TOWN THEORY AND PRACTICE

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EDITED
WITH AN INTRODUCTION
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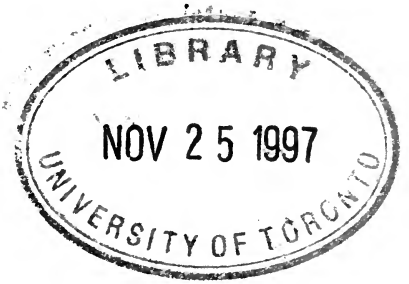
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AN INTRODUCTORY CHAPTER

By C. B. Purdom

Within two years the municipalities of all towns in Great Britain with populations of twenty thousand and over will be required by law to prepare "town-plans." Hitherto, as is well known, there has been a minimum or entire absence of planning, and the result is the unpleasing, inconvenient, and unhealthy agglomerations of buildings which we call towns and cities to-day. In the future that state of things is not to be repeated, and municipal authorities, which have had the power for a dozen years to plan their towns without availing themselves of it to any extent, are to be compelled to make plans. But before this immense municipal activity is set going through the length and breadth

of the country, it is proper that the question should be raised, "What should be the aim in town-planning?" A multitude of town-plans, guided by no purpose or by an inadequate or mean purpose, would be worse than no plans at all. Better to suffer the ills we have already in our towns than to aggravate them by hasty, unskilful, or stupid planning. Therefore those who are concerned with town-plans—which is all of us who live in towns—must discover what sort of towns they really want and how it is possible to get them.

This book has been written to stimulate discussion about towns and their planning. It sets down the main outlines of the subject in a way intended to appeal to the ordinary reader. For the purpose of definition the town idea which is implicit in the term "garden city" has been employed as the basis of discussion. It is necessary to explain why. The "garden city" is a well-known though generally

misapplied term, lavishly used by people who never seem to have troubled to inquire into its meaning. Its real importance is that it is the one specific conception, idea, or plan of a town that has emerged in industrial England designed for an industrial community and in harmony with the traditional ideals of English town-life. For this reason, the grounds of which are made plain in the book itself, the description of a garden city has formed the common ground upon which those who have contributed to this book have met. It has given the opportunity that was required for arriving at an answer to the question we have already formulated. The obvious reply to the question is that our towns should be planned to make convenient, healthy, and beautiful places to live and work in. But we want something more than an obvious reply, we want an illustration in detail of what is meant. Therefore, as the type of modern town that most completely fulfils these conditions,

at least ideally, is the garden city, the question arises: What is a garden city? And this book is the answer.

The garden city is understood to be a new town; and if we are to get a clear picture in our minds of what a town should be, we are bound to think of a new town. This is not to be utopian, even though the main problem of so many of us is that of old towns and cities, because there is still great scope in our country, as in other countries, for the building of new towns; indeed, the effort already employed in the development of great suburbs requires but a relatively small amount of impetus in a fresh direction to transform those suburbs to new towns. But the great and immediate value of the consideration of the garden city idea, however, is that it defines a type of town to which the development of existing towns can in varying degrees be made to conform. The garden city is, moreover, not merely an abstract theory; it exists as a practical attempt to solve

the problem of the over-concentration of population in great cities, which is becoming more and more pressing in all civilised countries throughout the world. In the opinion of many people, including those who have co-operated to produce this book, it is the most important contribution to the solution of that problem that has yet been made in this country or abroad. The term "garden city" has become well known in association with new ideas of housing and new methods of town-planning; but its significance is deeply rooted in the desire to remedy the evils of overcrowding and congestion of population in the towns, which is the greatest obstacle to the improvement of civic life. In this chapter it is my business to explain what that significance is. I shall do so by describing how the term came into use, what those who introduced it meant by it, and what has been done to give it practical effect.

Popular use of the term "Garden City"

The current use of the term "garden city" is due entirely to a book published in London, in 1898, by Ebenezer Howard, under the title of *To-morrow*, in which a proposal for a new type of town was described. As a consequence of the publication of that book, and more particularly of the propaganda that was undertaken on behalf of the proposal contained within it, the term became widely known and is now freely used by people interested in housing throughout the world. No housing enterprise is either too small or too ambitious to be described as a garden city, and no town-planning scheme, however grandiose, is complete without provision for *cités-jardin*. It is not surprising that in the process of popularisation the term should have come to be very loosely used. The speculative builder, for example, has seized upon it eagerly, and is everywhere to be

seen exploiting the commercial value of an attractive name. We have been made familiar, in the last few years, with such terms as "garden suburb," "garden village," "garden settlement," and combinations of "garden" with other words. Whenever people have wanted to speak of good practice in cottage building, site-planning, or town-planning, they have tacked "garden" on to any combination of words they have fancied and then taken for granted that they were in the garden city movement. This confusion is serious, because the term "garden city" has a precise meaning that is possessed by no other term in current use; and I propose now to show, as a preliminary to the discussion of the term in detail, what that meaning is.

An American Garden City

It is interesting to note, before we proceed further, that the first use of the name "garden city" appears to have been

made by one Alexander T. Stewart, a merchant prince of New York, who established a model estate on Long Island, N.Y., in 1869. Stewart was the head of the largest retail dry goods store in New York, which later became the establishment known as John Wanamakers, and, like some other millionaires, he was of a philanthropic turn of mind. He purchased 8000 acres of the town lands of Hempstead, on Long Island, at the price of fifty-five dollars an acre, his object being to build a model town for his own and other New York workers. He disclaimed, however, any philanthropic or charitable intention in the following letter to the editor of the Hempstead *Sentinel*:

NEW YORK,
6th July 1869

Having been informed that interested parties are circulating statements to the effect that my purpose in desiring to purchase the Hempstead Plains is to devote them to the erection of tenement houses, and public charities of a like character, etc.

I consider it proper to state that my only object in seeking to acquire these lands is to devote them to the usual purposes for which such lands, so located, should be applied—that is, open them by constructing extensive public roads, laying out the lands in parcels for sale to actual settlers, and erecting at various points attractive buildings and residences, so that a barren waste may speedily be covered by a population desirable in every respect as neighbour taxpayers and as citizens. In doing this I am prepared and would be willing to expend several millions of dollars.

If Stewart had no philanthropic object, it is probable that he had far-reaching idealistic plans for his model city. The land was barren common-land, and he immediately set to work to convert it into farms and to lay out his new city of gardens. Unfortunately he died seven years later and the scheme was held up. He had, however, put down a railway from New York and constructed wide, tree-lined roads, and at the time of his death there had been built 102 houses, rented at 150 dollars to 1200 dollars each, with a population of 275. After a period of

some stagnation, following the abandonment of the original scheme, it became a thriving suburb of New York, rather better than the ordinary suburb, inhabited by people of some means. It was probably not intended for industry by Stewart, and certainly in its later development it was simply a residential suburb; but, like many other suburbs around large cities, in course of time it attracted manufacturers and has now several large factories. One of Stewart's ideas was to keep the freehold of the land in his own hands, and until after his death the land was not sold, but leased. We may fairly suppose that had he lived the scheme may have possessed many interesting and novel features and have become a town of note.

"*Garden Cities of To-morrow*"

Our use of the term "garden city" has, however, nothing directly to do with Stewart. Mr Howard, in the book that has already been mentioned, came upon

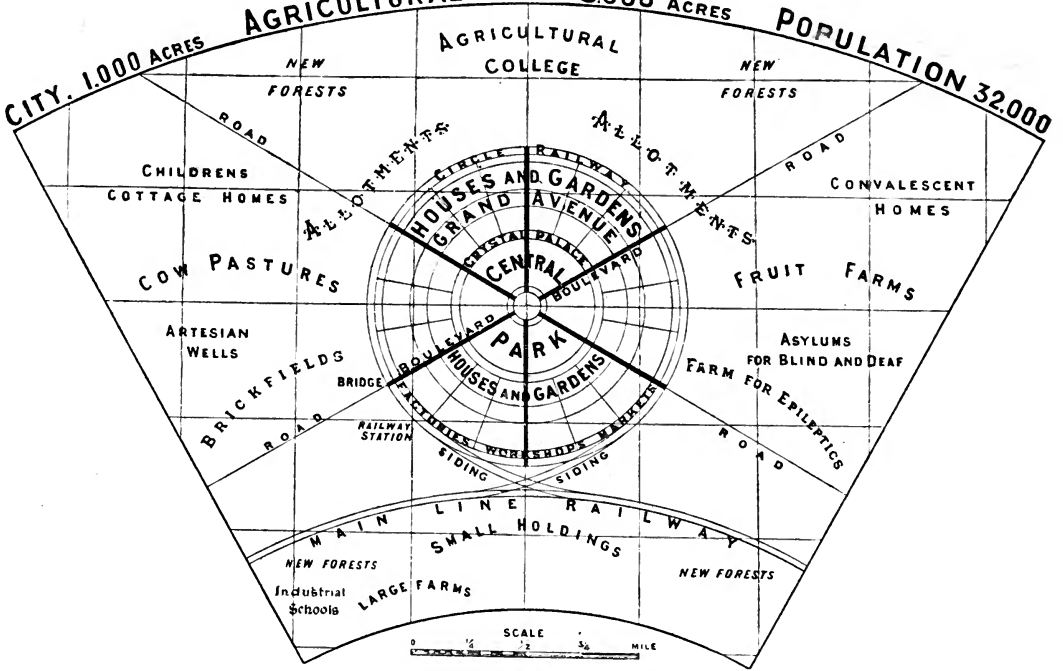


FIGURE I

Ebenezer Howard's diagram of a Garden City, from "To-morrow" (1898).

the name independently; and it is with Mr Howard's idea and the attempt to put that idea into practice that we are now concerned. I make the following summary of his proposal for a garden city from *Garden Cities of To-morrow*, the title under which *To-morrow* was re-issued in 1902 and is best known.

An estate of 6000 acres was to be bought at a cost of £40 an acre, or £240,000. The estate was to be held in trust, "first, as a security for the debenture-holders, and, secondly, in trust for the people of Garden City." A town was to be built near the centre of the estate to occupy about 1000 acres. Six boulevards were to divide the town into six equal parts. In the centre was to be a park in which were placed the public buildings, and around the park a great arcade containing shops, etc. The population of the town was to be 30,000. The building plots were to be of an average size of 20 by 130 feet. There were to be common gardens and co-operative kitchens.

On the outer ring of the town there were to be factories, warehouses, etc., fronting on a circular railway. The agricultural estate of 5000 acres was to be properly developed for agricultural purposes as part of the scheme, and the population of this belt was taken at 2000.

The entire revenue of the town was to be derived from ground rents, which were considered to be amply sufficient "(*a*) to pay the interest on the money with which the estate is purchased, (*b*) to provide a sinking fund for the purpose of paying off the principal, (*c*) to construct and maintain all such works as are usually constructed and maintained by municipal and other local authorities out of rates compulsorily levied, and (*d*) after redemption of debentures to provide a large surplus for other purposes, such as old-age pensions or insurance against accident and sickness"

The ground rents were therefore described as rate-rents. The administration of the town was to be in the hands of

a Board of Management elected by the rate-renters.

Questions of finance, engineering, municipal enterprise, agriculture, local option, etc., are discussed in the book, but the essence of the scheme is contained in these words :

> There are in reality not only, as is so constantly assumed, two alternatives—town life and country life—but a third alternative, in which all the advantages of the most energetic and active town life, with all the beauty and delight of the country, may be secured in perfect combination.

This "healthy, natural and economic combination of town and country life" was to be brought about by ownership of the land in the interest of the community living upon it. The town was to be properly planned, limited in size, and all the amenities of life were to be developed ; but the power of this "town-country magnet," as the author called it, came from the fact that there was to be "but one landlord, and this the community." If

the book be examined—and it is still worth careful reading—it will be found that although the details of the scheme are treated with a certain amount of hesitation, the firm basis of it is the unity of urban and rural interests in a single community and the ownership of the land by that community.

The Garden City Movement

Soon after the book was published the Garden Cities Association was formed to make the idea known and to take steps to give practical effect to it. An actual example of this ideal town was required, and a large number of people came to be convinced that it could be undertaken.

The essential character of the enterprise that was to be attempted was never once in doubt. In the first tract issued by the Association (September 1899) the garden city proposal is described as "a combination of town and country possessing superior advantages over either city

or country life." In the first detailed statement of its objects (1901) the same thing is insisted upon. "The idea is to bring the town to the country by the establishment of industrial centres in rural districts." The late Sir Ralph Neville, chairman of the Council of the Association for many years, explained the principle over and over again. At a conference held at Bournville, in 1901, he said that the proposals were "to purchase a site at agricultural prices . . . to lay that site out as a city, a city in which manufacture shall proceed and the labourer will find a home . . . the advantages of country life being secured by the permanent allocation of a large proportion of the site belonging to the Garden City to agriculture, and the restriction of buildings to a fixed proportion of the site purchased . . ." (*Report of Garden City Conference at Bournville*, p. 12). And later, at the same conference, he declared that the "real basis of the thing" was the

"automatic rise in the value of the land which will take place as soon as you attract the people to your city," and "that increment goes to the advantage of the citizens themselves" (*Ibid.*, pp. 24–5).

In the literature of the movement these two elements of the idea were consistently affirmed, and their advantages to manufacturers and the community at large were strongly urged.

The First Garden City

The attempt to establish a garden city took shape in 1903, when a company was formed and a large area of land was purchased at Letchworth in Hertfordshire. We have thus not merely the abstract statement of the idea, but a concrete example of it. First Garden City Limited was incorporated under the Companies Acts, with an authorised capital of £300,000 to purchase an estate of 3818 acres (since increased to 4500 acres), and to establish thereon a town, with industries,

with a population of 30,000, in accordance with the scheme set out by Mr Howard in his book. The dividends on the share capital were limited to 5 per cent. and the balance of the profits of the Company were to go to the community.

In the original prospectus of the Garden City Company (1903) it was stated that "The exceptional features of this scheme are that the town is to be limited to a population of about 30,000 inhabitants, that the greater portion of the estate is to be retained for agricultural purposes, and that the dividends to shareholders are to be limited. . . ." And among the advantages anticipated is: "That the inhabitants will have the satisfaction of knowing that the increment of value of the land created by themselves will be devoted to their benefit." These twin principles are clear, they are fundamental, and they give the town of Letchworth its character. The town has other features, it is true; but they are based upon

that foundation. There is the town plan, there is the limitation of the number of houses to the acre, there is the allocation of areas for various functional purposes, and there are other matters of great interest and importance. They are all as necessary to the modern town as roads, drainage, and a water supply. But what make Letchworth are (*a*) the conception of a town as an organism in which agriculture and mechanical industry are associated, and (*b*) the existence of a social claim to land value.

Letchworth has become a town of 10,313 inhabitants (census 1921), with factories and workshops, and is steadily growing. Its population is largely industrial and it provides employment for a large population in the surrounding villages. The town is now an urban district, with a district council. The industries are engineering in various branches, printing, corset-making, and a variety of other light trades. There is a residential population

not concerned with the town's industries. Indeed, the town has all the characteristics of a normal community, though the influence of its planning, the absence of bad housing, and the rural atmosphere are strongly felt in its social life and reflected in the aspect of the town. Letchworth has no striking architectural features except in certain details; but for the student of town-planning in both its technical and sociological aspects it is a valuable field of study.

A Second Garden City

Until 1919 Letchworth stood alone as an example of a garden city; but in that year a proposal was brought forward for the establishment of a second town near Welwyn, also in Hertfordshire, but nearer London than Letchworth. In the preliminary announcement of this scheme the object was stated to be:

> . . . to build an entirely new and self-dependent industrial town, on a site twenty-one miles from

London, as an illustration of the right way to provide for the expansion of the industries and population of a great city. . . .

It is urgently necessary that a convincing demonstration of the garden city principle of town development shall be given in time to influence the national housing programme, which is in danger of settling definitely into the wrong lines. Unless something is done to popularise a more scientific method of handling the question, a very large proportion of the houses to be built under the national scheme will be added to the big towns—whose growth is already acknowledged to be excessive.

Garden suburbs are no solution. They are better than tenements, but in the case of London, they have to be so far from the centre that the daily journeys are a grievous burden on the workers. . . .

The Company's scheme, therefore, will pay equal attention to housing and to the provision of manufacturing facilities. Healthy and well-equipped factories and workshops will be grouped in scientific relation to transport facilities, and will be easily accessible from the new houses of the workers.

The town will be laid out on garden city principles, the town area being defined and the rest of the Estate permanently reserved as an agricultural and rural belt. Particular care will be taken, in the arrangement of the town, to reduce internal transport and transit, whether of factory and office workers, or of goods, to the practicable minimum.

A population of 40,000 to 50,000 will be provided for, efforts being made to anticipate all its social, recreative and civic needs. The aim is to create a self-contained town, with a vigorous life of its own independent of London. . . .

In accordance with those principles, the freehold of the Estate will be retained in the ownership of the Company (except in so far as parts thereof may be required for public purposes) in trust for the future community. . . .

The building of the new town was definitely launched in May 1920, when Welwyn Garden City Limited was formed. The dividend on the share capital was limited to 7 per cent., the balance of the profits to be devoted to the town. Provision in the constitution of the Company was made for the Local Authority to appoint three Directors on the Board of Directors to be known as Civic Directors.

The Satellite Town

The establishment of the Welwyn Garden City is to be noted as a distinct development of the practical application

of the garden city idea; for it is designed to deal specifically with the problem of the growth of London. Letchworth provided an example of the garden city *de novo*; Welwyn Garden City provides an example of the garden city in its relation to an overgrown centre of population. The town is so placed that it is within the London sphere of influence; the immediate district is entirely rural, but north and south there is scattered a large residential population that depends upon London. The position of Welwyn Garden City, within a little more than half an hour by train from London, is such that it would be possible to develop it as a residential suburb; but that, however, would be to depart from the intention of its promoters. The town is planned as an industrial centre, providing an alternative site for manufacturers established in London or attracted to the neighbourhood. It is within an hour's run from central London by road so that distribution

of goods in the London area is a simple matter, and the docks and wharves of the Thames can be reached without touching central London at all.

Welwyn Garden City is far enough away from London to be maintained as a distinct civic unit, and, by grouping factories in relation to roads and railways and the homes of the workers, and by the development of an agricultural belt, a town is being created that will be in no danger of being swallowed up in the outward growth of the metropolis. Indeed, the new town, regarded as a satellite or daughter town of London, shows how the increasing population of Greater London may be accommodated in houses and factories without adding to the solid bulk of the great city. On the old system of building development, the process of merging still more of the small towns and villages in the home counties into London is but a matter of a short time. The agricultural land in the neighbourhood that helps to feed

London will then, as so constantly before, become a wilderness of houses, and the congestion, deformity, and civic helplessness of London will increase. No amount of town-planning, or arterial road construction, or preservation of open spaces will effectively mitigate that evil fate. To direct the forces of growth within London into a series of garden cities as satellite towns each with its corporate life and industrial equipment, would be of incalculable benefit to London, and enormously enrich the whole area. The special purpose of Welwyn Garden City is to show how this may be done. Within the home counties there is room for a large number of such towns, sufficient to meet the needs of the population for many generations.

What has happened in the past in the London neighbourhood is happening around all the great urban centres in the country. The growth of the great cities could all be brought to order if, instead

of suburban building, such as we see in the building estates and housing schemes to-day, the garden city principle of satellite town development were understood and applied.

The Definition of a Garden City

The study of Mr Howard's book and the two garden city schemes makes it possible to arrive at a definition by which we may know a garden city when we see it. If a reader of the newspapers were capable of believing what he read in them he would think that the whole of England was in process of being covered with garden cities. There is hardly a district in which the local council does not claim to be building one, and unscrupulous builders everywhere display the name on their advertisements. But a garden city is not a matter of a name. The thing itself is nowhere to be seen at the present date, but in Hertfordshire, at Letchworth and Welwyn Garden City. To put the matter

beyond doubt the Garden Cities and Town Planning Association in 1919 adopted a formal definition of the term which reads as follows :

> A Garden City is a town planned for industry and healthy living ; of a size that makes possible a full measure of social life, but not larger ; surrounded by a permanent belt of rural land ; the whole of the land being in public ownership or held in trust for the community.

That definition will be expounded in the rest of this book ; but before it is begun there is a particular feature of the garden city that I want to consider.

Land Ownership and Town-Planning

The garden city type of town as exemplified at Letchworth and Welwyn Garden City, and as stated by Mr Howard in his book, is the product of voluntary action in which there is complete unity between town-planning and land ownership. The schemes under the Town-Planning Acts in this country are prepared by munici-

palities in respect of land in various ownerships. There is no common legal interest. The local authority prepares the plan and enforces it, but the ownership of the land is not affected. There is provision, it is true, for an owner or a group of owners to prepare a plan themselves for submission to the local authority for adoption under the Acts; but the plan on its adoption passes out of the hands of the owners and is enforceable and can only be varied by the local authority. In the garden cities, the plan is prepared by a body without municipal status and without authority under the Acts, and is enforced by that body in its capacity as owner of the fee simple of the land. When the land so planned and owned is co-terminus, or practically co-terminus, with a local authority area, and where the body which prepares the plan and owns the land is working in the general interest of the public and in direct, though informal, association with the local authority, a position arises

which is greatly superior to that which exists in connection with a town-planning scheme under the Acts. That position is enjoyed in the two garden cities, and could be realised in any area, not already town-planned, where the ownership and development of the land were in the hands of a voluntary body, similar to the existing garden city companies. The superiority of the position is in this, that the plan can be more flexible, considered in closer detail and varied with greater ease than is possible under a formal town-planning scheme; for the voluntary authority, by virtue of its ownership of the fee simple, can exercise more extensive and more readily applied powers over the land than those possessed by the local authority as such. If the local authority itself actually owned the land it would combine in itself these powers, subject, however, to such limitations as govern the use and holding of land by local authorities.

Land Values and Rates

The position we are considering, that of the dual administration of a town area by a voluntary body and a municipal authority, has this further advantage, that it gives a control of land values that cannot otherwise be exercised, as well as a revenue for the community that cannot otherwise be secured. In Mr Ebenezer Howard's original conception of a garden city there were no local rates levied on the inhabitants, such rates being paid in bulk by the voluntary body out of the rents that it received. This is by no means an idle fancy. The ownership of land gives very considerable powers, and the ownership of the whole of the land occupied by a local community, if of sufficient size, makes possible a control of land values which properly exercised is of very great economic value. The power of town-planning possessed by a voluntary body, such as a garden city company, by virtue

of its land ownership, is the power to provide sites for shops, houses, commercial buildings, factories, etc., combined with the power to control the number of such buildings. For example, shops of a particular sort, public-houses for instance, can be excluded; so can factories of an objectionable type. But the value of such a power is not in its negative so much as its positive exercise. One of the fundamental activities of a town is its function as a market; it is a centre for the distribution of goods. The land values that are created by shops are, with rare exceptions, the highest land values it is possible to create. People will pay for a site for trading purposes more than they can afford to pay for any other purpose whatever. What they will pay depends upon several factors; but one of them obviously is the quantity of land available for the particular purpose. Therefore, by judicious use of this power to regulate the number of sites, together with

the ability to decide rightly where the sites should be, the voluntary body has very considerable values to dispose of.

At Letchworth a shopping and commercial area was planned, but no attempt was made to regulate land values or to control the number or class of shops, though public-houses were excluded. From 1904 to 1915 approximately ten acres were let at Letchworth for about eighty shops, the annual ground rents averaging £52 per acre. This was about three times the average ground rent of industrial sites, and double the rent of residential sites. It was probably a fair market value at the time of disposal; but it did not represent anything in the nature of the monopoly value. Sites were available for all who chose to take them, so that the monopoly value was ignored by the company. That there was something in the nature of a monoply value, which went to the lessees, is arguable, because the number of shop sites in a new

town must necessarily be limited; for there is a natural economic limitation, as well as the limitation in the extent of the shopping area itself. The value that actually arose out of those shopping sites at Letchworth was enjoyed, in the main, by the enterprising people who built or carried on their trades on them. That there was considerable value so enjoyed is proved by the prosperity of the shopkeeping classes in the town.

At Welwyn Garden City a different policy is being tested. The shop sites are being carefully regulated with a view to securing the ultimate values on behalf of the community. One site has been let for the purposes of a departmental stores, an area of a third of an acre at the rent of £33 per annum, rising by stages to £66 in fourteen years. A second site has been let for a restaurant and hotel, an area of four acres at a ground rent of £200. Further sites are to be let to the same bodies for similar purposes as required by

them. Other sites have been disposed of for banks and other commercial purposes, but not for the purpose of retail trading. The restriction upon the letting of such sites gives a natural monopoly to those who do acquire them; consequently it was not possible to allow them to be in the hands of any trading concern that would take advantage of its monopoly to the detriment of the town: the fullest and freest means of distribution of commodities is of course essential in the interests of the consumer. The method adopted, therefore, was that of the establishment of companies under expert management, on the directorate of which the land-owning body was represented, and with provision for surplus profits, after payment of a fixed return on capital (which is liberal in these cases owing to the nature of the businesses), to be devoted to the purposes of the community.

This method of dealing with shop sites is experimental and it remains to be seen

if it will satisfy all the requirements that have to be met. Time may show the need for some modification of it. There is, however, no reason, on the face of it, to suppose that the present arrangements will not work. The real test will be, is the market fair to the consumer and does it meet his requirements? If that test is satisfied there is likely to be no other serious difficulty that cannot easily be overcome. So far, the brief experience at Welwyn Garden City has shown that this system tends to reduce the cost of living, and has brought a much greater variety of commodities within reach of the inhabitants than could probably be done in any other way. If the distribution of commodities to the consumer is well done, there can be no doubt of the other benefits that will arise. The revenue that will accrue to the community will represent full site value, plus monopoly value, plus a share of trading profits. It may not be possible to split up the revenue under these various

heads, but there is no need to make the attempt. The effect will be realised by the existence of funds available for purposes the cost of which in other towns has to be met out of the rates.

This is an extreme illustration of what may be done by the combination of town-planning and land ownership existing in the garden city type of town. It is only possible in a garden city in a new area before vested interests have been allowed to get established; but it has other important possibilities which will be more or less obvious. Among other things it indicates a development of local government along new lines, with great potential benefit to the community at large. The possession of the fee-simple of land carries with it a powerful influence upon the life and activities of a community, varying with the relative position and extent of the site owned; and its possession by a voluntary body acting in conjunction with a public body facilitates the extension of social

activity, without interfering with existing individual interests, which would otherwise be impracticable. The close and continuous co-operation of a municipality with a voluntary land-owning corporation opens up a field of experiment which may be well worthy of the attention of political economists.

The Garden City as an Ideal

What bearing has this upon town-planning in general? There is small prospect at present of local authorities being able to follow the example of Letchworth and Welwyn Garden City. But I think we can agree that the garden city is worth seeing clearly as an ideal of town growth and planning. The influence of that ideal can be brought to bear in the practical work of preparing town-planning schemes. Hitherto, the garden cities have been studied as providing examples of road-planning, house-planning and the development of resi-

dential sites. But that is a small part of the theory and practice of the garden city. That garden cities are mere residential estates, with special amenities, is as unlike the truth as the idea that they are fanciful means of housing industrial workers by manufacturers of a philanthropic turn of mind. Garden cities have residential amenities of no mean order, and philanthropic employers can be quite as philanthropic in them as elsewhere; but these are small matters in relation to their real significance. The garden city is a combination of individual, municipal and industrial effort. It is not a mere plan; it is a creative organisation. Town-plans do not make towns. Dynamic forces, the energies of men and the enterprise associated with industries, the pressure of population lured to a centre by powerful forces of attraction—these are the makers of towns. In the past, towns have grown up under the blind influence of these forces; to-day there is a means in the art of town-planning

to replace that heedless process by conscious effort. But the art of town-planning is not a matter of adding road to road, building estate to building estate; it means the possession of an ideal, the exercise of the imagination, by those who care about towns, understand and love them, and have the power to make them what they would have them be." That is the value of the garden city to these present times. It is an idea of orderly town life that is being worked out in two places in this country, and that could, and no doubt will, be worked out in many more. More than that, it is an idea that should be in the minds of those who re-plan existing towns and cities, or who prepare schemes for their extension.

CHAPTER I

THE TOWN ITSELF

A Garden City is a Town

By W. R. Lethaby

The garden city is a town which exists in proper relation to the country round about it—a relation as between heart and lungs, between a centre of community life and distributed country labour by which each acts and reacts beneficially on the other. Town life is of very ancient institution and became highly developed in antiquity. Towns were the cradles of arts and letters; all history deals with life in towns, for history itself was the product of town dwellers. Town life in one word is Civilisation. The great purpose of life in towns is to produce finer

and finer types of civilisation and civility. The very objective of civilisation is to build beautiful cities and to live in them beautifully.

A garden city should manifestly not be too large; but concentration up to a point is of the essence of its being: there must in every given case and set of circumstances be a point of maximum efficiency beyond which a law of diminishing returns is encountered. The city should be industrial to the point of producing its due share of commodities, but again it should not be industrialised and commercialised. Balance is the aim, and a garden city should be balanced in all its functions and relations. We need some studies of the laws which govern cities considered as healthy organisms. The ordinary "scientific" political economy hardly anywhere seems to give clear indications as to how far it "pays" to maintain squalor and ugliness, disease, disorder, and dirt.

Like most "material" things, the town

is founded on spirit, and we have to begin with the formation of town psychology and civic desire. We have and we understand the love and worship of home and country, and we must seek to add to these city reverence, with teaching about town duties, and even some ritual. The town is a sacred thing, and we are starving the children by not giving them enough to love and reverence. If they grow up too brittle something will necessarily crack.

A city is one big organism and itself a single work of art; it is, in fact, the master-work by which others should be judged—what do they do for the town? It is a university for production, a cradle of life and a school of manners.

We town-dwellers came up to the day before yesterday by custom, and we have had an interval in which we have just drifted and gravitated down the steep way of least resistance. Now we have to think out aims and form scientific programmes

for the future. Some sort of productive economy has to be worked out to supplement or supplant the kind of political economy which too often has been a mere apology for profiteers. We have to experiment with the means of producing high quality in community life. We have to get rid of the irrational and learn to see untidiness as a disease. We have to teach that nature and the town have to be reverenced with a conscious personal love, and that we necessarily fail of having an essential life substance if these elements are lacking. We have to refound art on community service as the well-doing of what needs doing. People, we ourselves, exist individually in a *medium*, and if this medium has become thin and dry, our lives must necessarily wither up too. Our towns have to be made places of bodily health and spiritual refreshment, pleasant to live in and to visit. I would care not a pin or a button for a showy city as such if it could be produced only outwardly,

but I see that every town is a picture of the minds of its inhabitants. If the town does not embody rational effort, discipline, and aspiration, the children will be untrained and the men and women will be unsatisfied, hopeless and anarchical—it must be so, for, as the old Greek poet said, "The city teaches the man."

The first link in this chain at one end is to train for an active love of the towns in which we live, while approached from the other end the first link is to give us something in our towns which we may love. Greek culture built itself out in lovely cities, and these cities became the objects of a passionate regard, wells and reservoirs of community spirit and strength.

Every town old or new is a special problem with individual possibilities of developing its own specific character, which I may call its civic personality. In antiquity this idea of a personality was boldly conceived and expressed. Athens became Athene, the genius of Rome had a magnifi-

cent temple, and even here in Britain a Roman town would have had a statue of its genius. I must confess that I should like to see some molten images of London and Leeds, Birmingham and Bristol set up as symbols and centres around which the towns might build up their pride. We cannot remain strong without pride, we cannot long be proud without being given something for which to be proud. Every town has to emulate its neighbour and set about developing particular productions and special types of industry and culture. They should race for the reputation of having the smartest railway station, the most efficient electric lighting, the best restaurants, the most flowery park, the loveliest suburbs, the most restful cemetery. In every town we need a civilisation society, a council which would advise the town council, a centre for civic patriotism to gather into strength.

In going about England the things which have shown themselves as orderly in

their classes are golf grounds, race-courses, training villages, cricket fields, and tennis courts. In all the serious matters of sport, as also in war, it is seen that tidiness and smartness are parts of efficiency. In our town life it is not too much to say that this instinctive feeling has largely been pushed out by pressures which we have accepted as "economic." Good and noble things have been done, like the provision of parks and better water supply, and attempts, sometimes quite sad, at "beautification" are frequently made as a sacrifice to what is supposed to be "art"; but the idea of town tidiness, the ideal of town perfection seems nowhere even to be prophesied. The aim of this little paper is to suggest that the town is a single organic unit and that it must be seen as the product of a human group and as a work of "art." We cannot shake off responsibility and suppose that towns make themselves.

We have come to talk of music and

drama and art and architecture as if they were technical words for remote abstractions or exceptional luxuries, but what is civilisation for if it is not to produce poetry, music, beauty, and courtesy? These things are nothing worth in themselves unless they have a use for life. They are far more than luxuries, amusements, and excitements; they are the natural forms into which high human endeavours run. Civilisation has to externalise itself in disciplined arts, which become the registers and indices of the quality of life. The producers and their products set up a series of "inseparable reactions." Man builds the city so that the city shall shape his sons, for a city is properly a training place for men. Without order in the city we cannot have the full idea of order in the mind, and so of efficiency and the rest. Art is not something extraordinary, it can only properly exist—as can any of the forms and products of civilisation—when it becomes ordinary and

common. We destroy it by isolating it and idolising it as "genius," for genius is only the product of a wide culture. Shakespeare was not the accident of genius so much as the inevitable product of an age which was interested in music and poetry; when everybody was writing verses Shakespeare was the best of them. At the end of the eighteenth century a deep and wide interest in English antiquities and scenery culminated, and Turner was born. Turner was no accident, he was the greatest of the topographical draughtsmen, he was carried farthest by the tide, that is all. Arts and civilisation are produced by tides in the affairs of men. Moreover, history shows us that these currents can be made to flow by conscious effort, or rather, perhaps, that when the idea of making an effort arises the tide itself has begun to turn. Pericles made the glory of Athens, and Charlemagne and our Alfred deliberately fostered the arts of life and founded cultures.

In these questions of town building and town tidying we must begin from general ideas which everybody may understand and not allow ourselves to be led off by vain ambitions and professional catch-words. Order, cleanliness, health, everyone will allow that these are desirable to an imperative degree. We must begin with better street sweeping and more whitewash, with efficient dealing with rubbish (a very pressing matter in even small towns and villages), with control of advertisements, and with more planting of trees and flowers and tidying up the approaches and environs of the towns.

As it is, we compound for the obviously right and necessary by a dazzlingly vulgar "picture palace," with some "specimen of architecture"—an example, we are told, of correct style produced by a competition of paper designs in great anxiety and excitement at the moment, but scoffed at ever after; or by a marble or bronze "statue" which we are assured is a

"work of art," but which nobody wants, understands, or cares for, a mere idol set up to custom and vanity; or we accept the promise that some commercial exploit or exploitation will be ornamental, and allow most terrible tram-wire standards to be erected down the whole length of a once delightful High Street—ornamental indeed! That means so much the worse, for the rule is that "ornament" is properly emphasis, and things like drains and mechanical appliances should not shout, but be quiet and unobtruding.

While we have railways and their stations, these must be made to function in an orderly way—mechanism should at least be able to accomplish that. If we have factories, they too may be made inoffensive; indeed, a new and necessary science of psychological economics would demonstrate that they could not be properly effective until they were sufficiently humanised to be pleasant. If slag-heaps are necessary products, they

may at least be dealt with in the best possible way, and the seeking of a best way would at once make them interesting. Art and poetry may always be found in necessary human work and the inevitable things of life; if they are not so found indeed, that which passes by their names will only become another burden to existence. Art is not this or that strange and extravagant thing "Lo here or lo there," it is a common human aptitude.

Without thinking up vainly elaborate utopias, towns organised for decent life might easily be imagined and economically instituted if we would only will them. They must be made tidy from end to end, that is the first condition of such an organism functioning efficiently. Factories, railways, markets, shops may at least be made fit and reasonable; public gardens might be all really sweet, fair, and refreshing; cemeteries (although it is bad taste, I believe, to mention these) could be peaceful and dignified, not as they are now,

harsh and flashy, indeed horrible. What a final note this is on our "aims in life!"

Children should be trained to reverence their town and to do it services by picking up strewn paper and the like. Every town should have playfields and a stadium for athletics. Annual festivals have been customary in towns from the earliest known days, and some cultural assembly like the admirable Welsh Eisteddfod should be instituted everywhere. Every town should have a municipal theatre where the great stories might be presented; we are becoming a people who only know novelette and cinema stories; folk-lore, hero-stories, and national legends have almost passed out of the hearts of the people. Now stories form spirit, and this is a quite tremendous matter; nothing I can think of is quite so urgent and foundational as this need of giving us all a common fund of stories to form a folk mind. I have sometimes thought that Shakespeare must have consciously set about forming

a body of British drama beginning with *Cymbeline*, and Coleridge made wise proposals for filling up the gaps. We have infinite riches in noble stories if only they could be presented to the people in some penetrating way. The epic of the Norman Conquest, for instance, is already cast into acts and scenes on the Bayeux tapestry, and it would only need the collecting of a few passages from the chronicles and sagas to turn it into national drama.

I am eager to try once more to make it plain that by art and beauty in towns I do not mean some few out-of-the-way things which claim to be works of genius when they may be mere freaks of impudence. No; when beauty is scarce and shut-up, the little that remains necessarily becomes weakened and even diseased. Beauty only flourishes as a common good, a general health, a widely distributed right; it has common and humble roots in order, peace, service, joy in work. This last phrase, "joy in work," looks absurd as I write,

so far have we been carefully taught into the belief that work is an irksome slavery to be done by somebody else. And yet, what is there worth being joyous about except work? Many even yet have the work passion so developed that they have had to invent specially strenuous forms like football so as to be really jolly. Art, then, is just healthy work, and beauty is its evidence, its complexion and smile.

Some such ideas of town vitality as I have endeavoured to suggest seem to be forming in many countries, and we may hope that this is one of the works of the time spirit. In Denmark, folk schools have been formed for bringing national story back to the people; America is full of "movements" of similar kinds; even while I am writing, an article written by a cultivated modern Chinese scholar comes into my hand from which I may quote a passage: "In China religion is civilisation and civilisation is religion. But let me explain what I mean by a

nation with civilisation. The ancient Greeks and Romans were great civilised nations. Why? Because, besides governing and fighting, producing goods and selling them, they also produced spiritual things such as art and literature, and, what is far more important, they developed high types of humanity, and those great men are admired and prized by after generations. The chief end of civilisation is to produce men who, as we Chinese say, understand *li-yo*, courtesy, and music. A nation is civilised only when it has a spiritual asset or 'realised ideals.' The first thing you must do if you want to save civilisation is to know what civilisation is. Civilisation is first and above all a state of the mind and heart, a spiritual life."

CHAPTER II

THE TOWN PLAN

. . . *planned for industry and healthy living*

By George L. Pepler

Without industry a garden city can neither come into being nor continue to exist; and, therefore, important as it is that it should be a healthy and pleasant place to live in, it is essential that it should be on such a site and so planned that industry can be carried on in the most efficient and economical way possible. In fact, the term "garden city" conveys the idea of a distinct, well-balanced, and smoothly working organism of life and labour, planned from the beginning so that the most appropriate environment is available for both workers and works.

The intention is that each garden city should be a distinct self-contained town of comfortable size—not too large to feel at home in, but large enough to contain a diversity of industries to occupy and provide for the people whose homes are there; furnishing that enlivening variety of interests and that mingling of classes so essential to a well-ordered community, and thus to make possible real harmony and unity, the lack of which to-day so much retards progress and prosperity in all directions, not least in that of industry.

In a huge city the sense of identity is apt to be lost, and in consequence the ordinary inhabitant often takes little interest in local government; but in a sizeable town, good to look at and with civic pride outwardly expressed in civic order, a man can feel that he is part of a definite community. Feeling a citizen of no mean city, he will take an interest in its good government, and his vision will

not be bounded by the walls of his work-place.

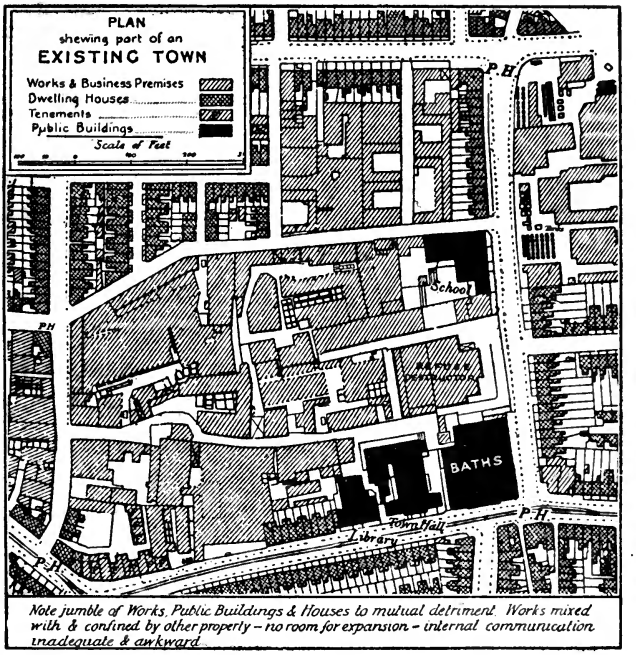
The garden city will advance healthy living, not only because the houses will be placed on the most suitable sites, with plenty of space all round to give free play to clean air and sunshine, but also because the gardens and surrounding agricultural belt will supply fresh and pure food and milk in place of the transit-soiled articles to which the average dweller in an ordinary city is condemned. Also, when working hours are short or in times of bad trade, the garden will afford a profitable outlet for energy. The absence of the permanent smoke-clouds of the large city will mean a purer atmosphere—curtains and clothes will keep clean much longer, and the house-keeper will save money on soap and be relieved of much harassing home-work.

The fitter the man and the smoother running his home, the better his work, and in this and other respects we shall see that in the garden city, pre-eminently,

healthy living and industry can mutually thrive.

In order to realise the advantages that a garden city should be able to offer to industry, it is well that we should consider some of the disadvantages under which work is at present being carried on in many towns. The ill effects of bad housing are now generally recognised, but the same analysis has not yet been applied in anything like the same degree to industry.

In many towns factories frequently exist on their present sites not because they were the most favourable situations for the purpose, but because the land happened to be in the market and was not hampered by estate restrictions. I have known of one site that was chosen in preference to another not because it was more suitable but merely owing to the fact that the vendor had a cleaner title to his land. Elsewhere factories have been properly placed, but in the absence



Note jumble of Works, Public Buildings & Houses to mutual detriment. Works mixed with & confined by other property – no room for expansion – internal communication inadequate & awkward

FIGURE V

of any town-planning scheme domestic buildings have been allowed to surround them, consequently there is no room for expansion and the factories are approached and intersected by streets suitable for domestic traffic but quite unsuitable for factory transport purposes and with footpaths totally inadequate to cope with the stream of factory workers. Apart from the constriction suffered by the factory itself, this haphazard mingling of factories and houses inevitably means unsatisfactory homes, with the corollary of discontent and unsatisfactory work. Factories being placed on sites which do not allow for expansion, and other buildings having been erected all round, the question of lighting is often one of great difficulty. Artificial light has to be resorted to, which not only is an expense but is not so healthy as natural light. Again, there being no general control of an industrial area, any man may establish anywhere a factory where highly inflammable material is pro-

duced, and in consequence his neighbours may have to pay largely increased fire insurance premiums although they themselves are carrying on no risky trade.

We often see houses on sites suitable for factories, and *vice versa*. We rarely seem to observe any co-ordination between factories themselves, but, for example, allow a factory having no need of canal accommodation to occupy a long length of canal frontage, excluding heavy industry for which such a service is essential.

Apart from the actual carrying on of industry, the factor of rates has a big economical bearing. In many of our industrial towns the rates are high, which means a heavy charge on industry. One of the principles of the garden city is that ultimately the values of the land should revert to the community and high rates thereby avoided. Also in many towns a considerable proportion of public expenditure goes in remedying past defects in housing and in maintaining the victims

of such defects, in street improvements and in health services that are required because the towns were not laid out so that each could function properly.

Bad living conditions result in ineffective citizens, and this means that many of the fit are debarred from becoming producers as they have to spend their lives looking after the unfit, who therefore not only levy a heavy charge on the community in costly institutions, provided either for their maintenance, correction, or cure, but also divert to their unproductive selves the productive energy of many of their fellow-citizens. As industry can only thrive when the standard of production is high and as taxation is a charge on industry, it follows that every step taken that will save the necessity of the unproductive use of energy or of public expenditure must be a direct help to industry. It would seem that an obvious step in the right direction is to establish garden city conditions.

Road traffic congestion is another factor of waste in many towns. Those who experience it appreciate at the time the annoyance and waste of time they suffer, but few realise the large waste of money involved in the aggregate. The business man held up in a taxi can watch the threepences ticking off, and knows also that his wasted time has a cash-value; the man and boy in charge of a van, or the clerk on a bus in the same traffic-block, have to be paid for all this wasted time, and the motor-engines still keep running and consuming petrol. It is not only in a definite block that all this waste occurs, but the constant slowing down of traffic due to inadequate streets makes the waste constant. If the value of the business men's time, of that of their employees whose wages they pay, and of the petrol wasted in this way in the course of a year, could be assessed, it would, in many towns, be found to be a serious permanent charge on industry.

Even where the homes of the working people are not uncomfortably mixed up with the factories, one often finds that the workers have a long journey to and from their daily work. Such a journey is often undertaken under very uncomfortable conditions, and this again, apart from the expense, means fatigue and waste of energy and consequently less efficient work.

The tendency shown in recent years for industrial undertakings to move out of the crowded centres, despite the cost and great inconvenience of the move itself, is evidence that the disadvantages I have referred to are real and are beginning to be appreciated; but there is little point in moving except to a place such as a garden city where all future development is mapped out, as otherwise the old difficulties will in course of time reappear.

All the disadvantages I have referred to can be obviated in the garden city, which is promoted by one body which not only

controls how the city is laid out, but actually owns all the sites and provides the principal services and amenities that are required.

From the beginning there will be a plan which will allocate to each activity of the community the site on which it can be carried out most efficiently and pleasantly. Works will be allocated to an area or areas where there is access to railway sidings, canals, and good roads; and the roads will be so designed as to serve the works and to deal particularly with the traffic they will be required to bear.

The frontage to main lines of railway is limited and sometimes not available for siding purposes. Also some works could not use to the full an entire siding, therefore in a garden city arrangements can be made, if required, for a communal siding serving a group of factories.

In choosing the area to be set aside for industry, consideration will also be given to sources of power, water supply, etc.

Many works will require large supplies of electricity, gas, or water, and it is economical to place such works near to the sources of supply or production, so that the large mains need not be of undue length and so that the load will not come on mains used also for domestic purposes, thereby interfering with the even continuity of domestic supply.

Consideration will be given to arranging factory areas to suit particular, or groups of, industries and to facilitate co-operation. For example, it is possible to house and supply power for a group of distinct small industries in one large building, such small industries as do not each need or cannot economically afford a separate factory of their own. Again, many industries are interdependent or use each other's products or by-products; therefore if a major industry becomes established in the town, adjoining sites in the factory area can be reserved for what may be termed satellite works.

Also the works will be placed where they can be carried on without interfering with the amenity of the residents.

As industry supplies the wherewithal to live, the choice of the best area for it is almost the first business of the town-planner, but he will always have in mind the amenity of the residents, and in selecting the sites for houses he will pick those positions where life can be most healthy and pleasant. These sites will be near enough to the works for communication to be easy, but far enough away to avoid noise, smell, or dirt. This can only be provided if, from the beginning, there is a plan of the whole town and provision is made for proper inter-communication between the parts. In addition to the house gardens, there will be every facility for recreation, and, as well as the playgrounds, the open country, where alone the town dweller can get right away from his daily cares, will be within easy reach of all.

So far I have had principally in mind the new garden city erected on a specially selected site. Such a project has many advantages, for it starts where it is possible to provide from the beginning for the best possible facilities for efficient industry and healthy and pleasant living.

It is well always to have this ideal model in mind, because only under the conditions provided by a new site can the best type of modern town be built; but that does not mean giving up our existing towns as a bad job; it encourages the study of them to see how their development and reconstruction may be economically and scientifically planned so that they may gradually approximate to the ideal, and the waste and discomfort of the present gradually remedied.

I suggested earlier that a man tended to lose his identity in a great city, yet the great city has many advantages. When we have built all our garden cities we shall still have the great cities. How, then, can

we incorporate in them the garden city ideals? If the present tendency of industries to move out of crowded centres continues, their removal will leave more elbow room in our great cities. This should give us opportunity in our plans of reconstruction to provide for marking out more definitely the parishes or other constituent parts of the city so that the boundaries of each may be clearly seen and each may have its visible centre of civic life, so that the inhabitants may feel members of a definite community.

Many cities may enlarge their borders, but in doing so it is of great importance that the identity of the absorbed units should be maintained so that their local councils may feel partners in a big concern rather than indistinguishable pawns of no importance. A great deal can be done in regard to this by proper planning.

The old city wall, while giving a sense of comfort to those within, was intended to appear forbidding to the outsider. To-day

we require a boundary to be marked in a way that shall give distinction without conveying any idea of antagonism. What, therefore, could be better than a belt of open land, or where the units are already largely conglomerated and a complete belt is impracticable, a small, well-kept open space on either side of the main roads where they cross the boundary, with perhaps stone pillars to remind us of city gates.

Many of our existing towns are very pleasant and offer opportunities for extension into veritable garden cities. They possess great advantages in having a history and traditions and a civic entity. Such towns wisely developed to a plan embodying the same general principles as those to which I have already referred, with perhaps such reconstruction as will make the new blend with the old without destroying the historic core, may be made ideal places for industry and healthy living.

A garden city is self-contained in a high degree, and this principle applied to existing towns means that each unit of civic life should have its clearly marked boundaries and be of a comprehensible size. It will then be possible to have large groups of authorities joining to form one unit of local government to plan and control inter-urban matters so that each part may be developed in the most efficient way. At the same time the general plan will provide for keeping the parts distinct, and the inhabitants of the local centres should be left freedom to plan, develop, and govern their own place with as much individuality as they desire to express, provided that their schemes fit into the general framework.

It may be felt that in this paper I have given too much attention to rather intangible things, which on the surface appear perhaps to be somewhat unpractical. My answer is that the difficult times we are passing through strongly impress on

one that if in the past a little more attention had been given to social psychology, the lives of communities might have been arranged so as to run a great deal more happily and smoothly than they have done; far less energy would have been required to be expended in continual readjustments, and much conflict involving huge cost in wasted effort and money might have been avoided.

The advocates of the garden city have seen that industry cannot function economically (that is, with full efficiency and without wasteful and harassing friction) unless those engaged in it are given the opportunity for healthy living both of body and mind. Their ideal therefore is to provide towns that are so planned that life and labour can be carried on under the most favourable conditions possible.

CHAPTER III

THE TOWN AND THE BEST SIZE FOR GOOD SOCIAL LIFE

. . . of a size that makes possible a full measure of social life, but not larger

By Raymond Unwin

The garden city should be a town of limited size. This is one of the principles associated with the term. The limit suggested in the heading to this chapter would allow the size of the city to be sufficient to render the enjoyment of a full measure of social life and culture possible to its citizens, but would not allow that it should grow much larger than is needed to secure this end. There is an implication in this that the disadvantages of town life as compared with country life

may be more than balanced by the advantages to be gained from the greater degree of economic organisation, social life, and human fellowship which can be enjoyed in the town; but that so soon as a town reaches the size which will give full opportunity for the realisation of such social life, any further increase in size will be likely to aggravate the disadvantages without increasing to a corresponding extent the opportunities for fuller life. Consequently it seems better to add to the number of towns rather than allow them to grow beyond this limit. This may be said generally to be the garden city policy, and it raises for consideration two questions, namely, what is the desirable size for a town, and how far is the limitation of towns to that desirable size practicable? It must be recognised that there can be no one exact size which would be the most desirable in all circumstances.

In considering the size of a city from the point of view of the best social or

cultural unit, it would be neither possible nor desirable to ignore the underlying economic conditions; these vary materially in their effect both on the actual size for the best economic unit and on the class of population, which is an important consideration in regard to the best social unit. There are, for example, industrial concerns which it has proved an economic advantage to develop on so large a scale that they employ sufficient people to represent the normal working population of a city containing from 80,000 to 100,000 inhabitants. It is undesirable that a city should consist entirely of a population interested in and dependent upon one industrial concern. Economically it is very dangerous, and socially it must have a tendency to a narrow and one-sided outlook on the part of the citizens. The social disadvantage has been particularly apparent in some large colliery towns where there is comparatively little variety in the character of employment afforded

by the single industry, where it is particularly difficult to develop any social life and culture having a wider basis of interest than the pits and their working. If decided economic advantage is permanently to be associated with industrial undertakings on the scale which requires from 10,000 to 20,000 workers, we must expect that there will be numerous cases in which a limit of population that might be most advantageous for a city depending on mixed industries would be altogether too small to give the full social and cultural advantages aimed at. The difficulty of the very large industry might, no doubt, be met to some extent by the grouping of cities of smaller size, so that several of them might be sufficiently near to serve one of these large industrial undertakings, in addition to some mixed industries of their own, and in this way the dilution of the population dependent on one industry could be secured without requiring a city unit of abnormal size.

There are conditions varying considerably in different places which may affect the best unit of size for a town from the economic point of view. There is usually some unit for a city population for which the various necessary services, such as transport or water-supply, can be provided at the least cost per head of population; and if the town grows much beyond the size of that unit the cost may increase. For instance, to sink wells to secure a water-supply for each house would be very costly, and it would usually be much cheaper per head to provide an adequate water-supply for a population of 50,000 or 100,000 people; but at some such figure the water available in the immediate neighbourhood may be exhausted and the supplies necessary for a further increase of population may only be obtainable at a greatly increased cost. It is found that in cities like New York to increase the supply of water to meet its growing population may cost four or five times as much per

head as formerly was the case. Not only is this true, but the needs of the population in some cases show a high ratio of relative increase as compared with the numbers. This applies notably to passenger traffic facilities; the total number of journeys, or the average number of journeys per head of population, seem to increase in large cities faster than the square of the increase of population. If, in addition to this, the cost per head of providing traffic facilities increases, as it undoubtedly does with the increase in the size of the city, we have a considerable total increase in the cost of assisting citizens to move about arising from an increase of population beyond the most economical unit. Mr John Lothrop has recently stated that while New York was increasing in population about 30 per cent., the cost of installing traffic facilities increased about 400 per cent. There are other facilities—the telephone is perhaps the most obvious—in which the increased

population necessarily so complicates a system that the cost per head tends to increase with the increased population, although it is true that the opportunities given to each subscriber are enormously greater. These may, however, be opportunities which the majority of subscribers do not utilise. The number of friends with whom any subscriber ordinarily communicates is probably not much greater in London than it would be in a town of 50,000 inhabitants, but as the head of the American Telephone and Telegraph recently is reported to have said:

> We deliver to each telephone patron here in New York City hundreds of thousands of telephone connections, whereas in a small city we would deliver only a few thousands of connections. That is one reason why we must have more per telephone here in New York than in a city of moderate size.

These increasing costs tend to make the great city uneconomical as a unit of population. At the same time it must be recognised that the increased size of the unit

of population very greatly enhances the opportunities of gain to the fortunate among large sections of the trading and professional citizens, and this is no doubt the reason why, in spite of much economic difficulty, our great cities continue to grow. It is, however, by no means clear that the increase of economic or financial opportunity to these individuals applies to the population generally; and, to some extent at least, the general population is probably bearing the cost of the increase of size beyond the most economic unit, while the advantages of that increase are going mainly to a limited number of successful traders. The opportunities for gain for all the population may be increased; at the same time it may be equally true that the life of the majority is rendered harder, and that only the minority really enjoy the advantages. If this be the case, it would seem that life in the overgrown towns has become something of a gamble, and results in sacrificing

the welfare of the majority of citizens to increase the winnings of those who are fortunate in what may perhaps be called the city sweepstake. It is very important that we recognise clearly the distinction between economic advantages which are shared by the whole population, due to their living and working together, and opportunities for greater individual gain which are afforded to a limited number as the result of bringing an ever-increasing population within reach of their activities. The former is a permanent force conferring a general advantage and giving a more generous economic basis upon which life and culture may flourish. The second has no such general economic value. It merely introduces into the economic basis a larger element of uncertainty and a more unequal distribution of advantages. The subject of the economic efficiency of towns of different size has not received such study as would enable any definite figures to be fixed for the average size that would

give to every citizen a supply of the necessary services and conveniences at the least cost in labour per head of population. It is most desirable that this subject should receive more careful investigation, and that some realisation by the whole of the citizens of what it may cost them per head if they allow their cities to go on growing indefinitely should be made possible.

Economic efficiency is a factor of importance because it must be the basis of social life, but it cannot be considered alone. There are many advantages in city life, and also many disadvantages —social, educational, and hygienic—the securing or avoiding of which may be well worth some sacrifice on the economic plane, should that be called for. It is desirable, therefore, to consider the question of size independently from the point of view of social life and culture. We have already seen that there can be no one ideal limit of number to afford the best

social opportunities, because this number will vary with the variety of employment available and other factors bearing upon the character and average level of education of the population. No exact figure either can represent the most economical unit, the one, that is, which will give the greatest number of conveniences and opportunities to the whole population with the least expenditure of time and labour. An examination of both the problems will show a certain range of limits rather than any particular limit. One may expect to find that, both economically and socially, increasing population will clearly show improved efficiency and opportunities up to a certain figure, as, *e.g.*, 50,000; that according to circumstances the improvement may continue in one or both up to about 75,000; and that thereafter there might be a slight diminution in efficiency varying according to circumstances which would become marked at about 150,000 inhabitants; and that for given circum-

stances the most satisfactory and efficient size might lie somewhere between 50,000 and 100,000 population. In one case it might easily happen that the full cultural opportunities would be reached at 50,000, whereas the full economic efficiency was only reached at 100,000; and it should be recognised that the economic efficiency is so important as a basis of social and cultural opportunities that within limits which did not appreciably injure the social efficiency of the community it would be difficult, and perhaps from the practical point of view impossible, to limit the size of a city to a less figure than would represent full economic efficiency. On the other hand, if it were found that the most economical point indicated a smaller city than that which would give full cultural opportunities, it might well be worth while for the citizens to make some sacrifice to secure the greater opportunities. From cities of 50,000 to cities which are numbered in millions there is such an

enormous range of size that it is difficult to find a limiting figure; but so great a student of men and life as Lord Bryce, than whom few men could be quoted who would set a higher value on the opportunities of culture, has suggested that the desirable size for a city would be from 50,000 to 70,000 people, and that it is doubtful whether cultural advantages of any kind will result from cities over 100,000 in population which could compensate for the sacrifices which they must entail.

It is worth while to examine a few of the conditions of life, taking the smallest number mentioned. To begin with education; in a city with a population of 50,000 there would be approximately 10,000 within the ages devoted to education. This would involve a staff of 300 to 400 teachers at least. While such a population might not itself afford the specialised opportunities for study and instruction on a university level, it is clear that there would be a sufficient number of scholars

and teachers to allow very efficient organisation of education and provide for an ample variety of accomplishment. In this country boroughs having a population of 10,000 and urban districts having a population of 20,000 are recognised as Educational Authorities both for elementary and secondary purposes; and there can be no doubt that any ordinary town of a mixed population numbering from 50,000 to 75,000, which would include places like Chester, Exeter, Lincoln, York, Dudley, or Burton-on-Trent, could provide educational facilities which, as regards elementary and secondary education certainly, would be equal to anything which larger cities could offer: such towns could also provide a considerable amount of specialised education both technical and artistic. In the realms of higher university education, or the more complicated and advanced branches of technical training, larger centres of population might have some advantage, one, however,

which could equally be secured by groups of towns of the size mentioned. Indeed, many of the most advanced teaching centres are not found in large towns, but depend for their support on students drawn from many towns, or even from the whole area of the country.

Looked at from another point of view, it will be found that even in a town having a population as small as 50,000, the majority of the children will attend schools situated in the particular part of the town in which they live, and will only in their later years begin to attend classes which depend on the whole of the town. As the size of a town grows this decentralisation extends to all the educational facilities, and, to a large extent also, to all recreational and social institutions, so that it is only to a very limited extent that the majority of the people in a very large town secure any cultural or social advantage due to its actual size.

A limitation of the scale of certain

elaborate entertainments would be likely to be imposed by a general limitation of the size of towns. The very expensive productions of plays, operas, and other performances which can only be paid for by a very large number of attendances, continued through long runs, would not be practicable in towns of 50,000 to 100,000 population. But it is by no means clear that this would involve any appreciable loss to genuine culture. In fact, there are many who consider that the conditions imposed by productions on such an extravagant scale have proved very detrimental to dramatic art, and efforts have been made in recent years to develop smaller theatres depending on local groups. Already in some Canadian cities the theatres are removing from the centre to the suburbs, and we have in our own country such examples as the Everyman Theatre at Hampstead, which is a theatre of high cultural value.

The development of music is notoriously

independent of the large aggregations of population. Many towns of quite small size have become famous as the homes of musical movements, periodical festivals, schools of instruction, or orchestras reaching a very high degree of executive skill. The beautiful building known as the Mozarteum in Salzburg, connected with which is a great teaching school and an extensive, highly skilled orchestra, may be quoted as an example; while the musical festivals of Hereford and the development of music and pageantry at Glastonbury may be given as further examples. Both music, the pageant, folk-dancing, and many other forms of entertainment are characterised by affording very large opportunities for the public to share in the preparation of the performances, and they naturally spring up in the smaller towns or in definitely localised parts of larger cities, where there is sufficient general intercourse among a limited and varied population to bring about such efforts at

self-entertainment and expression. Such forms of spontaneous entertainment have an educational and cultural value which probably far outweighs the loss of some opportunities which a large centre of population might afford for viewing highly specialised performances.

Each element of social life could be examined in like manner, but enough has been said to suggest that the value of the overgrown town because of its greater opportunities for witnessing the greatest skill and talent has been overrated, and insufficient allowance has been made for the necessary opposite result, namely, that the overgrown town tends to restrict the opportunities of development to a few fortunate people, whereas a number of smaller towns would give a more limited opportunity to a much larger number to develop their full capacities.

As regards social life and culture, it would appear that a group of towns of from 50,000 to 100,000 population, having

good means of communication from one to the other, and recognising one capital city which would be the centre of those highly specialised activities which must draw from a large population, will afford nearly all the advantages which have hitherto been associated with the very large town. At the same time the limitation of the size of each of these units, and their proper arrangement so that every citizen would be within walking distance of open country, would give those opportunities of quiet and peaceful contemplation which are so sadly wanting to the majority of dwellers in our great towns, who must live in the midst of noise, bustle, and confusion, almost unceasing, during the greater part of their lives. Though it is not easy to define, the influence of constant contact with open country is very great. Pleasure and interest of the most wholesome kind come from watching the growing of crops, the rearing of animals, and the ever-varying succession of the

seasons, each with its special beauty; and there is little doubt that the more definite advantages which may be gained by town life should be sought with the very minimum of sacrifice of this intimate contact with nature.

There is one point which should not be overlooked in regard to size. The higher the general level of education and intelligence, the smaller need be the city unit which will give the greatest cultural and social opportunities. If the whole population have sufficient education and culture to appreciate music, the drama, and the higher arts of life generally, a relatively small number will provide the highly skilled few who can be leaders and instructors for their fellows in the different arts and sciences, and a small population only will be required to support the necessary institutions for giving expression to these arts.

With regard to the second point of the possibility of limiting the growth of cities,

it should be recognised that this is no new proposal. European cities in the Middle Ages, and even up to comparatively recent times, were definitely limited in size by their fortifications, and frequently no building was permitted within a zone of considerable width outside those fortifications. The desire for safety proved a sufficiently strong inducement to secure this limitation. In the case of more modern cities also, examples of definite limitation in certain directions by the preservation of large open spaces are common, and instances of more definite limitation—as in the belt which was left around the original city of Adelaide—are not wanting. If the population sufficiently wish for the limitation, there is not much doubt that it can be secured; but a mere negative policy of fixing a limit would be likely by itself to fail; definite and attractive provision should be made at the same time for the increasing population, otherwise the pressure of public opinion would be

likely soon to break through the bounds which had been laid down. Therefore to provide for attractive satellite cities in sufficient number and conveniently placed must be part of the policy of limitation, and indeed will probably have to precede the fixing of any limit in the case of existing towns. The limitation would naturally take the form of the reservation of a certain area of land around the city to be kept free from buildings. And in the first instance, in connection with existing towns the belt reserved may tend to be of inadequate width, and suburbs instead of satellite cities may grow up nearer to the parent city than is desirable. It cannot be expected that so great a change in the policy of city development as would be involved by the recognition that the ideal size of a city lies between 50,000 and 100,000, and that, as Lord Bryce expresses it, " the great thing is to arrest the growth of cities beyond 200,000," at which size we must regard them as overgrown, can

be brought about suddenly. The important matter is to secure a general recognition of what is desirable and to work towards it as rapidly as possible.

CHAPTER IV

THE TOWN AND AGRICULTURE

. . . surrounded by a permanent belt of rural land

By Sir Theodore G. Chambers, K.B.E.

The ideal cities of the future will not be, what modern industrial cities have become, purely urban regions devoted solely to industry, administration, and residence, existing like islands of town life in an ocean of open country, with the interests and pursuits of which their citizens have little or no conscious interest. One of the purposes of the garden city movement is to break down the artificial division of the population into detached groups of country folk and townspeople. The industrial penetration of the rural districts,

which the policy of garden cities implies, will, if the cities are properly planned, be of material benefit to both agriculture and industry in that the town worker will be brought in touch with rural pursuits, and the rural worker will gain the advantages of the higher standard of life and the superior social and economic conveniences of the town. In the environment of the garden city the outlook and sympathies of the citizen will cover wider ground; urban and rural interests will no longer be separate. The garden city will create a new type of human aggregate which will be neither all town nor all country, but which will combine the better features of both.

One of the lessons of the Great War was the need of increasing the supply of home-grown food. How nearly Great Britain came to grief between 1914 and 1918 owing to its not being self-supporting few seem to be aware. The menace of the German submarine campaign caused those in authority some of their most

anxious hours during the war. If, in the future, we are to increase materially our home-grown food, it is necessary to attract and to keep upon the land a very much larger proportion of our population than we have there to-day, and in many ways our systems of food production must be modified.

The danger to a State of the depopulation of its rural districts together with an inordinate growth of its cities has been recognised by many before our time. It has been a subject of concern to statesmen throughout history. Six times in the sixteenth and seventeenth centuries efforts were made to check the growth of Paris. During the reigns of the Tudors and Stuarts the emigration from the rural districts of England and the rapid growth of the towns were sources of anxiety to those who saw ahead. In Germany also serious attempts have been made to retain labour on the land by preventing the freedom of movement of the popula-

tion; but all legislative methods proved futile. Direct legislation is not, however, likely to be advocated in these days to remedy the depopulation of the country-side and the congestion of the cities. We must look rather for a policy which will promote conditions which will automatically and naturally check the forces which at present repel people from the country and attract them to the cities, and set up reverse forces which will attract industry to settle and develop in rural surroundings under improved conditions, and at the same time not only keep the present rural workers on the land, but add to their numbers.

It is interesting to note, from a study of the planning of ancient and medieval cities and towns, that in times past the proper relationship of agricultural land to the city was often carefully considered and provided for. Sites for towns were chosen and their plans prepared with due regard to this relationship. The original

nucleus of the city was oftentimes the market-place which served the economic needs of the surrounding agricultural district. Most of the older county towns in England were the centres which served the inhabitants of certain areas for the interchange of their produce, for the performance of their commercial, social, and administrative functions—places where people met on certain occasions, coming in from the surrounding country to buy or sell, to discuss or to administer their general affairs. The great cities of to-day are, with few exceptions, the growth of the industrial age, the result of concentration upon manufacturing processes within brick walls. They are modern atrocities. The fatal divorce between agricultural and urban life which has resulted, and the consequent demoralisation of both rural and urban communities, is a nineteenth century development in the main, and it has been a divorce with highly important and injurious political influences. In the year

1851 the population of England and Wales was about equally divided between town and country. An aggregate population of about 9,000,000 people lived in some 580 towns. About the same number lived in the country. Even at this date the economic interests of the townspeople and the rural dwellers were often incompatible, but the equal distribution of the population did not give a preponderance of power to the one or the other. With the growth of the cities and the gradual increase of the proportion of townsmen to country folk the power of the industrial population was not felt immediately. It was largely counterbalanced by the political power and prestige of the landed classes, which enabled rural economic interests to be upheld against the growing weight of the commercial and industrial economic interests. But by the end of the century the growth of the towns made the State predominantly urban, and with the diminution of the power of the landed

classes, due to various causes, there is little doubt that agricultural interests suffered neglect.

At the date of the last census—1921—we find 79·3 per cent. of the population of England and Wales living in urban districts, while only 20·7 per cent. were living in rural districts; and while we have to note that these terms urban and rural districts are to a large extent merely empirical divisions of area which do not always coincide with fact, nevertheless it is certain that this separation of the inhabitants of a State into two camps, with different and often opposed economic conceptions, must be a grave danger. This will be especially the case when the predominant political power passes into the hands of the industrial population, many of whom by the circumstances of their lives cannot know or appreciate how vital is the maintenance of agriculture and food production to the well-being of the State.

The segregation of the people into these two groups is also permanently injurious to the race, in that the cities naturally attract the most enterprising and the most gifted individuals from the rural districts through the superior advantages they offer to those with intelligence and driving power. In the towns these individuals tend to deteriorate. To quote the report of the "Verney" Committee of 1916:

The stability and physical strength of a nation depend largely on those classes who have either been born or brought up in the country or have had the advantage of country life. It is certain that the physique of those portions of our nation who live in crowded streets rapidly deteriorates, and would deteriorate still further if they were not to some extent reinforced by men from the country districts. The recruiting returns show a much larger proportion of men rejected for physical reasons in the large towns than in the country districts. If, therefore, we desire a strong and healthy race, we must encourage as large a proportion of our people as possible to live on the land. We fear that the growing tendency to move to large centres of population,

a tendency which is not confined to this country, is likely to be more and more stimulated by the development of town attractions and facilities of locomotion, and can only be counteracted by a revival of agriculture, together with an improvement in the existing conditions of rural life.

The present-day city system is thus seen to have a definitely dysgenic influence in that it acts continuously as an agency first for the selection and then for the destruction of the fittest of the race.

Before leaving the agricultural aspect of the rural belt a word or two is necessary as to the treatment of the land. Generally speaking it may be said that that kind of agriculture should be carried on which will best help the city itself. If the soil is suitable a considerable area will be required to provide the milk supply. Fruit and vegetables will have a ready market and should be profitable. The near presence of a community will give intensive cultivation its opportunity. Low cost of transport to the consumer acts as a preferential tariff against imported

produce. Poultry, ducks, pigs, the rearing and keeping of which demands considerable labour, will provide a healthy and part-time occupation for a number of the inhabitants of the city if they take sufficient trouble, and it will be profitable also if they do not pay too meticulous attention to the time they spend. But whatever be the type of food production which will suit the city best, the actual user of the land will be ultimately determined largely by the character of the soil and its suitability for one purpose or another.

We must now turn to another, and in some respects a not less important, function of the rural belt of the garden city. The belt is necessary to protect the city from encroachments and from the injurious effect of bad planning or overcrowding of houses upon the land in its immediate vicinity. One of the essentials of the garden city is the ownership of the freehold of the entire area by those who have the control of its destiny. In this ownership

of the entire area lies the ability to plan the city properly and also the elements of financial success. In planning the city there must be reserved surrounding the built-up portion a protective belt owned by the city but not built upon. This belt will serve the agricultural needs of the city and fulfil the requirements we have discussed in the first part of this chapter. The fact that the belt is not built upon will, if the belt is judiciously selected and if it is of a sufficient width, prevent the land beyond it, which is not owned by the city authorities, from being built upon. Thus the existence of a rural belt round the city in the ownership of the city maintains a very much wider belt beyond, which will extend until the next urban area is reached. From the economic and social standpoints the agricultural belt will thus be practically all that surrounding country which comes within the sphere of influence of the city or in any way enters into relationship with it. It

is this protective function of the city's belt which will mainly determine its precise area, its position and width. It must be widest where protection is most needed. It may be narrower or even omitted where there exists some natural barrier to development, such as river or marsh, mountain or moor. Along main roads or canals or avenues of approach a considerable frontage should be reserved—that is to say, the belt must be wide, since development will often run along narrow channels where transport and ease of access may encourage demand. Generally speaking the width of the belt at any given point must be such as will prevent a demand arising for the land beyond the area owned by the city, which, if satisfied, would break the unity of the city. If the best conditions are to be maintained this unity must be absolute.

The actual amount of land to be retained by the city undeveloped by building will depend upon the size and growth of the

city, and it may be affected to some extent by financial considerations. It must not be an amount so excessive in its relationship to the area which will be developed as to throw an undue burden on the resources of the city. The revenue from the rural lands will probably be insufficient to meet the proportionate interest upon its capital value at the rate which the financing of the enterprise will demand. It will therefore be inadvisable for the belt to be any larger than is actually necessary for the preservation of the town and the maintenance of the rural character of the hinterland. Again, the rural belt need not be fixed irrevocably and finally. There must be a belt *permanently*, but it need not be strictly a *permanent* belt. As the city grows, and provided the maximum limit of size has not been exceeded, the original belt may be built upon if the city has secured the freehold of land further out which can be substituted for the original belt in order to maintain its essential char-

acter. It is in this maintenance of a belt permanently to protect the city that the greatest skill and watchfulness must be exercised by the city authorities.

It is impossible to-day to forecast what will be the population of the ideal city in the years to come. This will depend upon what unit of population in the future can maintain the most efficient civic machinery and the most lively civic spirit. Nevertheless, while reserving the right to extend the area of particular garden cities in the future to meet changed conditions, it will be necessary for the city architect to know the boundaries of the city, and yet while working within these boundaries he will maintain a certain elasticity of mind and prepare as far as he can, and where it is possible, for future outward growth. It has to be borne in mind that the further the city spreads from its centre the greater will be the area available for development with each equal extension of the radius.

We have thus seen that the rural belt is one of the most significant and important characteristics of the garden city. That it is indeed so essential to the conception of the garden city as to be regarded as axiomatic, for without it the garden city of to-morrow would not be radically different in its nature economically and socially from the cities of yesterday.

CHAPTER V

THE TOWN AND LAND

. . . the whole of the land being in public ownership or held in trust for the community

By R. L. Reiss

All those who have been associated with the development of garden cities, or with propaganda in connection with the idea, have agreed that the freehold of the whole of the land must be vested either in a public body or in the promoters of the scheme, who will treat their ownership as being to some extent in the nature of a trust for the benefit of the community. Where the promoters are a company this is achieved by the limitation of the dividend payable on shares and the utilisation of

surplus profits for the benefit of the town. Only thus can that full control over development be secured which will ensure the carrying out of the scheme and the safeguarding of the interests of the citizens.

To understand the reasons for this, it will be necessary to discuss briefly the general question of land ownership and development.

The term " land " is used both in practice and in Acts of Parliament in a number of different senses. Thus it is often used to include not merely the actual ground but all the buildings upon it, and in certain instances even machinery in a factory. For our present purpose, however, the term " land " is applied to the actual ground only.

Again, the phrase " land value " or " value of land " is also used with a number of different meanings. For our present purpose its meaning is the value of the land apart from any buildings on it. Generally speaking it is the market value,

or the price that may be agreed as between a willing buyer and a willing seller. There are various elements in the making up of this value. First, there is the value as a site for building purposes or for a recreation ground or for any other purpose. This may depend upon its location, upon the beauty of the surrounding country, upon its proximity to a railway station and to shops, upon the size of the town and the amount of development taking place there, and upon the services which are provided, *e.g.* water, drainage, roads. This "site value" may also depend upon the amount of other land in the market. Secondly, there is the actual agricultural value of the land, which depends upon the nature and quality of the soil and its location in relation to markets and transport. In addition there may be a sporting value, and in many cases a "sentimental" value or a value due to a supposed social position attaching to its ownership.

For a long time the social and economic

effects of land ownership and the creation of land values have been the subject of acute controversy. There is a school which believes that national interests can only be served effectively by the ownership of all the land in the country being vested in the State. Others, while not going so far as this, nevertheless believe that a considerable increase in the municipal ownership of land is desirable. Again, there are those who believe that land values should be subject to special taxation, basing their case upon the argument that land increases in value through the activities of the public generally, and of local authorities, while the economic advantage accrues to the owner without a corresponding exertion or expenditure of capital on his part.

For our present purpose it is unnecessary to balance the arguments for and against such proposals or to lay down any definite opinion upon the broad questions involved. Whatever opinions may be held

upon such questions, there are certain propositions upon which there is general agreement, which, together with the results obtaining from them, are of vital importance in connection with the development of towns, and particularly in the creation of new garden cities or the extension of villages and small towns in such a way as to make them into garden cities.

In the first place, land is a quasi-monopoly. There is a limited quantity of land in any given country, town, or place. Moreover, within each town there is a limited quantity of land suitable for any given purpose. The land monopoly differs from other monopolies such as arise in connection with the licensed trade, copyrights and patents, which are not monopolies because of their inherent characteristics, but become such through the action of the legislature.

In the second place, land is immobile, and the use to which it is put is for the most part a permanent use and vitally

affects other land and other people than the owners.

As a result of the monopoly and immobility of land, land values may increase and decrease through circumstances over which the owner often has no control. It is true that the value of land may be increased by the judicious expenditure of capital on the part of the owner, but it is also true that it may increase or decrease for a number of different reasons. As a matter of history, the total value of land has steadily increased by a greater amount than is represented by the amount of capital expended upon it. At the same time, individual bits of land have decreased in value. Thus the value of land owned by A may be increased or diminished by the use to which his neighbour B puts his land. If B erects a well-designed house of substantial size, with a good garden to it, A's land may very likely be increased in value. If, on the other hand, B erects a factory upon his land or sells it for

the erection of an elementary school, A's land, if a choice residential site, may be diminished in value. Again, the value of the land may be increased by the action of a local authority in carrying out a drainage scheme, by a railway company opening a new station, by the discovery of coal or the opening of a large factory in the neighbourhood. On the other hand, its value may be diminished by the local authority locating their sewage farm or isolation hospital in the immediate neighbourhood. It may also be increased or diminished in value because the town in which the land is situated is increasing in prosperity or is decaying. For example, the value of the land in Salisbury was increased by the development of that city during the Middle Ages, while the resulting decay of Old Sarum and of Wilton probably diminished the land values in those two places. Land may also acquire a special value owing to its "special adaptability for a given purpose." It

may decrease in value owing to "severance," *e.g.* by a farm or a building estate being cut up. On the other hand, two or more bits of land may be increased in value as a whole through being joined together, *e.g.* the land purchased by the London County Council in connection with the Kingsway improvements, which acquired an additional value over and above that attributable to the actual capital expenditure on the making of new roads.

Another effect of the peculiar qualities of land, and particularly urban land, is that the use to which it is put is, generally speaking, of a comparatively permanent nature. If the land is badly developed it often can only be replanned at enormous cost (*e.g.* slum areas such as the Boundary street area in Bethnal Green). Now, as most of the land of the country is and has been in private ownership, and as private individuals have, in the main, considered their own interests and not those of the

community, land has been developed in an unsatisfactory way from the public point of view. Our towns have grown up gradually without plan, each individual owner utilising his land in such a way as to secure to him the greatest immediate advantage.

Broadly speaking, towns may be divided into three categories :

(*a*) Those in which the freehold is divided amongst a large number of individuals, the owners of the houses, shops, and factories also being owners of the freehold of the site upon which their building stands. Typical instances of such "Freehold" towns are Stoke-on-Trent, Bradford, Reading, and Cambridge.

(*b*) Those in which the tenure is mainly leasehold, the number of freeholders being relatively small, and most of the house owners holding their land on lease and paying a ground rent. In these cases the actual freehold of the land is owned by a few people, in some instances a considerable proportion of the freehold being owned by one owner. Typical instances of such "Leasehold" towns are Cardiff, Eastbourne, Sheffield, Merthyr, Oxford, Burnley, and Warrington.

(*c*) Lastly, there are a large number of towns, including the largest of all, which are partly freehold

and partly leasehold. There are a number of small freeholders and also a number of large estates where the sites have been let on lease. Examples of such towns are London, Birmingham, Liverpool, and Swansea.

Generally speaking, planning is worst in places where the control of the land has been split up among a number of different owners. Each individual treated his own land as an opportunity for making the most out of it. There has been no kind of co-operation and little consideration for the public interests. Public improvements of various kinds have had to be carried out at considerable expense, whether such improvement has been the widening of a street or the clearing of a slum area. Even in leasehold towns, where the freehold of the land is mainly owned by quite a few people, or possibly a single individual, this has to a large extent been the case. In some districts of such towns, however, where individual owners have owned a considerable portion of land, they have

attempted to plan the development of their land with some idea of public advantage. But this has generally been done because the owner has had the imagination to see that such planning was also to his own interest. Examples of this may be seen in some of the big London estates, where portions of the lands owned by the Dukes of Bedford, Devonshire, and Westminster, Lords Portman, Northampton, and others, have in the past been laid out in squares and crescents.

The larger the area owned by any particular owner in a developing town, the more chance he has of securing good development. Where, as at Eastbourne, practically all the land is owned by one person, and that person has retained the freehold and granted leaseholds, the opportunity for good planning has been in large measure taken advantage of. In certain of the towns in the West Riding of Yorkshire, however, where similar conditions have prevailed, the development has, never-

theless, not been any better than in freehold towns, the estates being developed to secure immediate results only and without taking a long view.

It has long been recognised by people of all parties that the ownership of land should be subjected to certain restrictions. Thus, the law provides that if a man use his land in such a way as to constitute a nuisance to his neighbour, the latter has a right of action against him; that a man can only develop his land for building purposes provided he complies with the building regulations and bye-laws with regard to roads and drains, designed to secure that buildings should have reasonable access of air and sunshine and should be properly drained. Moreover, the power of local authorities and, under certain circumstances, statutory companies such as railway companies, to purchase land for public purposes, compulsorily if necessary, has long been recognised in this country as elsewhere.

These provisions, however, did not meet the requirements of the case. With the increasing recognition of the necessity for town planning, the Town Planning Acts of 1909 and 1919 were passed. These Acts recognised the public interest in the development of land. Municipalities were empowered to prepare town-planning schemes for the unbuilt portion of their area, and in certain cases contiguous areas, controlling the use to which each individual owner might put his land. Such schemes may limit certain land to industrial purposes, others to residential. They may provide for restrictions and regulations with regard to the construction of roads, the number of houses to the acre, and various kindred matters. These provisions may all be achieved without a local authority purchasing any of the land itself.

Whatever the value, however, of the Town Planning Acts as applied to the development of the outskirts of existing towns, they do not fully meet the require-

ments of the case where a garden city is being projected, or where it is the intention to extend an existing village or small town in such a way as to make it a garden city. The ordinary Rural District Council, which is the responsible local authority in such cases, can hardly be expected to have the imagination to prepare a complete town-planning scheme for the whole area where a new town is to be built. Moreover, the exercise of the Town Planning Acts does not deal satisfactorily with the increases and changes in land values. It is for this reason that those connected with the garden city movement, which has as its object the founding of new towns and the extension of small existing towns into garden cities, are agreed that "the whole of the land must be in public ownership or held in trust for the community."

In the first place, there is great value in the whole of the land being in one ownership, because

(*a*) It is then possible to prepare a comprehensive plan for the whole area.

(*b*) In considering that plan, any reduction in the potential land value which may be brought about by restricting a particular area to agricultural purposes only may be counterbalanced by the increases in value due to having restricted factory or residential areas.

(*c*) The limitations in value due to land being used for open spaces or recreation purposes only may be balanced by the increases in value of the sites facing such land.

In a word, the creation of land values will be in one hand. But it is not sufficient that the land should be in one ownership. The monopoly thus created must be used to public advantage. The predominating consideration in the preparation and carrying out of a town plan must be the interests of the town rather than the profit of individuals. Moreover, the excess of land values created over and above the amount required to cover the interest upon the capital cost of development must be used for the benefit of the town as a whole. These results can only be achieved by the

whole of the fee-simple of the land not merely being in one ownership but in the ownership of some public body, whether Local Authority or the State, or else held by some person or body of persons in trust for the community.

If this policy be adopted, then the following results can be achieved :

(1) The main object of those preparing the town plan will be to secure the best possible town from the point of view of the citizens residing in it.

(2) The same motive will inspire those responsible for the carrying out of the town plan, an operation which will, of necessity, take a considerable period of time and will require continuity of purpose. However public-spirited a private owner may be, he cannot guarantee a like spirit on the part of his heirs.

(3) In particular, the permanent maintenance of a belt of rural land can be secured.

(4) Changes in land values created by the community will be enjoyed by the community.

(5) Greater public spirit in civic life and a larger measure of co-operation for the public good by the general body of citizens will result from the sense of the corporate ownership of land and the con-

sequent knowledge that improvements in value will go to public ends.

(6) The grievances of the ordinary leaseholder on the renewal of the lease will be obviated. Instead of the ground landlord for his own profit exacting the utmost farthing on such renewal, the fact that any additional rent does not swell private coffers will on the one hand be a restriction against extortion and on the other ensure that the increase in value finds its way back to the general community.

(7) The creation of vested interests is minimised, and thus one of the greatest obstacles to improvement is removed and greater speed and precision in development is secured.

(8) Generally the corporate ownership of the land gives stability to the city.

It will be seen that the garden city policy secures the main objects of those who advocate the taxation of land values and the nationalisation of the land, while at the same time it meets the objections of those who object to both proposals. The fact that people holding widely divergent views upon the land question generally have agreed upon this policy with regard

to the creation of garden cities is the strongest evidence of its soundness.

It remains to discuss briefly the relative merits of the land being in public ownership or being held by some body in trust for the community. Those who object to the nationalisation or the municipalisation of land assert that if public bodies engage in the business of land development they would be unlikely to exercise sufficient initiative or to carry out the business on sound lines. A common ground can be secured between the advocates of municipal ownership and its opponents if, during the initial stages whilst the town is being developed, the land is owned by a public company whose constitution limits the amount of interest or dividend that can be paid upon its capital, the remaining profits going to the community. When the town is developed the ownership can be taken over by the responsible Local Authority if such a course is deemed desirable. In other words, the best policy is

probably for the land in the initial stages to be held in trust for the community and in the final stages to be owned by the community. It is unnecessary, however, to dogmatise upon this matter.

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