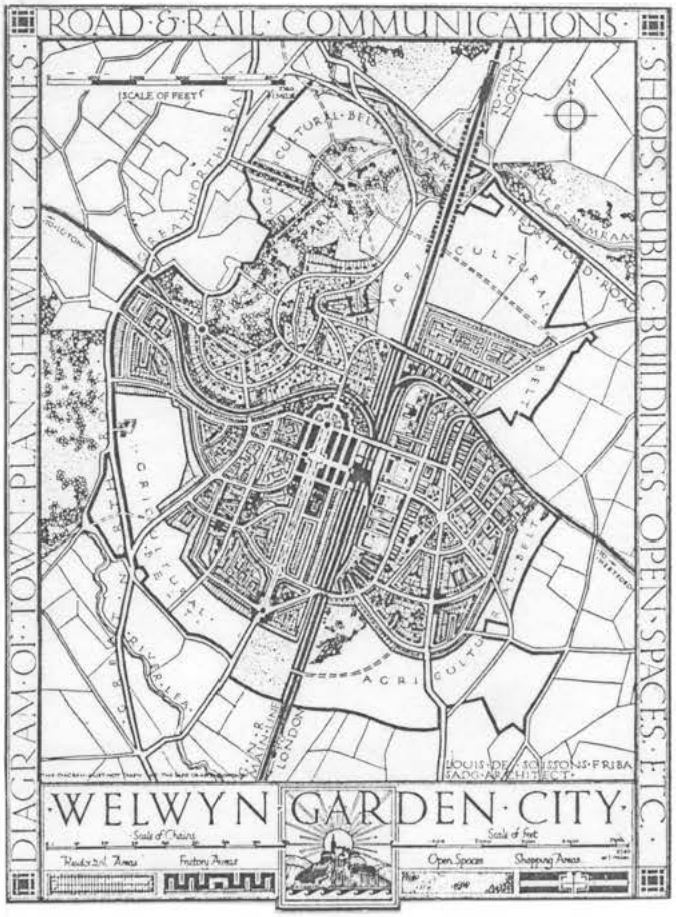
Garden City.

Parker and Unwin created a town in harmony with it's surroundings and within itself; the houses they built were attractive with nice gardens. Unwin said "If Garden City stands for anything, surely it stands for this: - a decent home and garden for every family that comes there. That is the irreducible minimum. Let that go and we fail utterly. And if we succeed utterly, what then? A beautiful home in a beautiful garden in a beautiful city for all!"

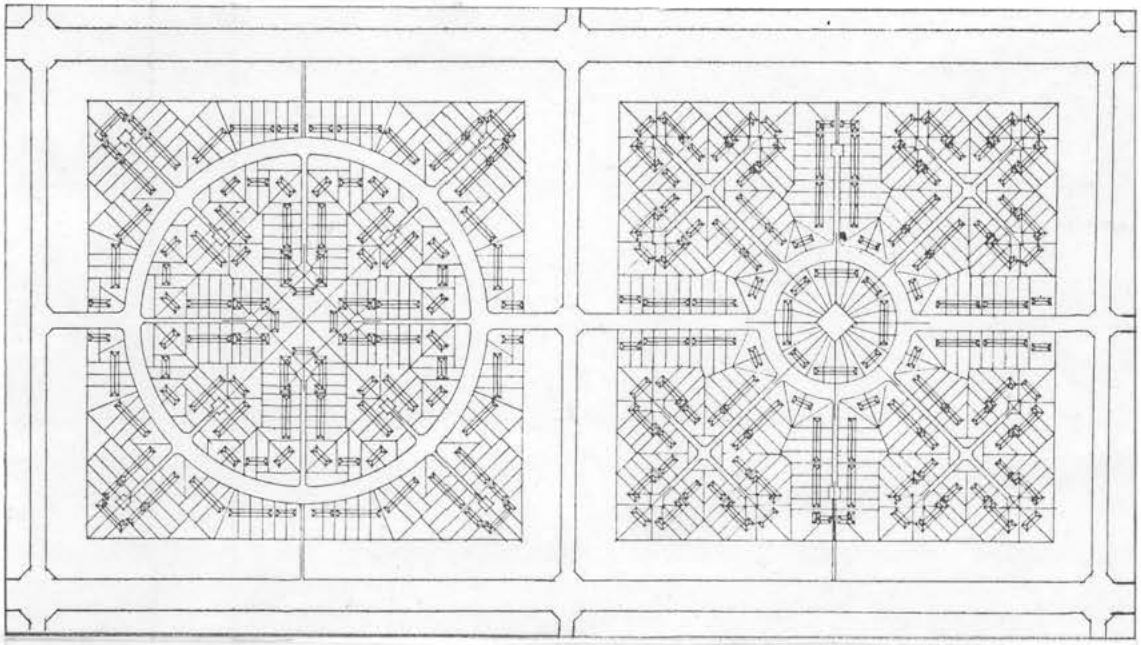
Compromises.

In later years the compromises have been too many; we have raised housing densities, built cheaper houses, made smaller gardens, and put too much emphasis on streeting, and service costs, etc., and we have "failed utterly".

Welwyn Garden City.

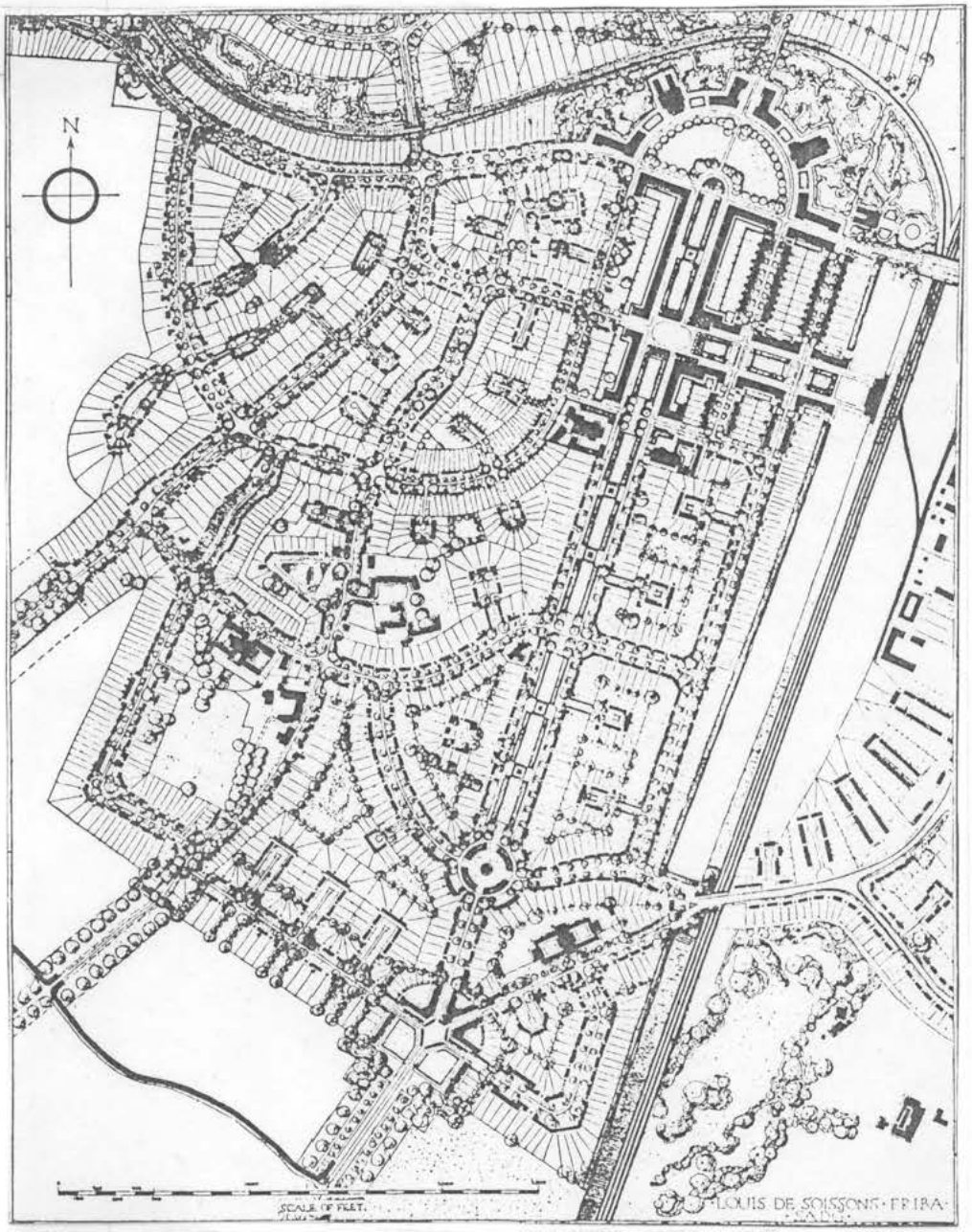


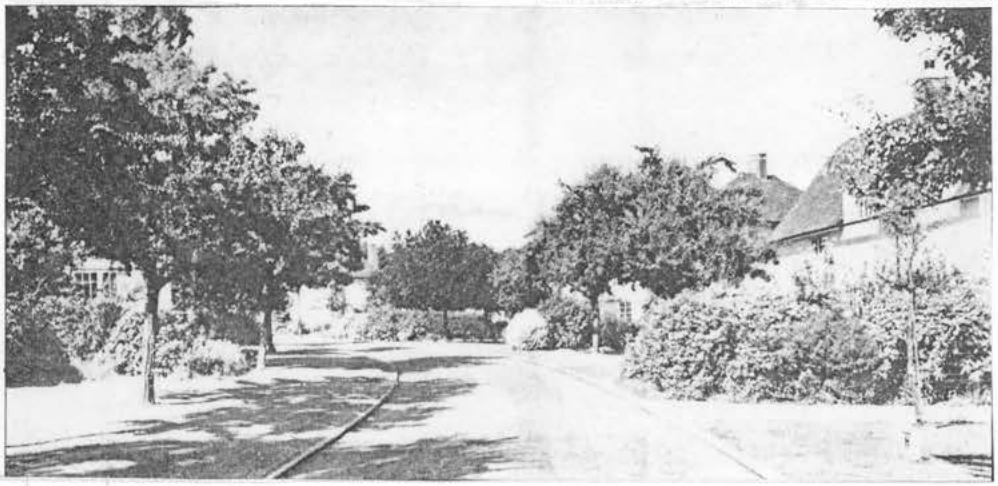
Plan of Welwyn Garden City prepared by Louis de Soissons. Traces of geometric road layouts, and well defined residential areas, can be seen.



Inter-war variations of Residential layouts. Bary Parker 1928. These and others formed models for local authority developments.

Welwyn Garden City,
South-west section.





Welwyn Garden City.
Dellcott Close. 1921
An early example of
landscaping of open
forecourts.

Raymond Unwin.

Raymond Unwin

Raymond Unwin (1863-1940) started his working life, in 1880, as an apprentice mining engineer in Chesterfield. He was a humanist, and was influenced by such men as John Ruskin, William Morris, James Hinton, and Edward Carpenter. While working in Chesterfield he gave talks to workers about William Morris, and wrote articles in magazines. He went on talking and writing about his ideals all his life.

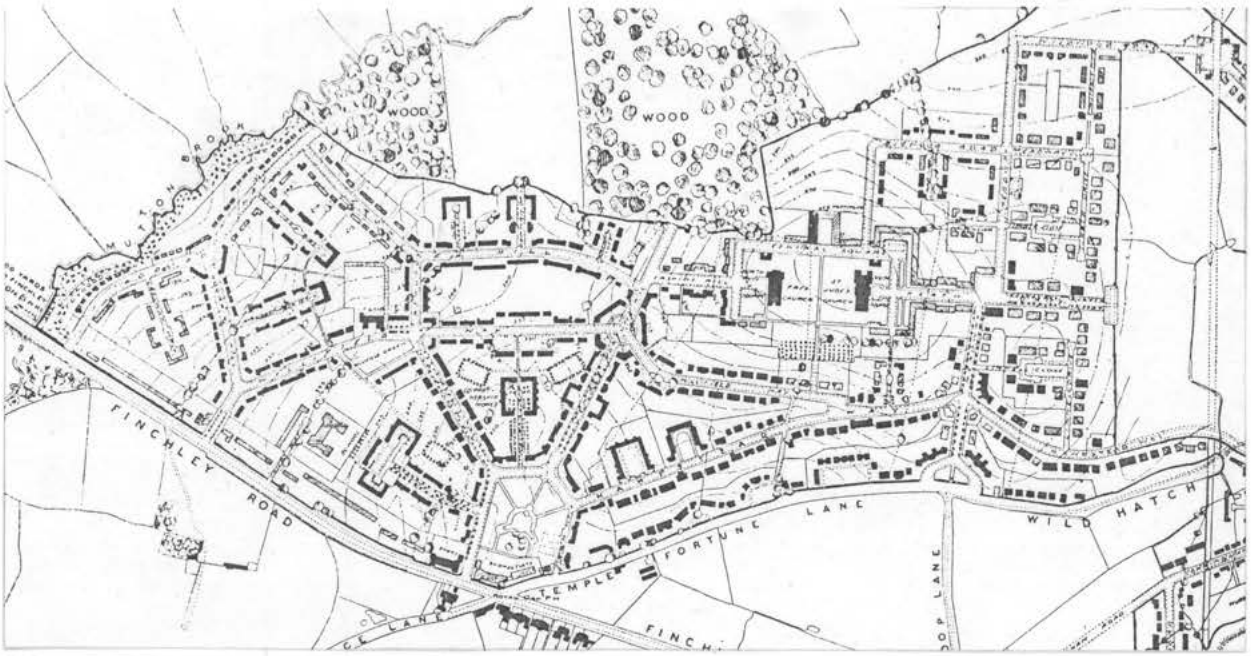
It is thought that Raymond Unwin started to design houses around 1890, he is definitely known to have designed a church in 1895. He joined Barry Parker in 1896, a partnership which lasted until 1914. Parker's father helped them financially, and they first received recognition in 1903, with an exhibition where they showed drawings of "Cottages Near A Town".

In 1901 Joseph Rowntree owned an estate at New Earswick, near to his cocoa works. Parker and Unwin were given the work of planning the estate for development.

New Earswick. Area around the school. Note the use of cul-de-sacs which enable the usage of oddly shaped sites. The area contains some of the best examples of cul- de-sacs drawn by Parker and Unwin.

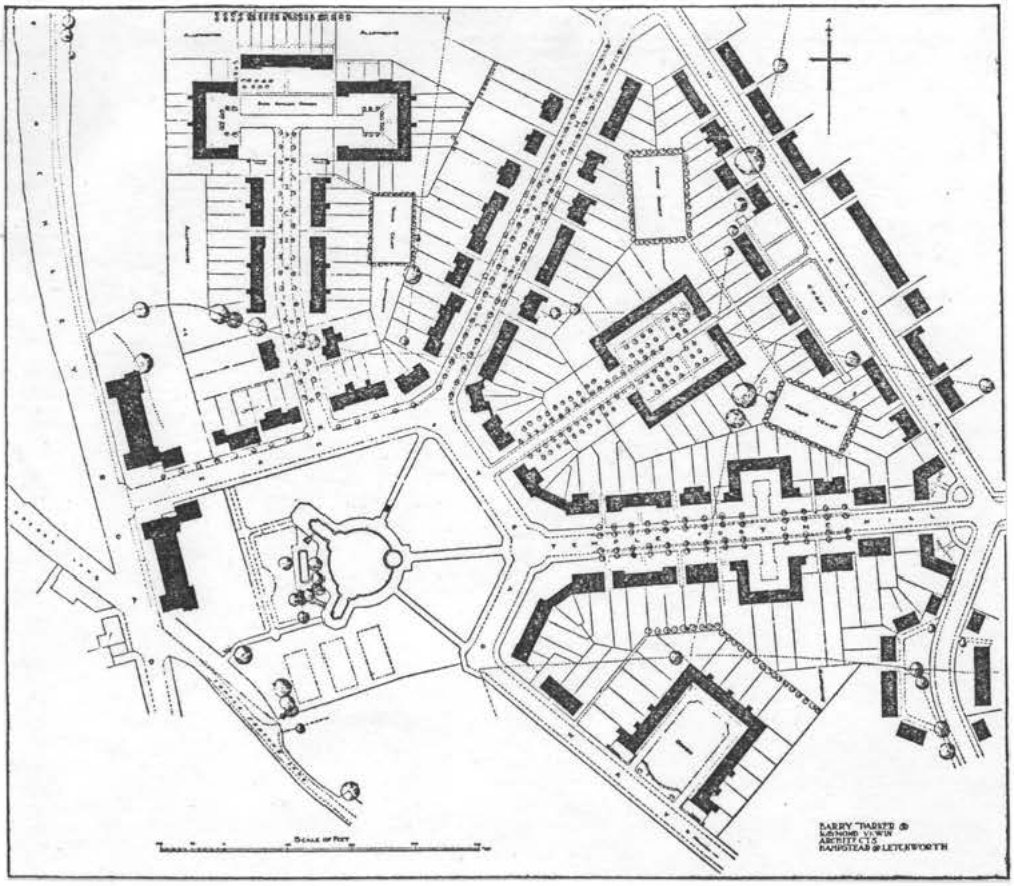
New Earswick, A few of the original 28 houses 1902-03

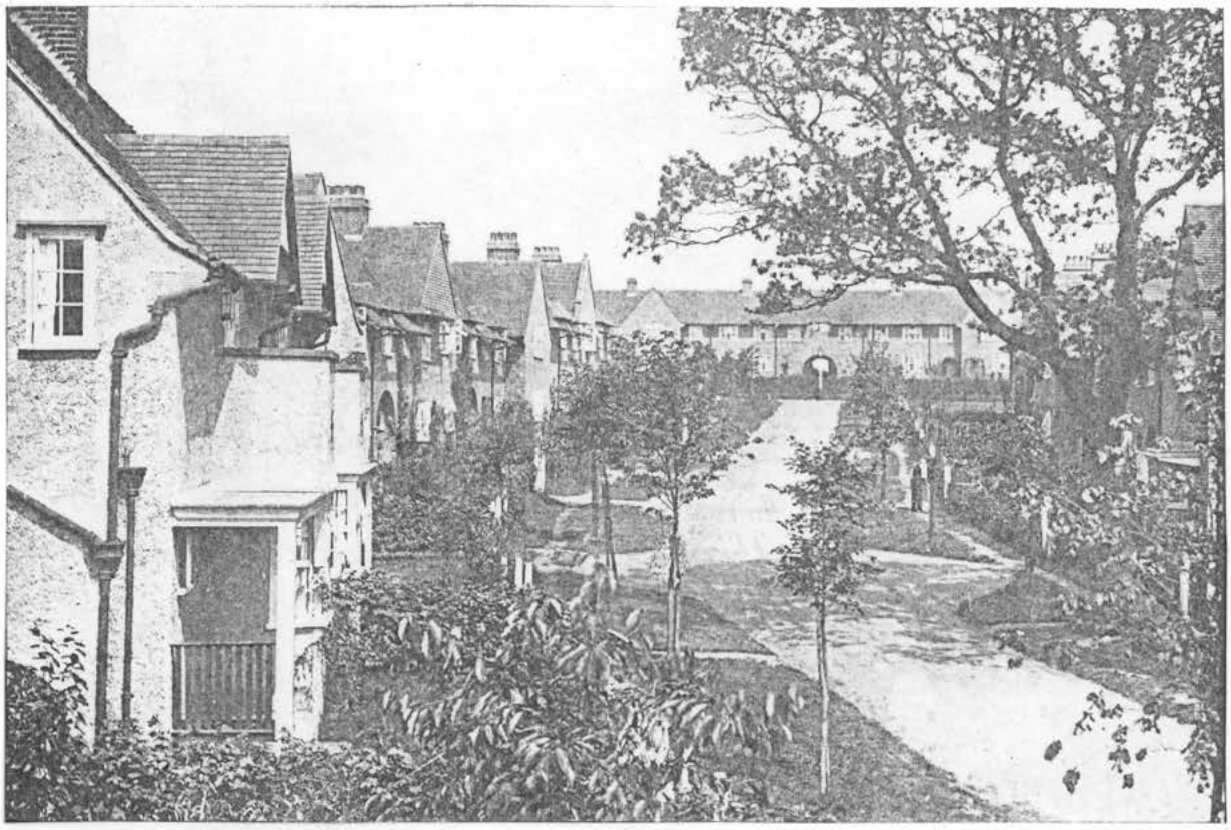
Parker and Unwin drew the first plan for Hampstead Garden Suburb in 1905. The estate was owned by Mrs. Henrietta Barnett and the scheme was designed to promote mixing between different social classes.



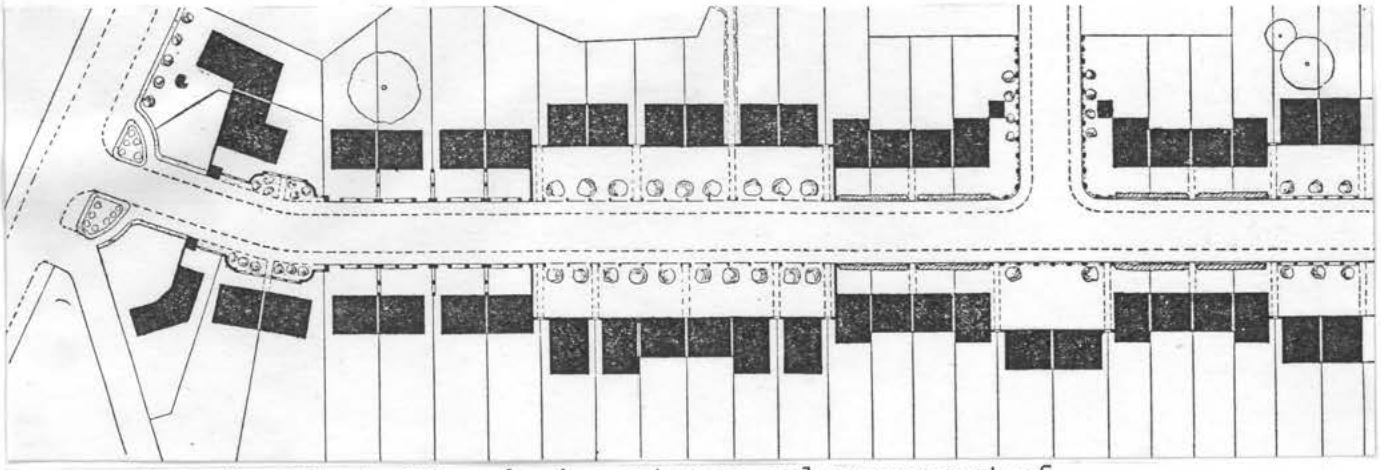
Hampstead Garden Suburb. An early plan of Parker and Unwin. It shows a high class of suburban architecture. 1909.

Hampstead Garden Suburb. The part developed by Hampstead Tenants Ltd., and laid out for cottages.

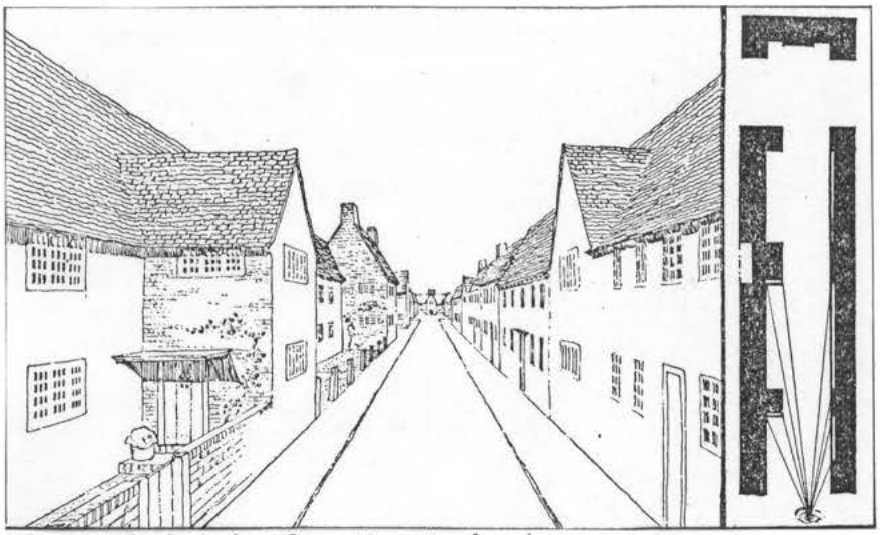




Hampstead Garden Suburb, Asmun's Place.



Hampstead Garden Suburb. Plan showing entrance and arrangement of buildings, with different types of fences used to emphasise the effect.



Plan and sketch of a street showing on one side the uninteresting vanishing perspective and on the other the more picturesque effect.

Competition for Letchworth.

As fairly unknown architects they won, in 1903, the competition for the planning of Letchworth, and with this work they became well known. They eventually became also, perhaps the foremost authorities on town planning in the world. In 1909 Unwin wrote the town planners "Bible" "Town Planning in Practice". In 1914 he became Chief Architect for the Ministry of Health, and in 1918, he wrote a report, "Housing Manual" which greatly influenced housing carried out after the First World War. He lectured widely abroad, especially in America, and from 1931 to 1933 he was President of RIBA.

"Town Planning in Practice".

Parker and Unwin's teachings.

Parker and Unwin based their work on the following underlying principles and assumptions: -

1. The village as an animated symbol containing social and aesthetic values.
2. The necessity of understanding the past. In this they were influenced by their friend Patrick Geddes. They maintained that a renewed consciousness of tradition should accompany the whole creative process.

Parker often told students "The greatest geniuses have never attempted to evolve something new. Their contribution has been the improvement and carrying further of traditional methods. Tradition has created for us a language in which to express our ideas."

An imaginary irregular town. Published in Unwins book "Town Planning in Practice.

Tradition.

Unwin wrote also "Architecture should develop from stage to stage, influenced by a living tradition, and gradually evolving one from another, and ever acquiring greater mastery over materials." "It will I think be both interesting and useful to enquire a little further why the buildings which our forefathers put up mostly adorn landscape, while our own erections so frequently spoil it."

3. The Middle Ages as the historic standard.
4. The indispensibility of beauty.

Mental health.

Unwin said "It is as necessary for mental and spiritual health that man should live in beautiful surroundings as it is for his bodily health that he should dwell under sanitary conditions." "The essence and life of design lies in finding that form for anything which will, with the maximum of convenience and beauty, fit it for the particular functions it has to perform, and adapt it to the special circumstances in which it must be placed."

5. That living densities of a maximum of twelve houses per acre should be adopted.

"Nothing Gained by Overcrowding."

An article which Unwin wrote, "Nothing Gained by Overcrowding! Or How the Garden City Type of Development May Benefit Both Owner and Occupier." said that blocks of flats are profitable for the builder but negative for the occupants who do not get the space they need, which leads to the problem of where to practise spare time activities. He maintained that housing should: -

1. Satisfy "the nature and needs of a full life for the individual and the family".
2. Satisfy the "quality and extent of the relations which constitute healthy community life".
3. Satisfy "the opportunitites which spring from the character of the land, allowing for the technical requirements that must govern any developments upon it".

This was of course appealing to the tenants, so he tried to interest the landowners with diverse economic arguments. He also said, often, that the whole of England's population, housed at ten houses per acre, would only take up two and a half per cent of the country's area.

Revival of family life.

Unwin would have liked to see a revival of the type of family life which he thought had been disrupted by the Industrial Revolution, he wrote "All through the history of English housing the cottage has been tied up with human life, human desires, needs, habits as well as man's mere physical necessities..... In the early Industrial Age, standards in family life and in housing deteriorated rather than progressed. What we are now trying to do in England is to get back to the cottage and garden type of housing..... Such housing allows for the growth of individuality and imagination which are so vital to co-operation."

Le Corbusier

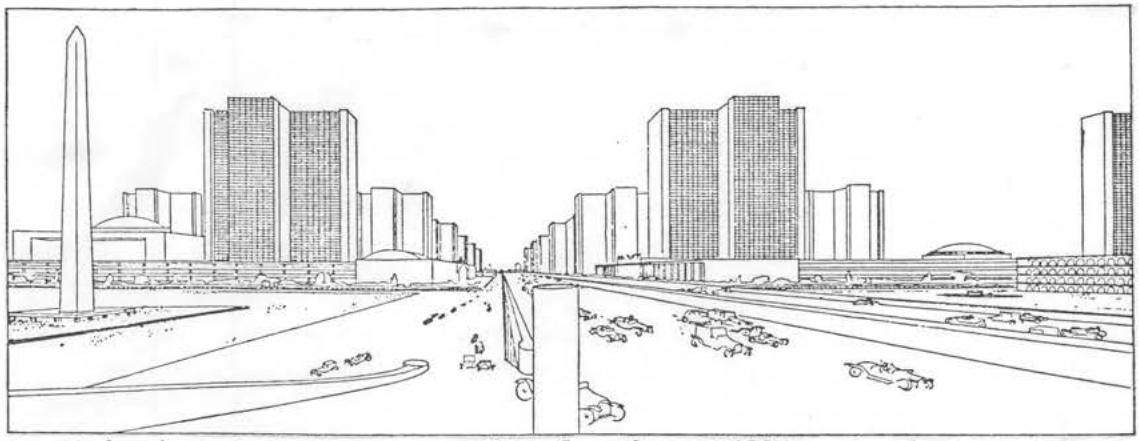
Parallel to the Garden City movement, there was at this time, an entirely different school of thought as to how towns should be planned. Some architects saw no way out of the terrible living conditions that existed around the end of the 1800's by the employment of the traditional methods that Unwin advocated. Instead new and revolutionary solutions to town planning began to be discussed, where people were classed as products of the machine age.
Le Corbusier (1887-1965) coined the phrases, "A house is a machine for living", and, "A town is a tool". He also wrote several books including, "The City of Tomorrow", "The New Spirit", "Towards a New Architecture", and "The Radiant City".

Tony Garnier.

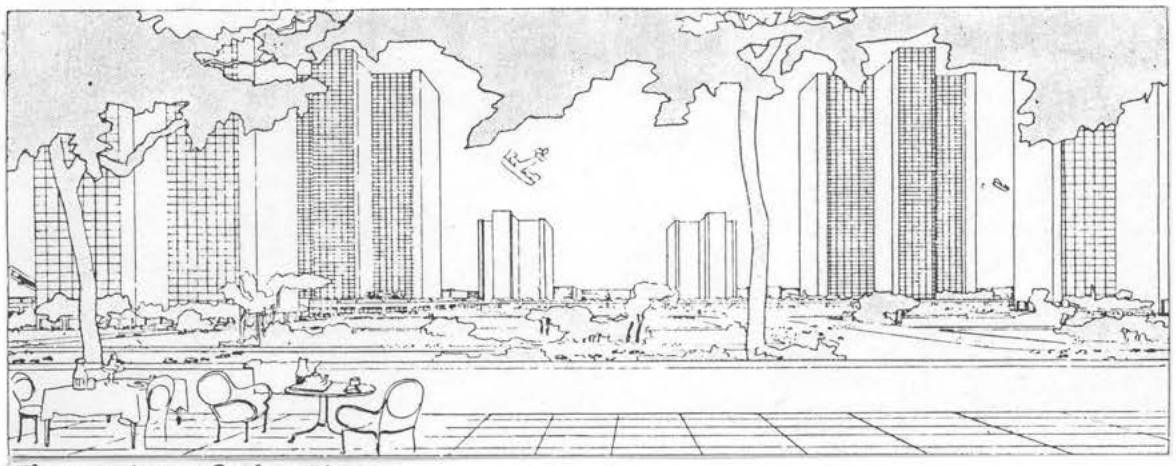
In 1904 the French architect Tony Garnier (1869-1948) exhibited a town planning scheme "City Industrielle". This project was characterised by the use of concrete and simplified geometrical forms. Le Corbusier liked Garnier's scheme and said of it, "One experiences here the beneficial results of order. Where order reigns, well-being begins".

A Contempory City.

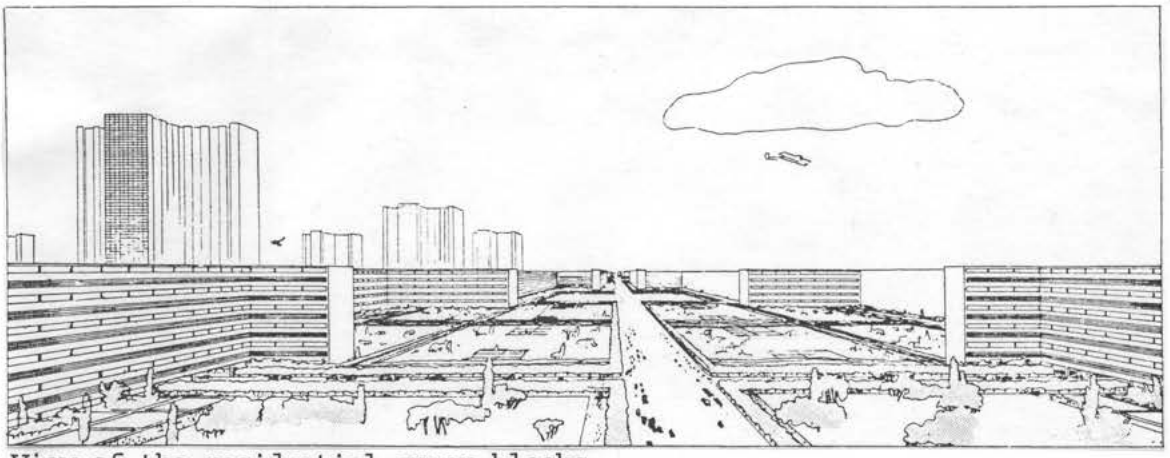
When in 1922, Le Corbusier was asked to prepare an exhibit for the Salon D'Automne in Paris, on town planning, he said, "All right, I will do you a monumental fountain, and behind it I will put a town of three million people." The resulting exhibit entitled "A Contemporary City for Three Million People", shocked many, but others enthused about it.



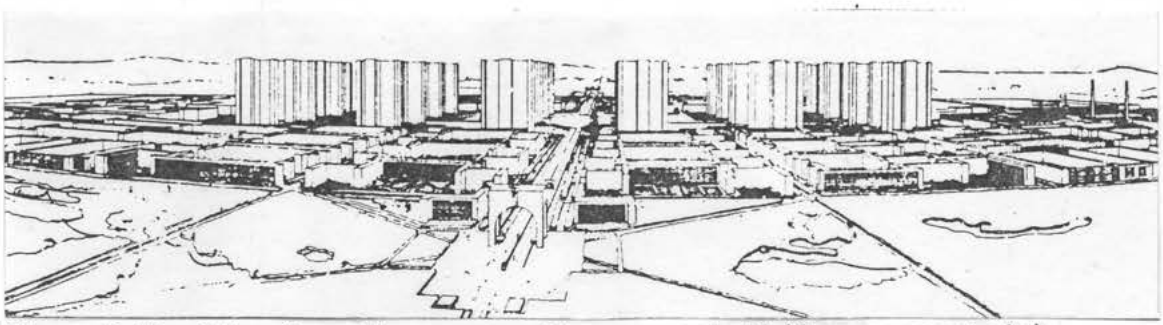
Le Corbusier, A Contemporary City for Three Million People, seen from the motorway. "One sees the skyscrapers bathing in light and air."



The centre of the City.



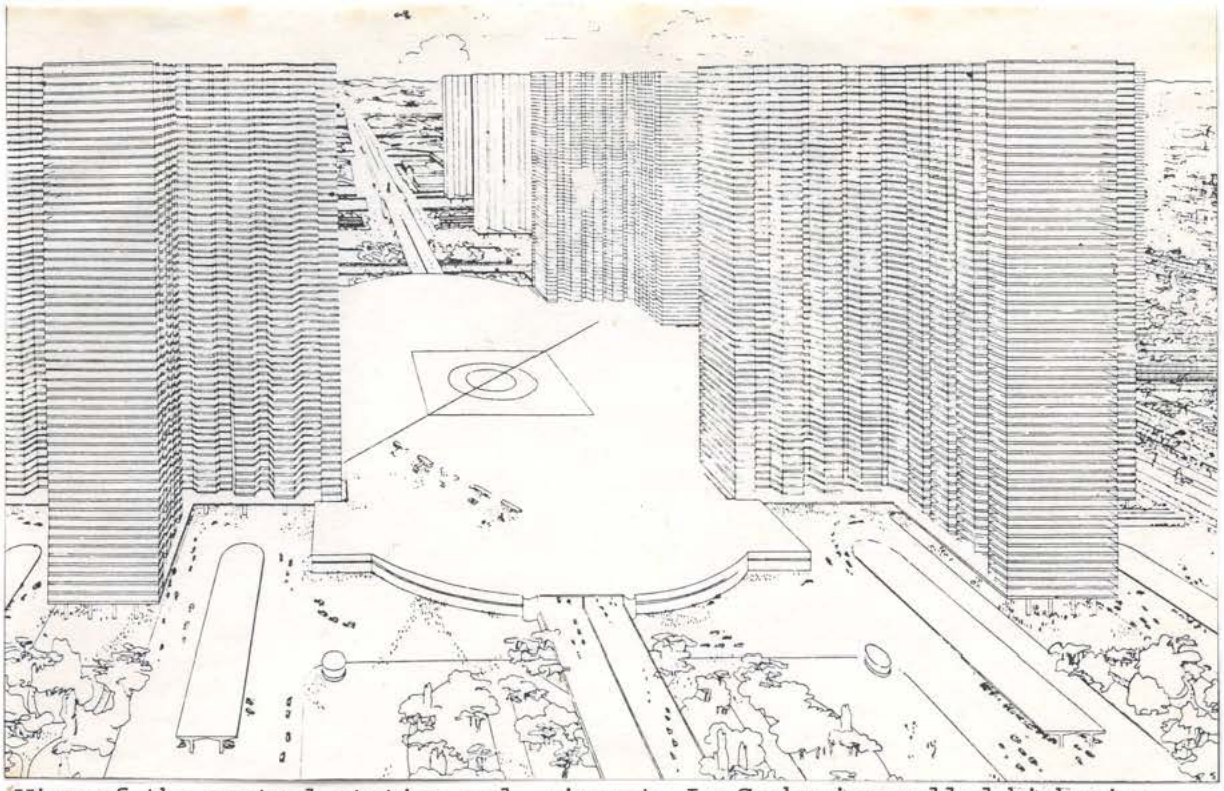
View of the residential super-blocks.



View of The City from its surrounding green belt(from a mountain)

Le Corbusier's theories.

Le Corbusier's conception of what housing environments should be like still influences town planning even today. He did not like the use of single family houses as he considered these wasteful of roads and utilities, he put great emphasis on geometric order, and said the planning of a city was "A human operation directed against nature". Many of his associates predicted a new society and environment, with a total divorce from the past. Le Corbusier said also "The materials of city planning are sky, (sky everywhere, as far as the eye can see), space, trees, steel, and cement, in this order."



View of the central station and airport. Le Corbusier called high-rise dwellings "Vertical Garden Cities".

The "Voisin" Scheme.

In 1925 Le Corbusier presented an even more alarming exhibition project; he showed how he thought the centre of Paris should be re-formed - the "Voisin" scheme. Le Corbusier thought that one should build high and concentratedly, and in doing so leave large areas free from buildings. He did admit that most people wanted to live in cottage-type houses with gardens, but his theory was that for them to do so would be far too costly for society (not taking social costs into consideration). He also said that long journeys to and from work in sprawling suburbs, and work on the upkeep of houses and gardens, would be detrimental to peoples' health.

Le Corbusier's model for the redevelopment of the centre of Paris. "The Voisin Plan"

Every day life.

What Le Corbusier and his followers did want for everyday people is hard to visualise. I think that they would have been quite satisfied if they could have just built their visions, without having any people living in them at all. In one case where Le Corbusier succeeded in getting a large block of flats built, the tenants actually started to form social contacts, chatting to each other in corridors and other spaces. Le Corbusier promptly had these areas painted black to dissuade people from frequenting them. This gives one the impression that Le Corbusier had a deep contempt for human life.

Le Corbusier's influence.

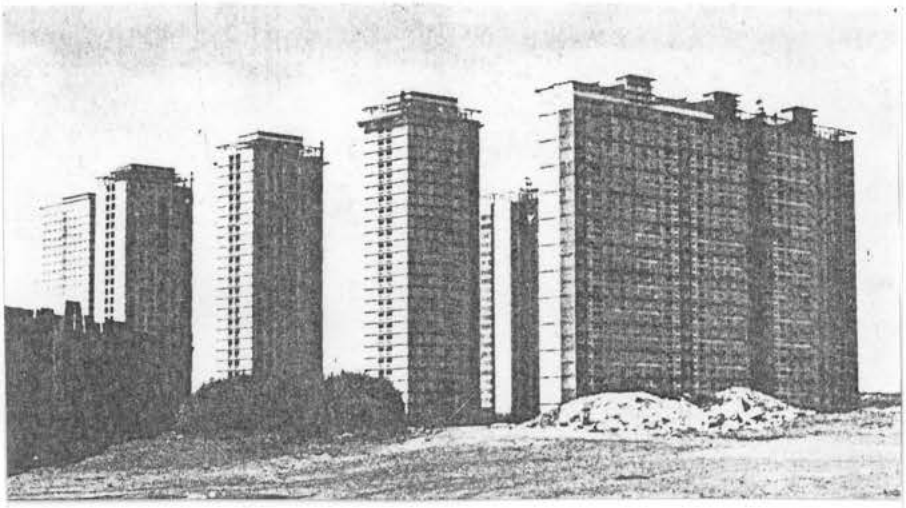
Many were, and still are, influenced by Le Corbusier. These so-called "progressive" architects take no interest whatsoever in what people want, instead they produce environmental solutions, the one more eccentric than the other, to how "they" think people should live. Progressive ideas have always been given a lot of publicity in architectural magazines etc.

An imaginary scheme, with all the town's functions grouped round a central space, living, working, transport etc. A study project by Louise and Martin Österlin, Gothenburg.

Housing Developments.

Many "high-rise" schemes have been built, and people that cannot afford choice are forced to live in these blocks. Today, living standards are becoming lower, family structures are changing, and the number of single persons wanting somewhere to live is increasing. Experts in England know that only ten per cent of the population are content to live in flats. Most people wish to live in small houses with gardens, and as we become richer and richer, so one would expect people to be able to afford housing of a higher standard, but local authorities and architects are doing all in their power to prevent this. If planners do capitulate to public opinion, they now plan their "low-rise" schemes with such high densities anyway, that these will prove to be equally as harmful environmentally as "high-rise" schemes are.

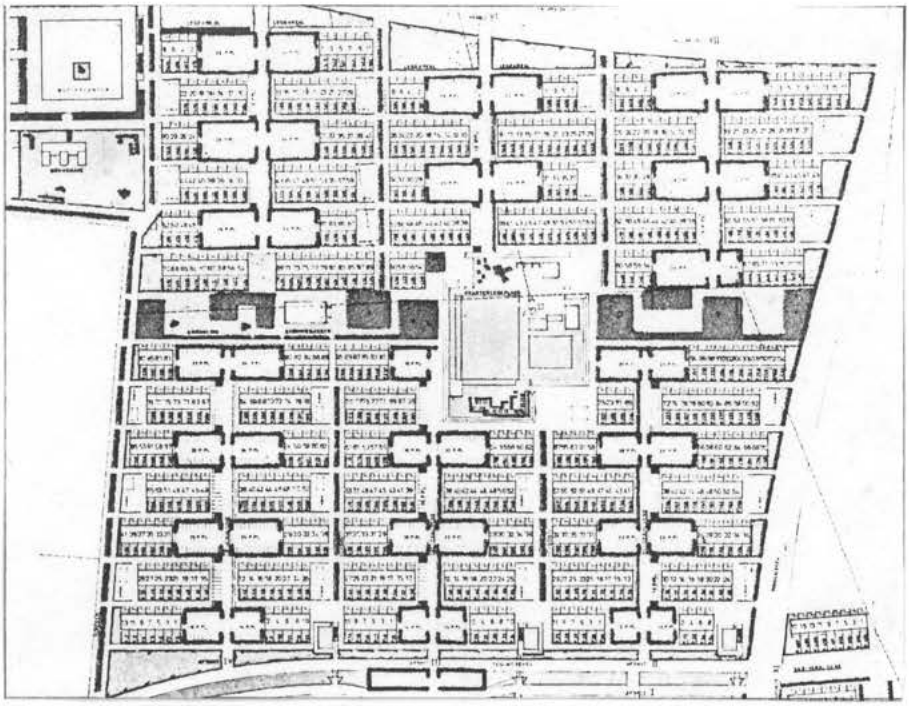
Standards.



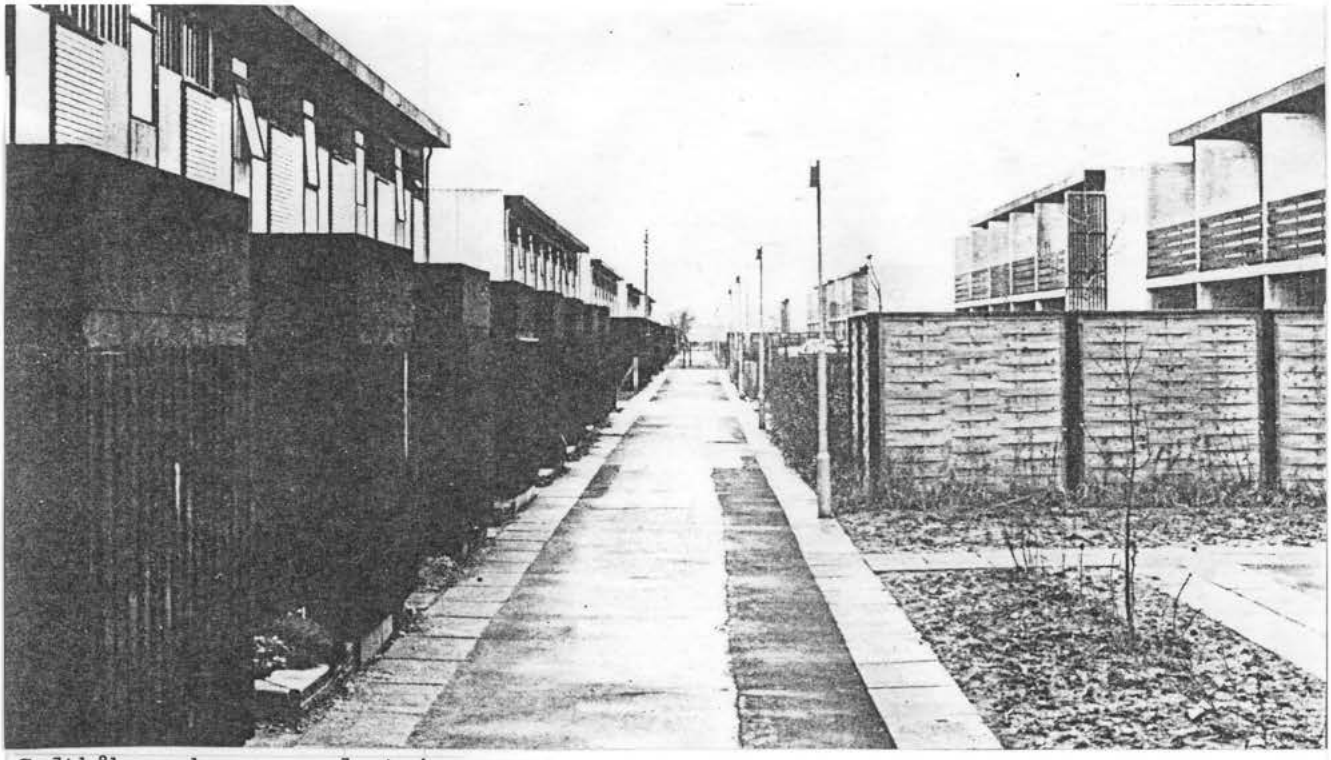
31 storey towers at Red Road, Balornock, Glasgow.

Modern suburb in Sweden.

Godthåbsparken,
house plans.



Godthåbsparken 1967. A high density "low-rise" scheme in Denmark. 804 terraced houses planned according to a very strict schema. Open spaces are concentrated in a few places, but there are small play areas evenly distributed within the area.



Godthåbsparken, a pedestrian way.

People need space.

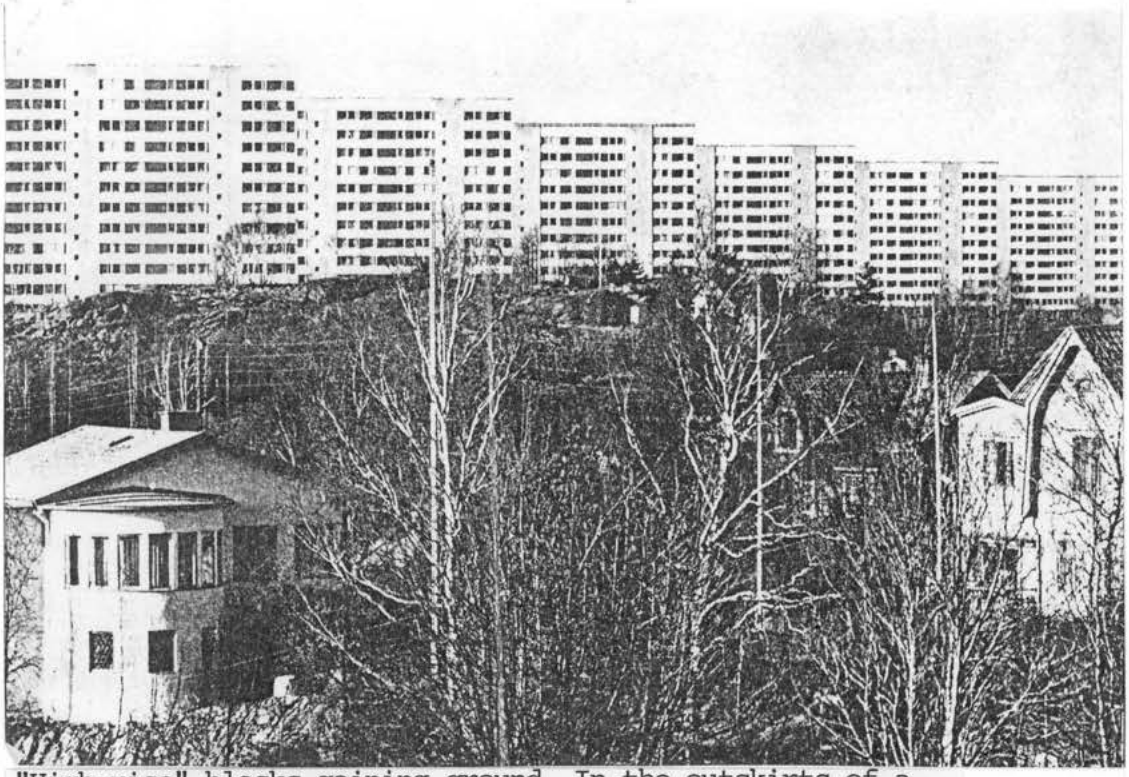
Unwin, Parker, Salt, Cadbury, Howard, and their followers understood that families and individuals need space in and around their homes. Planners today do not appear to understand this. Many of the social problems that arise in the community today, can I believe, be traced back to the problem of lack of adequate space for living. Over hundreds of years working class people have lived in cottage-type houses, to forget this and to create something entirely new is a mistake. We see this clearly when established small-scale town environments are demolished and the inhabitants are moved to modern, healthy, suburbs; everything then seems to go wrong for them socially. This is very disruptive and costly for society.

A "modern" suburb lacking human scale. People become isolated especially single people.

A spinal pedestrian route?

Tradition.

Unwin knew that the change from cottage-dwelling to living in tenement blocks was against the nature of man, and he tried to create environments where the social health of people was guaranteed. He and his followers built their Garden Towns and Villages based on traditional environments, so they were places where people could feel at home. Of course they used the contemporary technologies where they were appropriate, but they didn't let them replace older methods and materials where these would be more efficient.



"High-rise" blocks gaining ground. In the outskirts of a large town the "super blocks" get closer to the established older housing areas.

Human nature.

The architect needs an understanding of fundamental human nature, which unfortunately, is not part of the circulum in schools of architecture of today. Housing development must be based on tradition. Wealthier classes who can choose their living environments mostly live in traditional types of housing. So why can't this, (in cheaper forms of course), be available for everyone else? Planners today push "everyone else" into "high-rise" or high density, houses and this is socially very dangerous because such schemes were only conceived as "housing" and not as part of a total human living environment.

What Led Up To The Situation In The Sixties

Housing shortages.

After the Second World War the Industrial Revolution continued. More and more people were attracted to the towns, and an acute shortage of housing arose. To eliminate this became a question of political prestige; all the resources of society were put to the production of housing. Building workers were attracted to the towns by high wages, etc., and increased the pressures on the need for more houses, so the housing shortage worsened. Then workers in industry were attracted, by high wages, to the building industry, and the heavy industries were forced to import workers from abroad; the housing shortage became even worse, and political parties still continued to reiterate their promises of more housing.

"High-rise" flats
Lacking human scale.

Studies to form new standards.

All this led to the rapid growth of the building industry, and government controls, in the forms of increased numbers of building laws, regulations, and standards, became greater. The outcome of this was that housing became more and more standardised. The number of experts to deal with all these complicated standards grew, and the everyday man and his needs were forgotten. Everyone was only interested in producing as many flats and houses as possible; and because of the acute shortages, people were forced to accept almost anything.

In the chaos that arose local authorities in expanding areas merely struggled to keep up with the expansion, and planning, in its true meaning, fell by the wayside. Authorities concentrated on acquiring space for expansion, instead of studying the situation in its wider social perspective. A definite plan combining all the aspects of the situation was missing, and the result was catastrophic. Numerous flats were piled one upon the other, creating enormous parking houses for people; such houses were placed on every conceivable piece of land both inside and outside the expanding industrial towns.

Planning.

Planning developed into a constant process of adjustment, steered by short-sighted political and economic decisions. In some cases planners were given the blame for unsuccessful political decisions, but bad planning can also derive from bad planners, or planners who were working in too much isolation from other groups of experts. The fact that planners didn't possess a common language meant also that they could not communicate with each other, or with those they planned for. The unfortunate results of the established planning system can be seen if one visits one of the "festering and wretched suburbs" to be found outside Gothenburg. One sociologist has called these "lost communities".

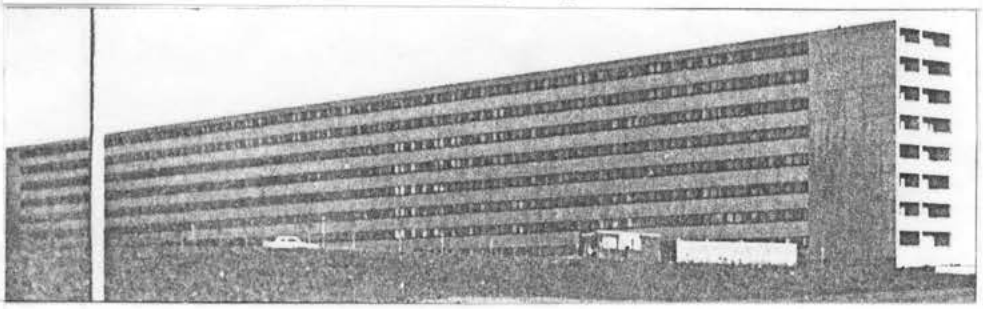
Children's play studies.

In far too many suburbs one sees a total lack of imagination in the execution of the buildings and their surroundings. The original ideas the architects and planners may have had when the scheme was first thought of, were scattered and lost on the way between the different authorities, clients, and builders, etc. Architects took on the role of administrators instead of imaginative designers.

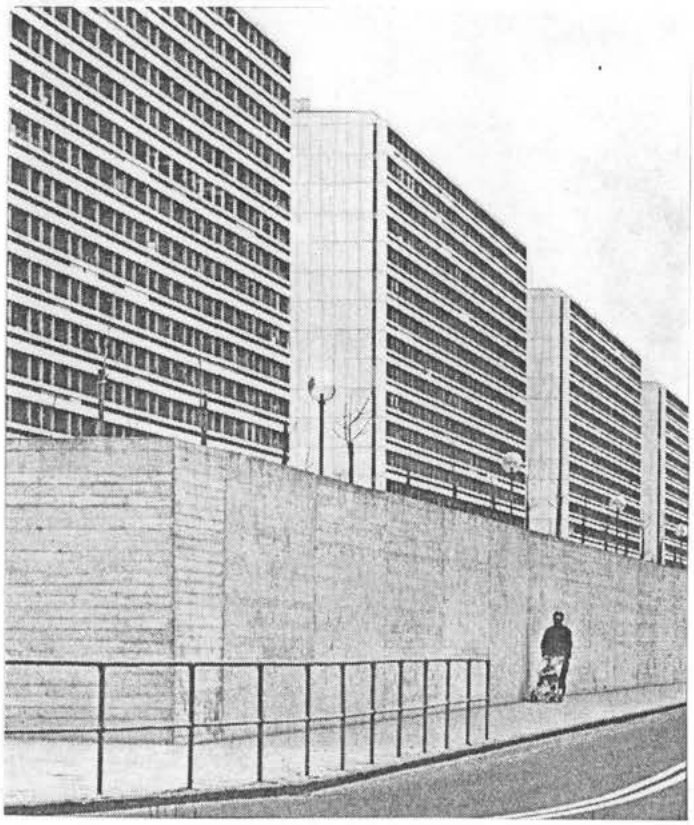
"Crane-track" architecture.

For many different reasons, technical, economic, political, and architectural, there have been, during recent years, more and more prefabricated houses built. In many cases, housing companies built their own factories, becoming themselves both producer and consumer at the same time. This led to large quantities of prefabricated elements being made with a view to profit, and this, in turn, led to the building of many, many houses, all looking exactly the same.

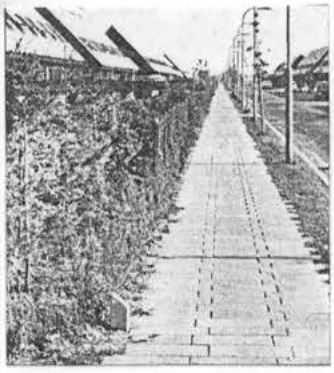
Planners and architects allowed themselves to be used for the purpose which gave rise to the term "Crane-Track" architecture. It was then that producers began to churn out their products, using the production of houses as a mass market, not considering at all that these were to be places for people to live in.



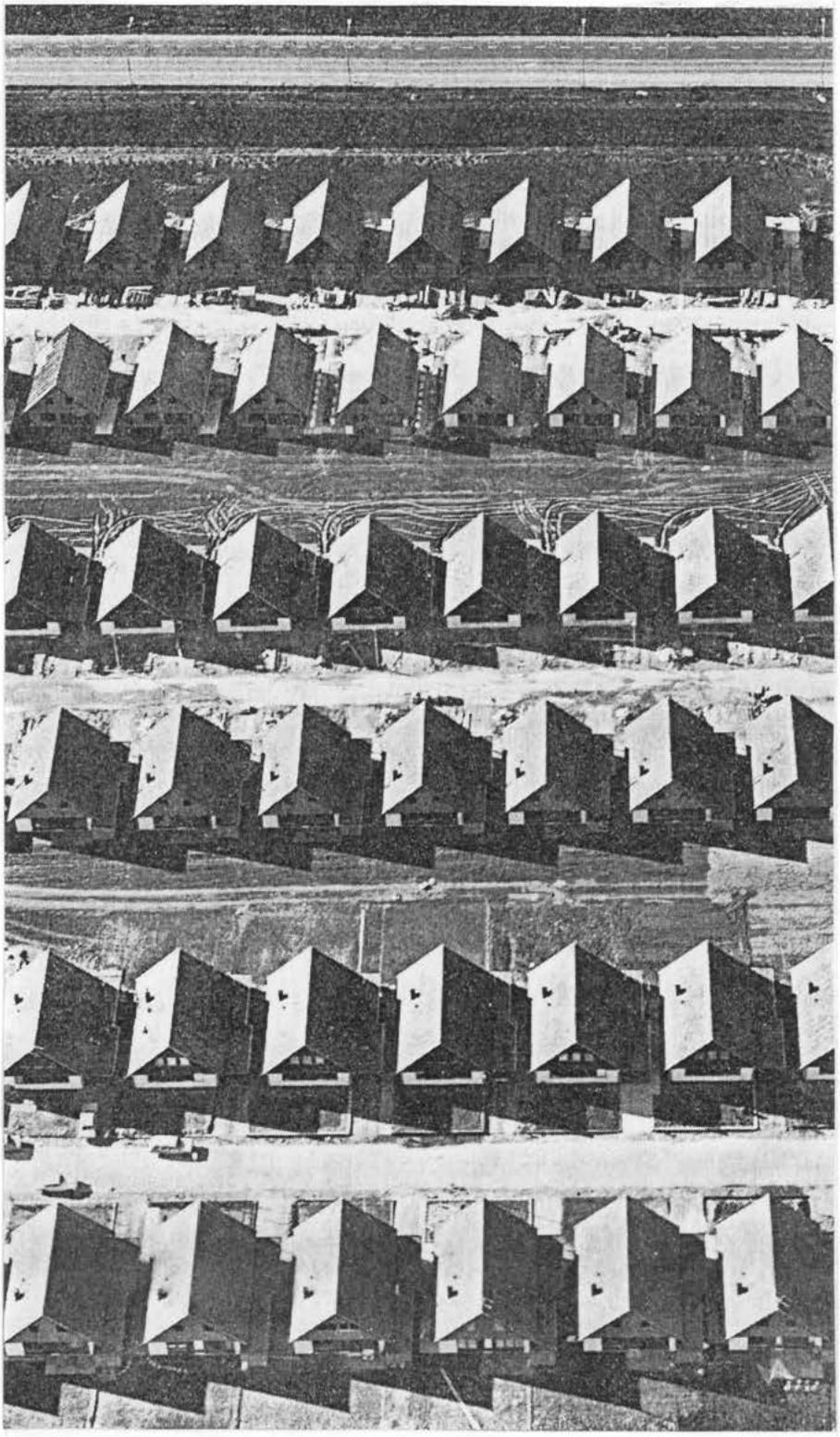
Modern architecture lack of imagination.



"High-rise" and concrete.

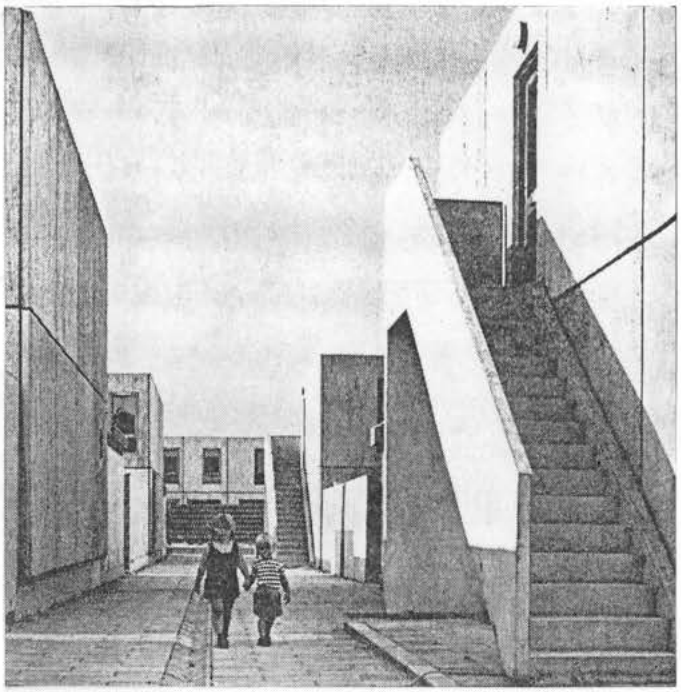


Geometric planning.



Row upon row of standard houses.

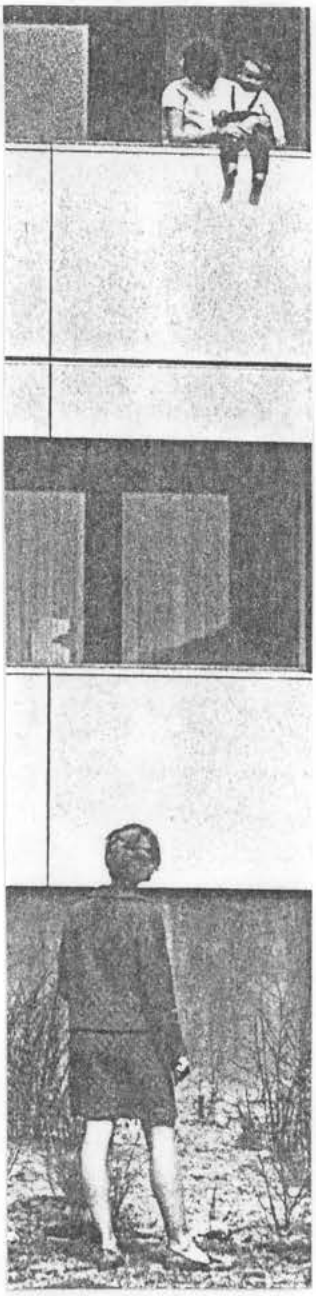
"Low-rise" suburb.



Concrete.

Inhuman housing.

In inhuman housing environments people feel insecure and disorientated, and people who move to such environments as strangers remain strangers. These conditions can lead to aggressiveness, apathy, depression, criminality, violence against children, alcoholism, and broken marriages, etc.



Contact.

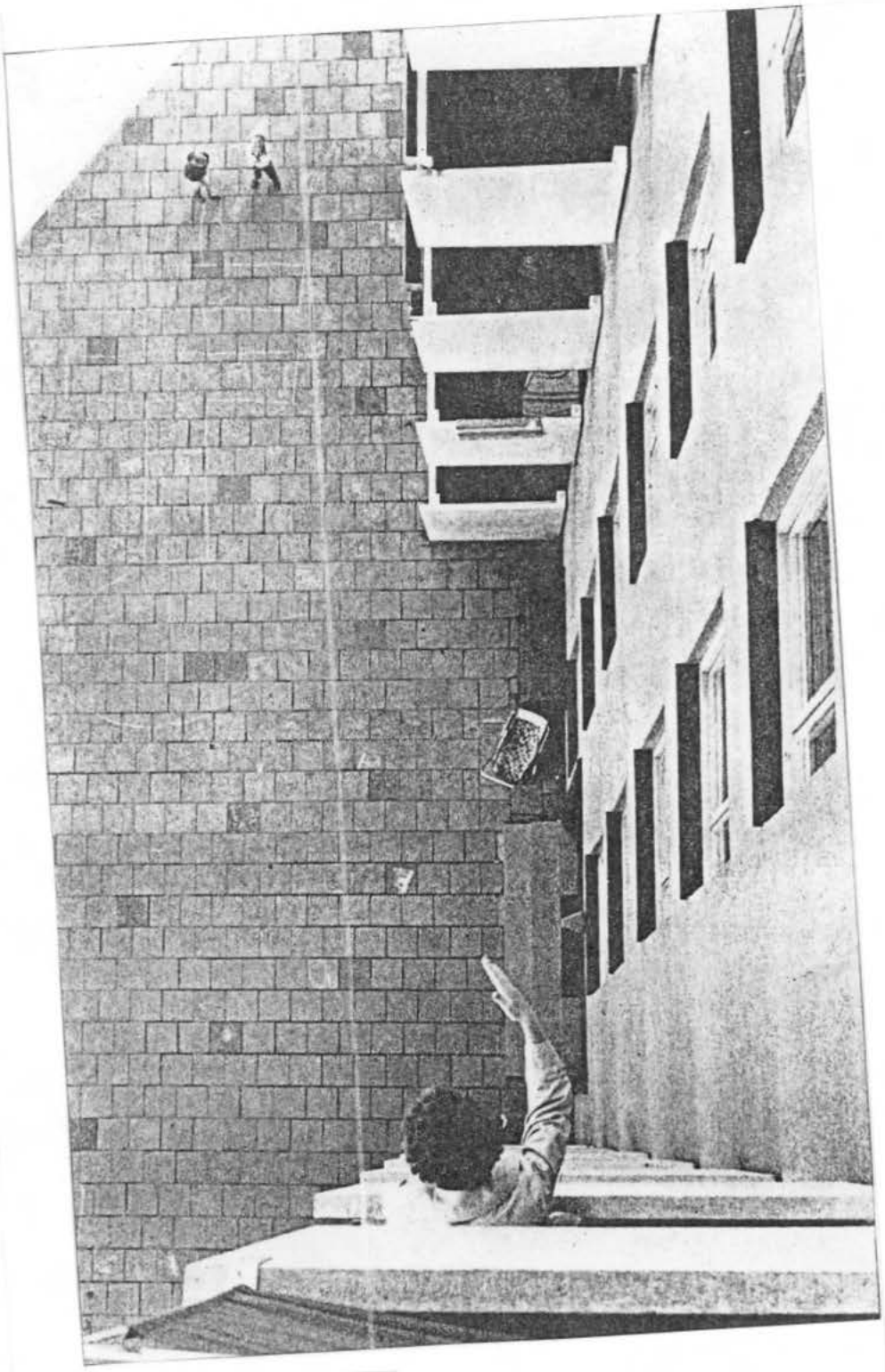
With bad housing conditions, and especially where families break up, it becomes more and more difficult for children to develop normally. This is a great problem, as the basis of a person's character is usually formed mainly in the pre-school years. Even a "normal" family life for a child in a "high-rise" flat can have detrimental effects on his social development. Children who grow up in such environments get out to play only half as much as children who live in "low-rise" houses; "high-rise" children are seldom out alone in early years, and this can lead to a delay in forming necessary social contacts. In "high-rise" areas too many children gather together in the play areas, and the number of conflict situations that a child cannot manage increases. The result of this can be aggressiveness and domination on the part of some children, with timidity and submission on the part of others.

Communal parking areas become very large. They attract children and are dangerous play spaces.

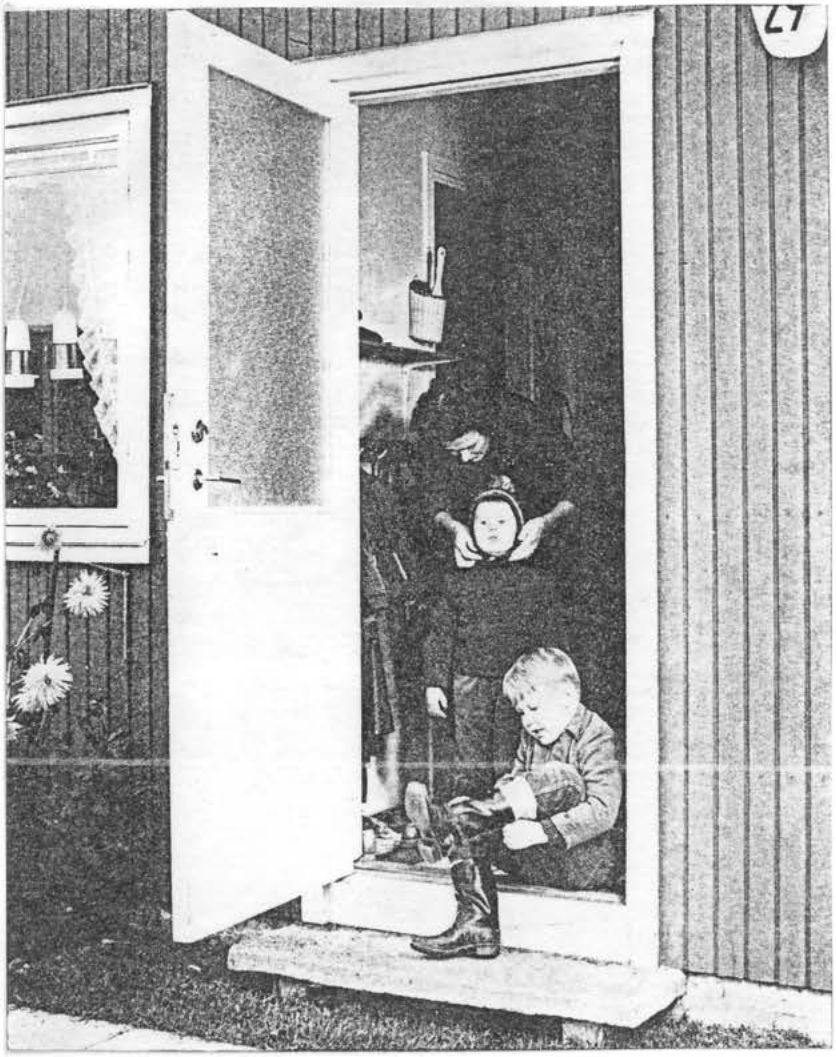
Crisis.

In a survey in the town of Uppsala in 1971, it was found that every fourth school child had some form of psychological disturbance. No child that grows up in a bad environment leaves it without some form of disorder. It seems as though we are approaching a crisis situation. It is necessary to have new thinking in town planning if children are to grow up in physically and socially healthy environments. Planners must reconsider existing laws and regulations and adopt new work procedures. It has been to easy for them to hide behind regulations, and for local authorities to bureaucratically inspect projects according to the letter of the law. It has been too easy for planners to sit down and draw with pen and tee-square, squares of regulation streets and houses, neither remembering or caring whether they satisfy man's personal needs or not.

Typical Suburban Scheme in England where regulation street and pavement widths gave rise to what became known as "Prairie Planning".



"High-rise", contact parent- children.



"Low-rise", contact parent- children.

The Importance of a Good Environment

Formation of character.

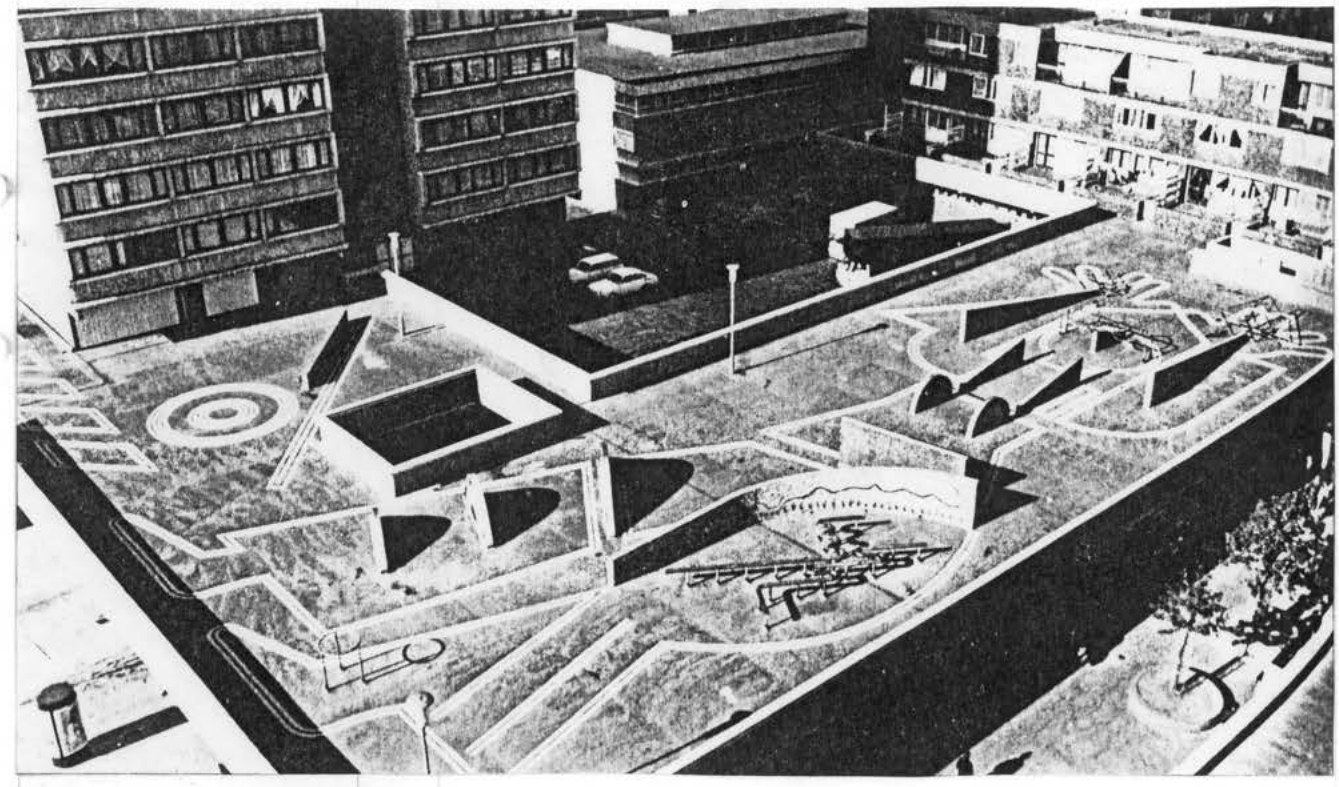
As I have mentioned earlier the basis of a person's character is formed mainly in the pre-school years. Up until this time a child spends most of its time within the home, or within the home environment (this includes house, garden, street, near area and perhaps school). Of these, it is without doubt the home which is the most important. It is within the home that childrens' lives develop, where they make contact with other members of the family, both young and old; it is in the home that children make their first and most important social contacts. Most parents like to be together with their children in a normal home environment, and children, if one is to believe surveys that have been carried out, like their parents to be at home when they are at home themselves. The home is therefore the foundation that society is built upon.

Social contact.

I know voices will be raised to oppose this saying that children are more competently looked after by others rather than by their parents, and better social contacts are made in day nurseries, play schools, etc., but can we be certain of this, and many are not of this opinion. Psychologists know that children who grow up with little contact with their parents become incapable of forming any close emotional relationships with anyone. It is also known that people model their behaviour as parents on the standard of parental care they have themselves experienced, so this also puts the next generation of children at grave risk.

Day nurseries, etc.

Do we know for certain that day nurseries and play schools, etc., are beneficial to the formation of childrens' characters? Do we know that tomorrow's society will be the better for these? Without knowing the answers to such questions, we break all contacts with the past and force people into new ways of living. This may cause irreparable damage to the future social and mental health of society; it is not only air pollution, the use of atom power, etc., that can be detrimental to a nation's health, our own attitudes and ways of life can be just as unhealthy and dangerous.



Sophisticated Play Area.

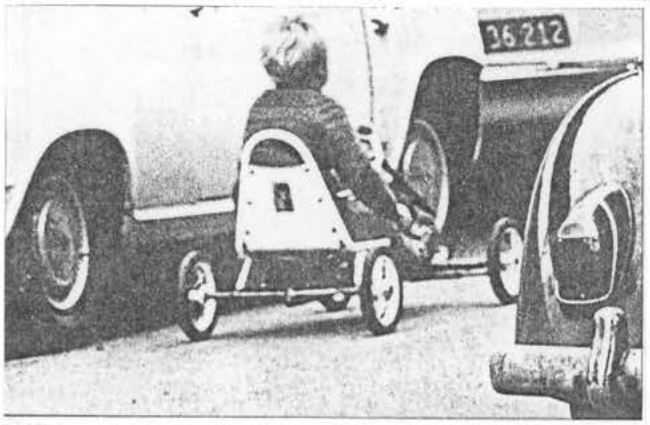
Contact.

From an early age children also need contact with nature, both physically and emotionally. A proper home should therefore have its own garden where small children can become acquainted with nature in safety, and independently from their parents and other adults. No sophisticated, constructed play area can replace this. In a well planned housing environment there should be no need for such playgrounds; the home, the garden, the street, and all the "near area" should form the child's playground, where it can experience new contacts, etc., which will automatically lead to social development and maturity. Adults too need a healthy living environment, where the home, place of work, leisure activities, services, and recreation areas are closely integrated, to allow people to lead a rich and full life.

Gardens.

In a survey carried out in England among mothers of children under 16 living in "high-rise" flats, it was shown that over seventy per cent of those taking part believed that their children would have a better chance of normal development if the family lived in a small house with a garden. Many psychologists are of the same opinion. In such an environment children can decide for themselves when they shall stop following mummy from room to room, when they shall step out alone into the garden, and eventually, when they shall go outside the safety of the garden to explore the area nearest to the home, etc.

Play area on opening day.



Children are attracted to parking spaces.

The Need for Gardens

In most of the industrial countries there is a tendency for a change towards the "service professions", at the same time, one sees in most people rising educational standards and higher intelligence levels. In the future these people will come to demand more inspiring housing environments than they have now; they will demand attractive surroundings and a larger variety of spare time activities. It will not be possible for everyone to own cottages in the country, sailing boats, etc., (and people will, more than at any other time before, need somewhere to go and something to do).

Planting onion sets in April. Mature onions can taken up in the late summer.

Differentiation of functions.

Elias Cornell usually talks about the differentiating of the functions of a society, cultural activiteis in one place, hospitals in a second, recreational facilities in a third, schools in a fourth, places of work in a fifth, and so on. Communities have taken this differentiation of functions so far, that we now build houses in one place, and we arrange for gardens to be placed somewhere else, apart from the houses several kilometres away; such gardens are called allotments. Even in 1895 George Cadbury understood the importance of a garden. It would be so much nicer and much more practical if these allotments could be placed nearer to the homes in which their owners live.

Need for gardens.

A working person, especially if he or she has a hard monotonous job, needs somewhere to relax, somewhere where he can use his imagination, and where he can determine for himself what he shall do. A garden gives many possibilities for meaningful spare time acitivites; here there is space for the pram, childrens' play, rabbit hutches, the dog's kennel, vegetable and flower growing, a patio, a greenhouse, and a shed. A shed is like a world in itself, in a shed one can practise a hobby, mend a bike, mess about with a motorbike, paint furniture, store seeds, garden tools, the lawn-mower, and much more besides.

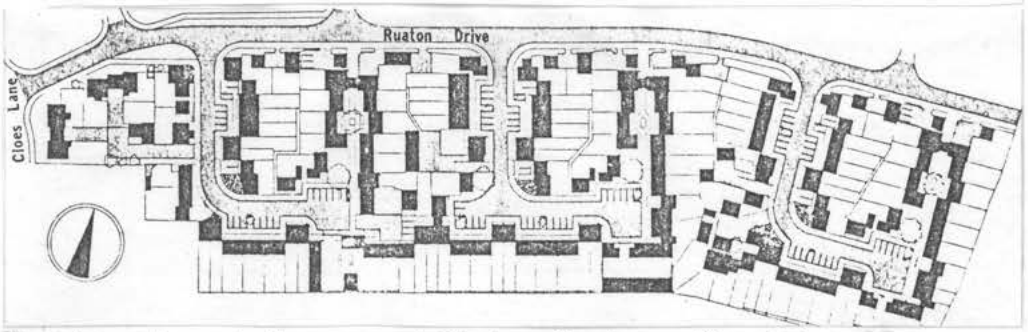
Children and gardens.

A garden can definitely benefit family life as the following passage in the introduction to Rune Pettersson's book, "The Children's Own Garden", (1943), points out. "Children are often curious. They wish to experiment, examine, discover, and place things in their causal connection. Through stimulation and leadership, parents, teachers, and other adults, help children's creative abilities to develop and advance. It is important that we do things together with the children, not just put a book in their hands, or give them money for the Saturday cinema, or just send them out to manage on their own. Is there anything more important than to gather together round that which is living and which grows and develops. Together with one's children to create life and look after the life that one has created. To see how seeds and plants grow up into beautiful flowers or to something tasty and useful. And together see how plants live and grow. It is of the utmost importance in these times of environmental pollution and pollution of nature, that we gain respect for nature, plants and animals."

The Need for a Living Street

Ordinary streets.

In an ordinary street lined with ordinary houses one can get to know one's neighbours quite quickly. In this way people soon feel part of a group, and can more easily identify themselves with their own streets and feel at home. From their houses they can see to the other side of the street, or along the street, and here they see other houses, and these are near enough for them to recognise people who are in the garden, or standing in a window, etc. This "eye contact" leads perhaps to some form of greeting, or a few friendly words, but it is not always necessary to say something, just a nod of the head means a lot; it is a sign that the people involved recognise each other, and this alone is enough to create a sense of security.



A return to cul-de-sacs at Ruaton Gardens, Clacton-on-sea.

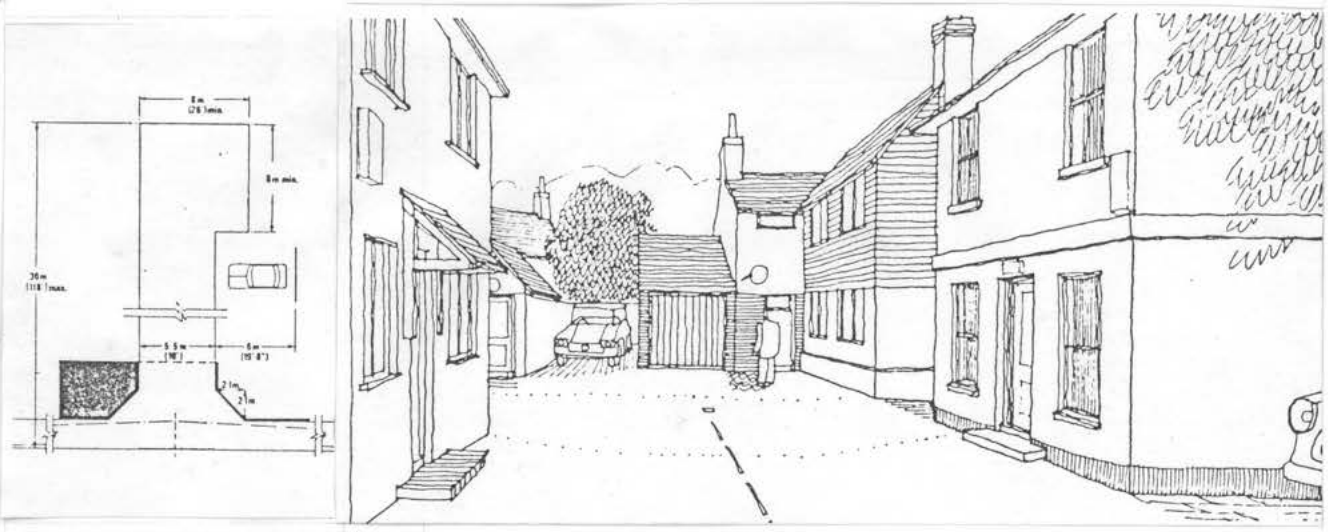
A street layout at Bellfield, Witham, in accordance with the Essex Design Guide. A return to "Mews Courts".

G.P. Webberly.

G.P. Webberly, a professor at London University, said, "The advantage of living in a village is that even if one is not loved, one can be hated, but in any case one will not be ignored.".

Social contacts.

So it is in the street the initial social contacts are made. One has perhaps ten to twenty families living near to one, among whom one might find two or three that one can establish friendships with. In a "high-rise" block of flats where the different floors are isolated from each other, one has at the most, perhaps four or five neighbours on the same floor as oneself; it is much less likely that one will find among these someone with the same interests as oneself. This is possibly one of the reasons why people do not talk to each other in blocks of flats, they are afraid that the others have entirely different life-styles and interests to themselves. Balconies, halls, stairways and lifts are so-called "socially neutral zones" where people who have no initial "eye contact" are unlikely to speak to complete strangers from several floors away.



Sketch for a mews court in the Essex Design Guide.

In a street there are many possibilities for each family to find the level of contact and relationship with neighbours that they desire. This is perhaps the biggest advantage of "urban villages"; they are not just a cluster of buildings, they are a way of life. It will need new thinking and a reorganisation of priorities among politicians, local authorities, architects, and planners, if town planning is to result in the creation of good living environments for ordinary people.

A way of life.

What are Personal Needs and the Functions that Houses Have to Fulfil?

Personal needs are difficult to define, but Alexander Leighton has specified ten basic needs that he thinks people have: -

1. Physical security.
2. Sexual satisfaction.
3. Expression of love.
4. Expression of animosity, hostility.
5. Guarantee of love.
6. Guarantee of being recognised.
7. Expression of spontaneity.
8. Orientation within the background of one's position in society.
9. Guarantee of being a member of a defined group of people.
10. Feeling of belonging to a moral order and being right in what one does.

J. Van Ettinger, in his book "Towards A Habitable World", gives the following list of qualities and demands that a home should comply with: -

A. Health and Security

1. Adequate protection against cold, damp and noise;
2. Adequate ventilation, access of sun and light;
3. Adequate facilities for personal hygiene;
4. Adequate facilities for cleaning clothes and articles for domestic use;
5. Supply of water for drinking and washing, discharge of faeces and waste water.

B. Independence

1. Adequate separation of the individual rooms, etc. and of dwellings from each other;
2. Adequate sound insulation.

C. Facilities

Adequate space for:

1. Working: cooking, sewing, hobbies, study and doing special work;
2. Rooms: sitting together, having meals together, recreation, receiving visitors;
3. Sleeping: proper bedrooms for parents, with adequate privacy; room for cradle and baby care; proper accommodation for the sick and for lying-in mothers; separate bedrooms for boys and girls;
4. Storage: articles for daily use, a stock of foodstuffs, seasonal clothing and bed clothes.

D. Contact with Social Life

1. Adequate accessibility: location along paved roads or paths, accessible for deliveries, transport of the sick, help from neighbours;
2. Adequate facilities in the neighbourhood for the necessities of life, health care, education and practicing religion;
3. Recreation and culture;
4. Adequate differentiation in size and type of dwellings in the district, so that a harmonious society develops according to age and social structure;
5. Adequate orientation with respect to the community: general situation in neighbourhoods and areas, communication with work centres and town and village centres; communal buildings, parks and playgrounds.
6. Adequate adaption of the housing standard and "standing" of the neighbourhood to the occupations of the occupants.

The Ministry of Housing and Local Government published in 1968 a "Design Bulletin", "House Planning" in which they gave a guide to users needs together with a check list. I would like to give here the main points they mentioned.

1. Site layout

1.1. Is the plan:
  a) suitable for single access?
  b) does it require access from both sides?

  If a way through the house is necessary, this shall not go through the living room.

1.2. Does the plan itself give reasonable privacy:
  a) to its living rooms and bedrooms from people calling or passing by?
  b) to its private garden from overlooking from other houses?
  c) to the gardens and living rooms of other houses?

1.3. Does the plan allow:
  a) for a car to be kept within the curtilage?

1.4. What orientations are best suitable to the plan?

2. The entrance

2.1. Is there a reception lobby or hall to provide a buffer against callers intruding on the privacy of the living areas:
  a) which is large enough to receive visitors and to allow a pram and furniture to be brought indoors?
  b) with space for hanging outdoor clothes?

2.2. Is there at or near an entrance:
  a) provision for storing a pram without entering the living areas?
  b) a W.C. and wash-hand basin, accessible without going through the living areas?

2.3. Is there shelter from rain for callers waiting at the entrance?

2.4. Is there a refuse store?

2.5. Is there a covered route from the house to:
  a) the garage?
  b) the refuse store?

2.6. Can meters be read:
  a) from outside the house?
  b) without entering the living areas?

3. Circulation and relationship between spaces

3.1. Is there a convenient route for the pram and for children through the house to the garden, without entering the main living area?

3.2. Can members of the household get from the entrance to their bedrooms without disturbing:
  a) any living area?
  b) or at least the main living area?

3.3. Can visitors get from the main entrance to the main living area without entering:
  a) the kitchen?
  b) the dining area?

3.4. Can members of the household get from bedrooms to the bathroom and W.C. without:
  a) entering any other room?
  b) crossing the entrance hall?
  c) going up- or down-stairs to another floor?

3.5. Are the circulation spaces:
  a) adequate in size for large items of furniture to be moved about the house?
  b) suitable for other purposes, e.g. cupboards, telephone, etc.?

3.6. Is there a convenient relationship between the kitchen, the living areas, and the outside spaces so that:
  a) the kitchen has direct access to the dining area and reasonable access to the main living area?
  b) the kitchen has a view of, and close access to, the private open space for supervising childrens play, putting washing on the line etc.?
  c) the kitchen has some view of the outside world, callers and passers-by, etc.?
  d) the kitchen has convenient access to the refuse store without going through the main living area?

3.7. Do the living areas have:
  a) a view of the garden and easy access to it?
  b) privacy from callers approaching the main entrance?

3.8. Is the general storage provision:
  a) conveniently distributed, e.g. so that bicycles and gardening tools do not have to be taken through the house?
  b) likely to be free from damp - for storing the vacuum cleaner, trunks etc.?

4. The kitchen

4.1. Is there adequate space in the kitchen for:
  a) built-in storage for cooking utensils, food stuffs, cleaning materials, etc.?
  b) the basic items of equipment, e.g. cooker, refrigerator, sink unit, etc.?
  c) items likely to be bought in the future, such as a dish-washer, deep freeze, etc.?

4.2. Are the working arrangements adequate, i.e.:
  a) is the total work surface adequate in area?
  b) is there an unbroken work surface between, and either side of, the sink and cooker?

4.3. Is the relationship between the sink, cooker, refrigerator and food store:
  a) compact?
  b) free from through circulation?

4.4. Is there a utility room for washing clothes, etc.?

4.5. Is there space in the kitchen for some members of the family to eat occasional meals?

4.6. Do doors which open into the kitchen clear working areas and cupboard door-swings?

4.7. Are there adequate means to prevent cooking smells from reaching:
  a) the main dining area?
  b) other parts of the house?

5. Living areas

5.1. Is the main living space large enough to accommodate the necessary furniture:
  a) for the whole family and occasional visitors?
  b) to provide for alternative furniture arrangements?

5.2. Can the main living space be shut off from the rest of the house?

5.3. In houses for four persons or more:
  a) is there a separate second living space (dining room, dining hall, kitchen with dining area or study)?
  b) can both living spaces be thrown into one for special occasions?
  c) or alternatively: are they well separated on plan to contribute to sound insulation?

5.4. Is the main dining area large enough for the whole family and occasional visitors?

5.5. Can the working area of the kitchen be screened from view from the main dining space?

6. Bedrooms

6.1. Can each member of the family, other than the parents, have a single room to themselves?

6.2. Is there space in each bedroom to:
  a) accommodate the necessary furniture?
  b) allow for sensible alternative furniture arrangements?

6.3. In addition, is there space for:
  a) a cot to be put occasionally in the main bedroom?
  b) a desk or dressing table in single rooms?

6.4. When the house is not fully occupied or when the children are young and sharing bedrooms:
  a) can at least one of the unoccupied bedrooms, by folding doors or a demountable partition, be used to enlarge the living areas or another bedroom?
  b) can two of the single bedrooms be used, by the same means, as a double room?

6.5. Does the plan contribute to sound insulation between the bedrooms and between bedrooms and the living areas?

7. Bathroom and W.C.

7.1. Is the bathroom and W.C. provision adequate?

7.2. In houses with a second W.C. and washbasin, is the compartment and its basin large enough to be used by an adult for washing, as an alternative to the bathroom?

7.3. Is there adequate space in the bathroom and W.C.:
a) around the fittings?
b) to open the door and enter easily?
c) to accommodate a stool in the bathroom in addition to the fittings?

7.4. Does the plan contribute to sound insulation between the bathroom - W.C. and:
a) the main entrance?
b) the living areas?
c) the bedrooms?

8. Storage

8.1. Is there a store or utility room inside the house with space for a work bench and storage for hobbies and household maintenance?

8.2. Is there space for a refuse store?

8.3. Is there adequate linen storage space?

9. Services

9.1. Is the heating system adequate?

9.2. Is the house insulated to minimise heat loss?

9.3. Is there an adequate supply of hot water?

9.4. Does the plan avoid excessive lengths of drainage?

9.5. Are there adequate electric socket outlets?
Are these conveniently positioned?

10. General

10.1. Are windows and doors positioned:
   a) to allow the best possible arrangements of furniture and equipment, e.g. beds in relation to windows?
   b) to avoid obstruction in circulation areas within the house?
   c) to give easy access to windows from inside and outside for cleaning by the occupant?

10.2. Are the stairs designed to avoid:
   a) windows at the top?
   b) one riser on a half landing or elsewhere in an unexpected place?
   c) a hand rail which is not continuous?
   d) a top tread which encroaches into the landing?
   e) a projecting tread at the bottom?

10.3. Are windows positioned to give the best possible privacy to the household from overlooking by passers-by and callers?

The Bulletin goes on to give characteristics of different types of houses, e.g. narrow frontage, wide frontage, patio houses, cluster houses, etc.

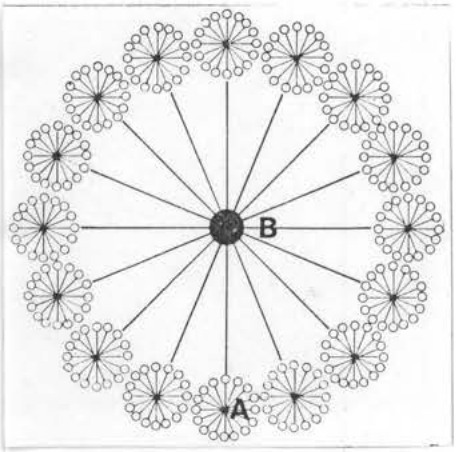
I think this attempt to explain the various functions of rooms and spaces is of more value than specifying minimum dimensions and giving type examples. The risk with the latter system is of architects following such "instructions" blindly, and of bureaucrats losing all their powers of reasoning. This results in endless numbers of stereotyped houses being built regardless of occupier needs, house location, etc.

How Does One Create a Good Housing Environment?

Towns today could advantageously be planned according to Howard's theories; but they should be divided into well-defined areas, consisting of, primary groups of about ten to twenty families, secondary groups of about three hundred families, and a third group size of three to six thousand families.

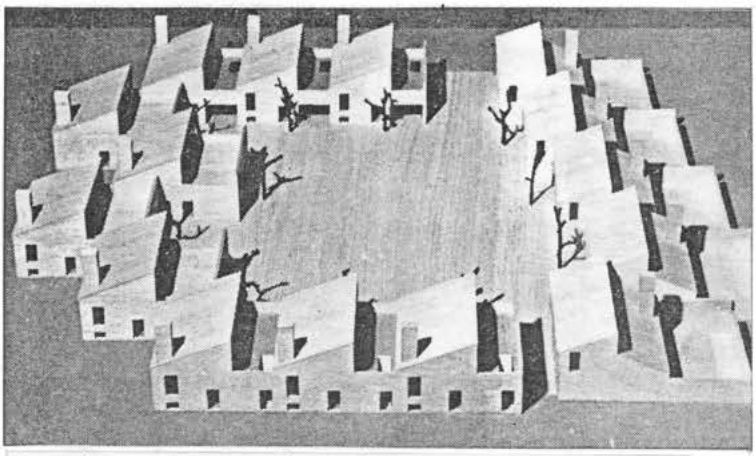
Group sizes.

The primary groups, of about ten to twenty houses each, can be placed around open play areas or short narrow streets, (e.g. cul-de-sacs). The secondary groups, of about three hundred families, would justify the building of a day nursery, a recreation hall, and the provision of open green areas. The third group size, of three to six thousand families, would justify the provision of a school, a sports centre, shops, and a church. In these groups there should be a variation in the sizes, and types of houses to make a more interesting environment, and to cater for different family types and structures, so that a harmonious society develops according to age and social structure.



A. Primary groups, 16 households.

B. Secondary group, 256 households.



A primary group formed round an open area. Amtstuegården, Hilleröd, Denmark.

Pedestrian Movement

Pedestrian movement should be convenient, safe, and pleasant, to enable people to visit neighbours, for children to meet and play, to give access to public transport, recreation areas, etc.

Parking

People will, given the choice, want to have their cars as near to their houses as possible. The parking and garaging of cars should therefore be arranged in a convenient and aesthetic manner, as close as possible to the houses.

Traffic

Within new housing areas vehicular movement should be made convenient, safe, and pleasant by the provision of: -

1. A road system segregated from through traffic.
2. A clearly defined hierachy of routes, with roads differing in size and design depending on their use, volume of traffic, and speed limits.

It is important that asphalted areas be kept as small as possible. Streets serving the primary housing groups of ten to twenty houses, shall be kept short and narrow so motorists will automatically reduce their speeds considerably. If the speed of traffic can be reduced to fifteen to twenty kilometres per hour, there is no evidence to show that it is not safe to mix pedestrian movement with vehicular traffic.

Planning Project.

To be able to work with a planning example I chose a site in Brottkärr, Askim. This area of land had been planned earlier when Askim was an independent borough, but when it was incorporated with Gothenburg the development of Askim was postponed in favour of developments north of Gothenburg.

The site.

The site, as shown on the drawings, is now open field land, surrounded on three sides by wooded, rocky hills. These create natural boundaries for the development. To the west of the site there is planned a new distributor road, this will lie between the site and the existing yacht harbour. A short distance along this road one reaches Amund Ö, a recreational island; the wooded countryside around the site is also used for recreational purposes.

The site.

The Development

As a result of my studies, shown earlier in this thesis, I decided to try, where this was possible, to form primary groups of houses, consisting of between ten and twenty houses to each group. As other student projects had shown examples of "low-rise" housing schemes based on "collective" solutions, I decided to try and form acceptable living environments by using a system of cul-de-sac type of streets. In such streets it is possible for pedestrians and motor vehicles to share the same space, and, as we have seen from history, it is also possible for such streets to promote social contacts between neighbours, if they should wish it.

Existing houses.

On the site there are a few existing houses, and part of the "problem" was to include these into the scheme. I felt that they should be integrated with the development scheme. One of the existing houses has a very large well established garden, and I suggest that this property should not be divided up. I would, however, suggest that the property might be included into the scheme as a day nursery, or a youth centre, or in some way be used by the community.

Parking and Garage Facilities

There are many examples of housing areas with communal garage systems, which means that home owners may have to leave their cars several hundreds of metres away from their homes. There are of course arguments for and against this. In this exercise however, I wanted to plan for garages and parking space adjoining the houses, and see what effect this had on the environment.

Pedestrian Ways

Marked on the plan are a series of pavements and footpaths linking the different primary groups of houses with each other, and giving them access to the central green area. Within this area is a spinal route joining the "community house" with the recreational area to the east of the site. The footpath system also links the site with the recreational facilities to the west, these include walking, bathing, cycling, and yachting facilities.

Traffic

From the planned new distributor road, along which a bus route is planned, I suggest that two minor-distributor roads should lead traffic into the site. The road to the south will also lead to other housing groups further away. There is no direct access to houses from these minor-distributor roads, the access is from short cul-de-sac streets, which lead off the minor-distributor roads. To show motorists that on entering the cul-de-sacs, they should drive with care, one can, at the entrance to them, raise the road surface, and perhaps use a different surfacing material. This, combined with the shortness and narrowness of the cul-de-sacs, will ensure low traffic speeds.

The Houses

As Unwin pointed out it is beneficial if houses in a street are of different sizes and types, and are placed at different distances from the pavement. This creates a more interesting environment than just straight lines of exactly the same type of house does. It should also be possible to extend the houses, as this may be required later, with changing family sizes and circumstances.

For the house plans I worked with the idea of a basic unit of three rooms, kitchen, bathroom, laundry, and garage. This unit can be enlarged upon to form houses consisting of up to seven to eight rooms, plus kitchen, etc. I tried to vary the street environments by using different house sizes, different materials, changing roof pitches, and adding such elements as balconies, etc.

The site slopes from east to west, and most of the cul-de-sacs run north-south, parallel with the contours. To make use of morning and evening sun, there are garden spaces both behind, and in front of the houses. On the eastern edge of the site the ground rises steeply towards the wooded area, on this far eastern side nearest the wood, I have placed patio-type houses, with enclosed gardens facing south-west; on the west side of these streets, there are two storey souterrain houses (see drawing with plan variations).

List of Drawings

		Skala
1.	Förutsättningarna	1:1000
2.	Områdesplan	1:1000
3.	Entrégata	1:200
4.	Entrégata, elevationer	1:200
5.	Hustyper, Planvariationer	1:200
6.	Husplan, Bastyp, 3 rum + kök	1:50
7.	Husplan, 7 rum + kök	1:50
8.	Sektioner	1:50

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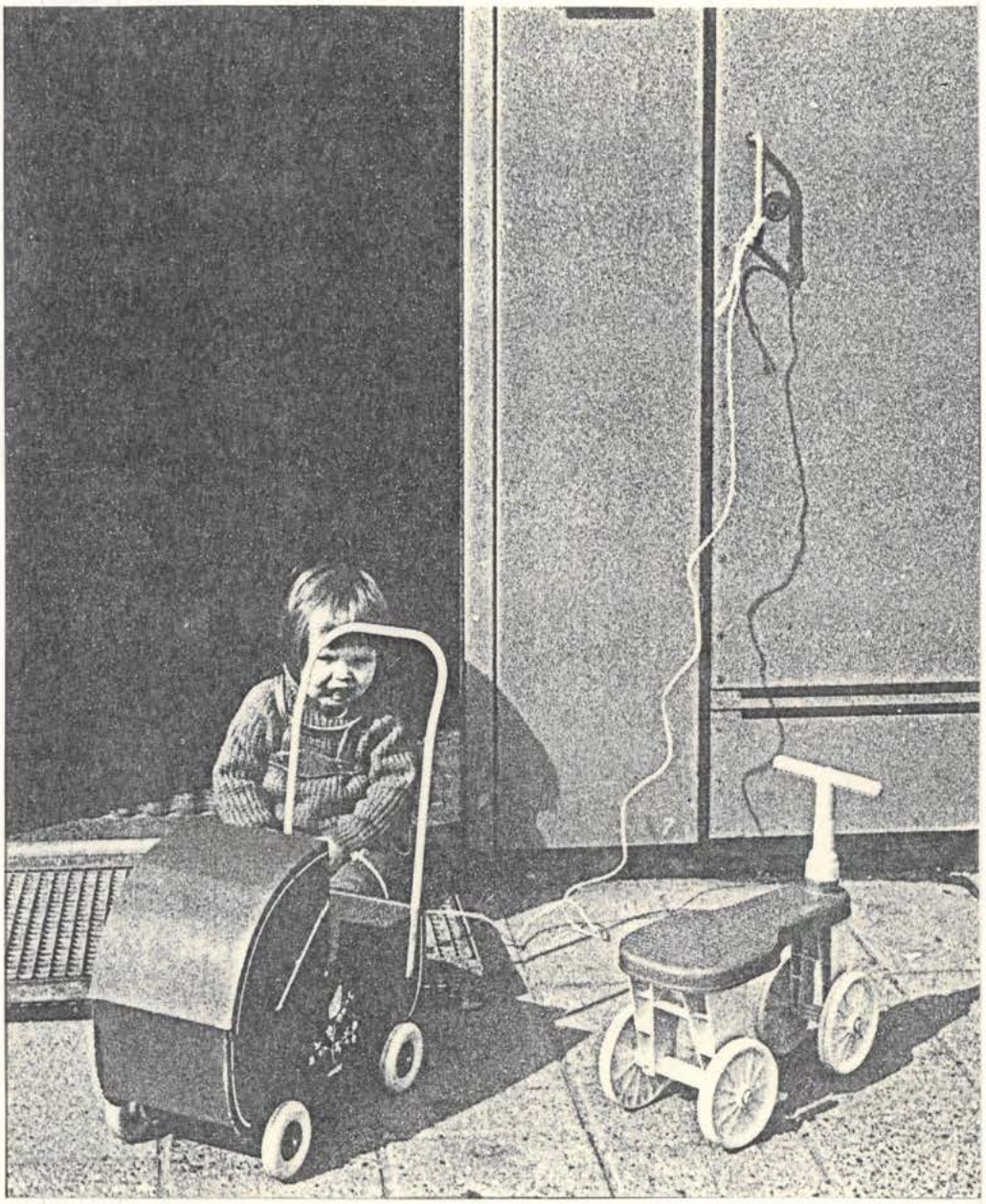

REALITY.