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II. A NEW METHOD: THE COMMUNITY UNIT

Economical Use versus Speculative Profit

The standards are established. The next step, therefore, is how to set about embodying them adequately in houses, with the utmost possible speed and economy.

Leadership, fortunately, backed up by a fairly large and well-educated body of public opinion, happened to be for the most part in the hands of men who believed that:

1. The primary problem is to provide as many good new houses at as low rentals as possible, and with a minimum of long-time real cost to the government.

2. This problem has nothing whatsoever to do with 'reviving the real-estate industry' as it had formerly been practiced. On the contrary, as the old practices are largely responsible for the bad condition of the cities and the existence of a 'housing problem' of major proportions, the old methods must be considered outmoded, and new ones set up in their place.

3. The new dwellings, in order to maintain the new standards in *time*, must be permanently removed from the speculative market.

4. The new standard and new method must be set up, not merely on an emergency basis, but in such a workable, efficient form that it will tend to replace old standards and methods entirely, even in fields unaided by the government. That is, a *new standard of demand* must be established.

5. It should be entirely possible to build good new houses that are, actually and in the long run, cheaper than the bad and wasteful old ones.

With such a point of view, and with the body of pre-war experiment for example, there could be only one answer in so far

as the vast majority of post-war dwellings was concerned. And that was that the complete neighborhood, and not the individual house or apartment-building, must be the unit of planning, of finance, of construction, and of administration.

Quite outside of any social considerations, the economic basis alone would have justified such a decision. There are five main departments in housing economy, and every one of them stands to be materially benefited by the use of the complete neighborhood unit.

The cost of raw *land*, when backed up by an efficient policy of municipal purchase, expropriation, or control of land for housing use, would obviously be lowered through not undergoing the expensive process of subdivision into small parcels and the speculative sale and resale of 'lots.' Moreover, by continued application of the community-unit principle, it should be possible to prevent future speculative excesses in raw land and also to reduce the inflated market-prices caused by past speculation.

The cost of *land-development* is also lowered by comprehensive planning. Streets and utilities designed only for specific permanent purposes and for full immediate use, would clearly cut out most of the extravagant waste hitherto largely borne by municipal governments. The economies of large-scale operation go into lower rents and not, as in the past, into promoting speculation.

The next item in housing economy is the cost of *construction.* Here the possibilities of rationalization, of mass-production of parts, and of efficient large-scale operations, would be utilized in a way quite impossible to small private enterprise. Structural experiments could be conducted, scientific tests made in new materials and methods, which might revolutionize the whole industry.

Then comes the cost of *money*, probably the most vital single element in any system of house-production, but particularly so in post-war Europe. All money was expensive, and a large part of the housing funds must come from the various governments in any case. Therefore, anything which would keep interest and amortization charges down would make for enormously greater economy. The best way to lower money costs

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is by guaranteeing a safe long-time investment. And the only way to build houses as a safe investment proposition is to make sure that they will be continuously sound and useful and desirable for a long time. That they will not be subject to blight, either in themselves or in their surroundings; that they will be conveniently located for the present and for the future; and that they will not soon undergo any predictable obsolescence. Again, the neighborhood unit in single ownership and designed to be permanently administered as such is the only way out. Moreover, in addition to ordinary financial charges, the governments had another interest in promoting the life-expectancy of a housing development. Subsidies, due either to inflated post-war prices or to low wages and therefore necessarily low rents, could be strung out in annual payments and need not be given outright.

And finally, there is the cost of *upkeep*, which, by the use of standardized parts and the provision of centralized services and management, would also be considerably reduced.

Financial and rental set-ups in typical new European developments will be presented in another section. (See Chapter VIII.) Here it must suffice to say that for the same unit of original cost (that is, without allowing for substantial economies in land, land development, and construction), and without allowing for subsidies, the 'economic' rent on most European housing would be less than half as high as it would be in America.

Nevertheless, the real significance of this modern housing method is not the economic saving. It is rather the fundamentally higher quality of the achievement. Even if it cost twice as much, I am not sure but that it would have to be done that way sooner or later.

As soon as the neighborhood is accepted as the unit of growth, a multitude of old conceptions and habits become quite meaningless. Standardized streets without beginning or end, automatically drawn up in the city engineering office, have no place in an organic plan whose use and form and limits have been established in advance. With the streets disappear the old-fashioned block and the standardized lots and also the 'front feet.' For the latter is a marketing and not a consumers' unit of

measure. Building-sites are no longer a commodity existing chiefly on a piece of paper. They become areas of land, each with its distinct topography, to be systematically planned to fit a thousand specific functions.

The change is essentially one from a mechanical standardization for profit to functional standards for use. And it is only by the latter method that the real *technological* benefits of standardization may be realized.

Instead of standardized streets and lots which result only in wasted land and pavement and possible amenity, we must have planning standards which reduce the cost of streets to a minimum. Instead of separate houses whose design has been standardized after an obsolete pattern, and which are therefore both wasteful and monotonous and ugly, we can have truly standardized *parts* which will lend themselves to harmonious arrangements as various as human requirements demand. The former merely degrades and travesties old forms. The latter creates at least the possibility of new forms.

Such words as 'unit,' 'standard,' and 'large-scale production' are, I realize, very likely to grate ungently on the average American ear when they are applied to the matter of dwellings. The traditional idea still prevails that everyone who works hard and saves his money can eventually buy a piece of ground and put up on it a house designed after his heart's desire. But, whether or not it would be nice to have it so, this idolum happens to belong to the realm of mythology. And anyone who entertains it must never have looked around as he entered an American city. In seventeen cities recently surveyed in detail, eighty to ninety per cent of the dwellings had been built by mass-production methods, most of them, of course, by small or large contractors without benefit of either architect or planner. We have plenty of 'standardization,' only we happen to have it in an excessively wasteful and ugly and unproductive form. And what of the other ten to twenty per cent, who do presumably build a house after their heart's desire? Even most of these are erected from 'standard' plans, and the result can never be anything more than a house and a lot, both of them far more expensive than they are worth. But a house and a lot are not all of a residential environment, and a single house in the city or in

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a suburb can hardly be said to have any independent existence at all. One house may be good in itself, but three houses of the same general kind, when set down without relation to each other on three adjoining narrow lots, may constitute a slum. Physically, a modern house is a knot in a network of utilities. Æsthetically, it is just as dependent on its neighbors. Socially, it is not a complete or successful dwelling without a close and convenient relationship to schools, shops, clubs, recreation fields, transportation lines, work-places. If it is so related in any of our cities, it is only by a happy accident; and in any case there will be none of that more comprehensive and fundamental relationship which can be achieved only by unified architectural planning from the start.

What is a Community Unit?

How big should a housing development be? What functions must it provide for? Should the measure be by area or by population or by some special condition? And above all, where should it be located? There are probably as many good answers to these questions as occasions on which they might arise. The new European developments range in size all the way from a hundred families or less up to Becontree, London, with provisions for more than one hundred thousand people. Plessis-Robinson, built near Paris by the Housing Office of the Department of the Seine, will have a population of twenty-five thousand, and a great many German and Austrian developments house five thousand or more. Certainly there is no simple formula to be derived from such figures.

The *ideal* has undoubtedly been the self-contained regional town, complete with assorted industries, and agricultural belt, and full facilities for social life. This is the one way to carry the premises underlying modern housing and planning through to a really satisfactory conclusion. The building of completely new cities, of a size and extent limited in advance and located scientifically with respect to natural resources, manufacture, and distribution, is the only way in which the use-standards embodied on a small scale in the best modern housing can be enlarged to include all of modern human environment. It is the

only way by which the waste and confusion of the nineteenth century can be really canceled out. To do this, however, is apparently quite impossible within the present class-property-profit economic system, itself a heritage from the nineteenth century and earlier. And it is probably even more impossible within a Fascist State, which is essentially nothing more than a forcible crystallization of that system. The all-important problem of how and when real three-dimensional planning can be achieved is unfortunately not a subject into which this book, which deals with the actual housing accomplishment of a dozen capitalist countries, can fruitfully enter.

It is not surprising, therefore, that the ideal of self-contained regionally planned new towns has not so far been achieved, outside of the separate private experiments at Letchworth and Welwyn, and outside of various plans in Russia which must inevitably provide significant material for later judgments. A few important and highly interesting first steps in the regional planning of resources and distribution and the location of new industries were attempted in the Ruhr district in western Germany. But they were in the main adapted only to an expanding industrialization, and it is very unlikely that they will be carried forward under the present régime. The regional surveys in England are gathering up a vast store of scientific knowledge which must be of immense value if and when comprehensive land-economic planning becomes possible. In the distribution of giant power electric lines — the backbone of neotechnic planning — several countries, above all Norway and Switzerland and now England, have shown real foresight. In no country short of Russia, however, can it be said that the actual post-war housing construction has been particularly influenced by such larger emergent factors.

But there are many steps between the barrack-metropolis of the nineteenth century, with its more recent sprawling dormitory suburbs, and the complete regional city, newly planned from the center out in relation to all the resources of a continent. Even such a city would not be a single unit, but made up of smaller integrated groups. And it is in the technique of planning and constructing and administering this smaller and simpler unit, for which 'neighborhood' is probably the most accurate

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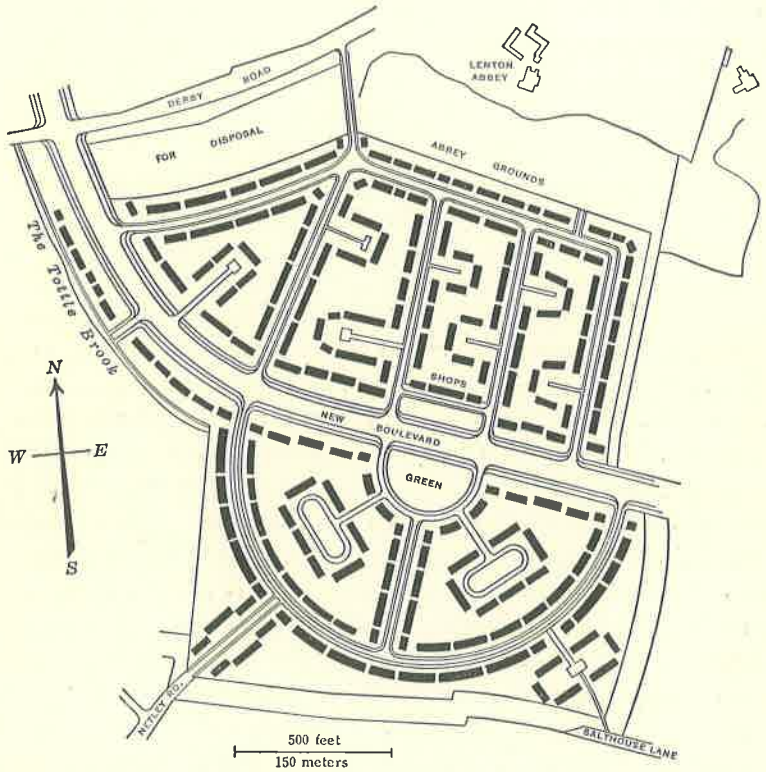
THE PLANNED COMMUNITY UNIT

1. ENGLAND



Lenton Abbey, municipal housing estate in Nottingham, consisting of about 880 small houses. This type of informal layout, with large blocks and indented culs-de-sac, and without specific attention to orientation, is typical of post-war housing in England.

term, that modern housing in Germany and England and the other western countries has made its real progress.

Few of these, as I have said, do actually include work-places — except perhaps the German agricultural villages which are more or less 'self-contained,' though at a simple peasant level. But much of the housing has been planned in direct *relation* to work-places: one of the very best of the new developments is that put up by the city of Berlin near the Siemens factory. And indeed most German cities, with their highly effective industrial zoning, have been able to locate new residential colonies in such a way that the majority of the tenants will not have to make long daily journeys, back and forth across the center of the town, merely in order to get from home to work and back again.

But are there any principles with which to determine the size and general form of a residential neighborhood? In any case, there are certainly no exact rules, from either an economic or a social viewpoint. The advantages of large-scale construction are not infinitely and geometrically increased by larger-scale construction. Many of the larger developments were broken up into several construction units, a few rows of apartments or a hundred or so small houses at one time. Similarly, on the visual and social side there are great variations. One of the most satisfactory modern colonies that I have seen is that at Neubühl outside of Zürich, which has only around two hundred dwellings. But on the other hand, Römerstadt in Frankfurt and Dammerstock in Karlsruhe are almost equally good, and they each have more than a thousand dwellings in small houses and apartments. Watergraafsmeer outside of Amsterdam has about the same number (although this is unusually large for Dutch developments), while several Berlin suburbs and some of the Viennese complexes, also designed as single neighborhood units, have almost two thousand dwellings each.

However, a few general statements can be made from the European experience. No housing project can be adequately planned and lived in as a social unit unless it includes a school for at least the younger children, the shops which are necessary for everyday purchases, and some sort of public open space for outdoor recreation for all ages, although not necessarily the

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THE PLANNED COMMUNITY UNIT

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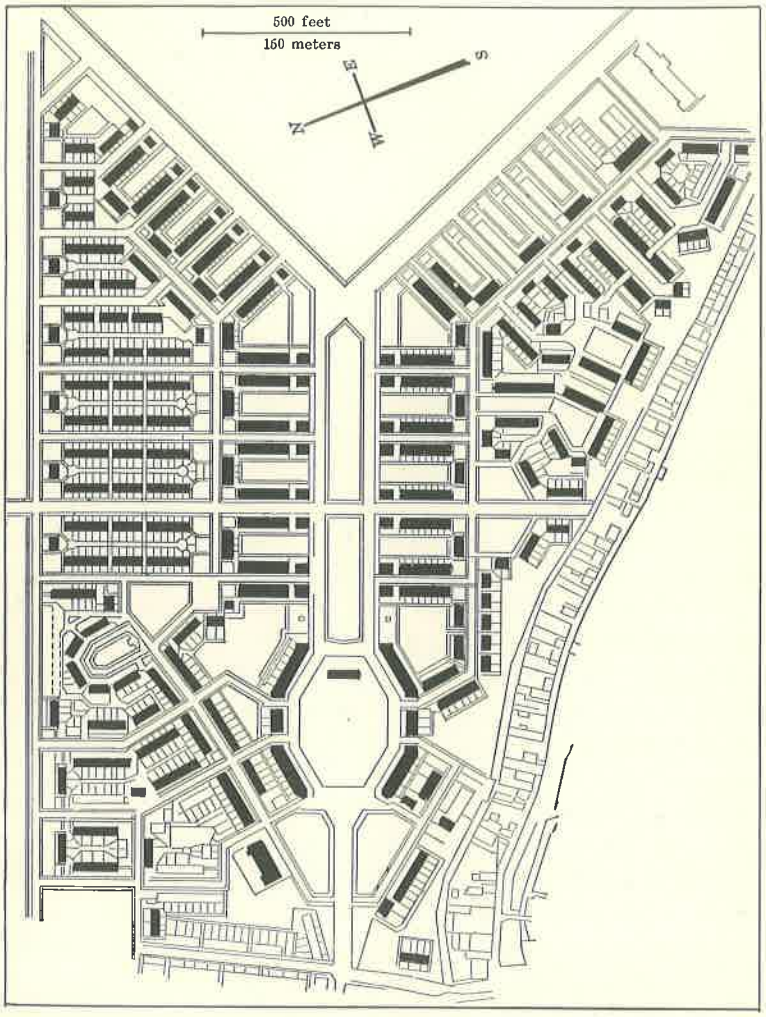

Nieuwendam, partly municipal and partly co-operative housing, in Amsterdam. It contains a thousand one-family houses, a school, a special section designed for old couples, an administration building, shops and other community equipment. The density is much greater than in the English communities, and there is nothing novel about the street-plan except the broad central parkway and the large interior play-spaces. The greater formality, however, makes possible a degree of urbanity not found in the more scattered English developments.

more formal types of playing-field. On the Continent, I think one should also include a café or some other form of public meeting-place. In such a community, there will ordinarily be several play-spaces for the smaller children. And on the Continent again, the average neighborhood unit will also provide a central power laundry,[1] particularly if the majority of dwellings happen to be apartments. Individual gardens for those who desire them, either in connection with small houses or in grouped allotments near the apartment-rows, are likely to be considered essential elements in a community layout.

Dwellings, gardens, schools or kindergarten, shops, usable open space, laundry, café — these are all part of the *minimum* neighborhood unit. But in addition, many other facilities are often provided. Many German developments have a central plant for distributing heat and hot water to all tenants at a regular monthly charge. The larger developments usually include complete elementary schools. Communities erected by co-operative housing societies are likely to plan, at least, on putting up a central social building. Where baths are not provided either in the dwellings or in the basements of the buildings, central bathing establishments must be constructed. With the family unit decreasingly sufficient unto itself, and with single workers to be accommodated, restaurants become increasingly important. Formal sports-fields must be considered. In some Dutch communities there are co-operative kitchens. And a mere listing of the communal facilities built into housing developments by the city of Vienna should show that the housing problem includes considerably more than houses. All of them, of course, do not occur in any one neighborhood group, but there are a great many in each category: baths, laundries, kindergartens, schools, libraries, youth centers, cinemas, nurseries, Maternal Consultation Stations and medical clinics, wading-pools, welfare centers for consumptives, gymnasia, dental clinics, post-offices, playgrounds and allotment gardens.

Plessis-Robinson, near Paris, which will house about twenty-five thousand people, is a complete urban entity with the single

[1] The seriousness with which Germany undertakes this problem of communal equipment may be judged from the fact that the German Engineering Association has a 'Scientific Institute on Clothes-Washing.'

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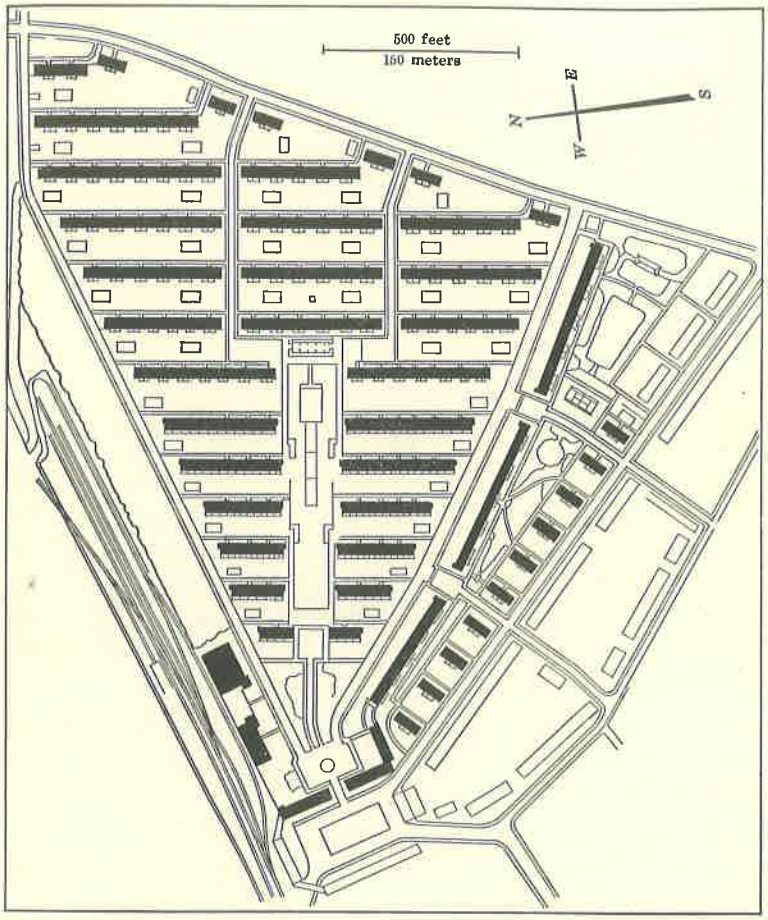
THE PLANNED COMMUNITY UNIT

3. GERMANY



Bad Durrenberg, a large development outside of Merseburg, put up by the local authorities in conjunction with several public utility societies, and designed by Alexander Klein. There are a thousand dwellings, the western part being small houses and the eastern section, with wider spacing between the rows, 3-story apartments. Heat and hot water are supplied from a central plant, and there is a communal power-laundry and other equipment. The major part consists of one huge superblock, with every dwelling oriented for maximum sunlight, no dwelling fronting on a street, and a large central park. This is one of the most complete examples of German *Zeilenbau* planning.

exception of work-places. It includes a *mairie*, a social center, an open-air theater, a public market, a church, large sports-fields, and a concert-hall. Heat and hot water are also centrally supplied.

Little would be gained, I think, by endeavoring to tabulate different kinds of possible community equipment in relation to specific units of population to be served. They vary enormously from one development to another, and can never be standardized on any sort of statistical basis. And, whether society is capitalistic, nationalistic, or communistic, there must always be great differences in the demand for such facilities from town to town and from region to region. The only realistic basis for planning community equipment is to have quite a solid knowledge of the people who are going to live in the development.

It is essential, however, that everything which may be needed should be *planned in* from the start. Sites should be allowed for those things which cannot be actually constructed at once. Such comprehensive planning provides both a new responsibility and an entirely new opportunity for the architect. For the first time, it is possible to use a great many different elements at once, to build up groups and balanced masses and rhythms merely out of the varied forms required for specific functions. Standardized parts, instead of creating dull uniformity, become a positive force in creating a unified whole. Meaningless surface ornament, once applied to distract the eye from the unbearable bleakness and monotony underneath, becomes not only unnecessary but ridiculous. Good materials, simple lines, and geometric forms become, when combined with carefully designed and planted open spaces, all the elements necessary to an authentic modern architecture.

But to return to the matter of size. On the social side, the school is probably the most important determining factor. Together with its recreation space, it is likely to supply the focal point of a planned neighborhood. Whether this school is merely a kindergarten and a nursery, as it often is in Swiss communities, or whether it is a complete elementary school, as is usual in Germany and Holland and England, is a matter which obviously cannot be decided out of hand. Physically, there are vital factors limiting the size in both directions. A unit must be

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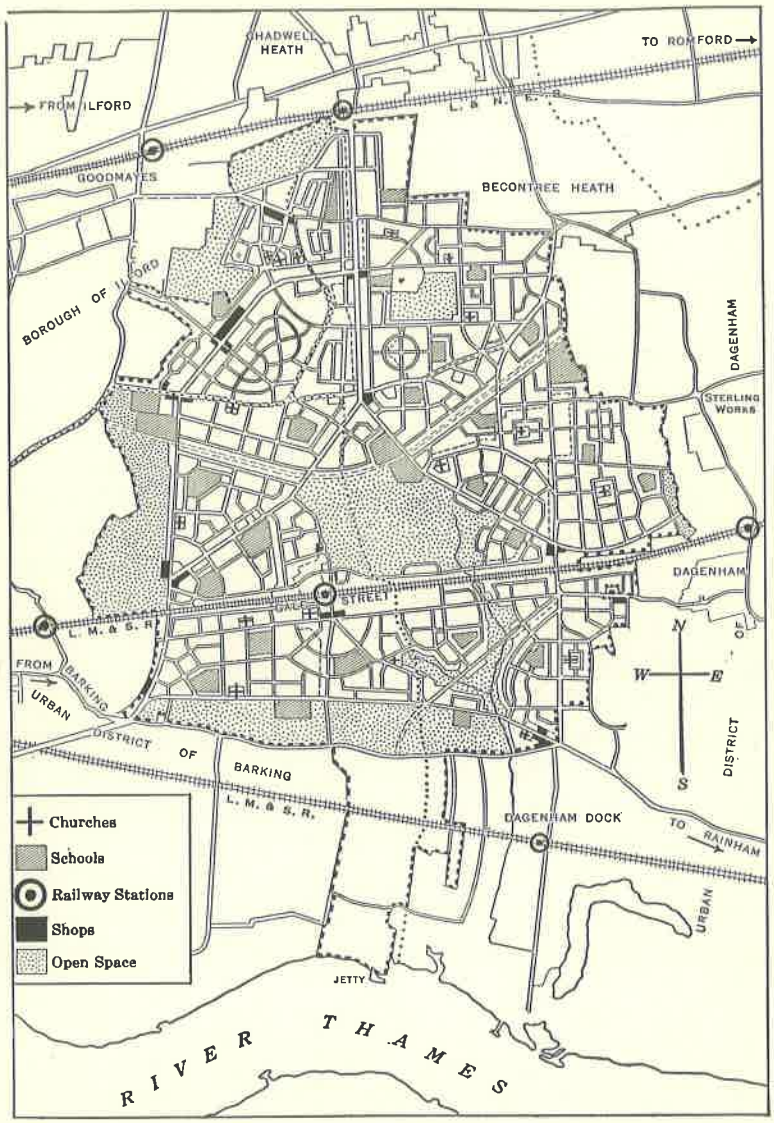
HOUSING IS MORE THAN HOUSES



Becontree, outside of London, put up and administered by the London County Council. Its 25,000 dwellings, almost all of them small one-family houses laid out in rows or groups, make it one of the largest public authority housing developments in the world. The partial green belt, and the variety of community equipment provided, may be seen on the plan.

at least large enough to create a neighborhood atmosphere. And I do not mean this in any sentimental sense. It must be large enough so that its amenity and desirability as a place of residence cannot be influenced by any exterior accidents or adjoining blight. This is all-important. And it must also be small enough so that all of its essential facilities are almost equally convenient to all the inhabitants. This means that in very large developments there must be several distinct neighborhoods, sufficient unto themselves for most everyday necessities. This has been done at Becontree, at Britz outside of Berlin, and in most of the other large communities. I should put the low figure roughly at about two hundred dwellings and the high one at a thousand, or eight hundred to five thousand people respectively.

In the matter of community equipment, and of planning that accepts such public facilities as an essential element of design, the order of excellence in the different countries is somewhat reversed, as compared with the *net* dwelling standards — that is, the private space and equipment per family. The most complete social equipment is provided in the Viennese apartment-complexes, where the dwellings themselves tend to be rather small and very simple. And in England, where almost every new house has five or six rooms, a bathroom, and a large private garden, almost no communal facilities are provided, except possibly a school and a central common and a shop or two. Germany more or less strikes a balance between these extremes, in both respects. The architectural treatment of such central facilities as exist in the German *Siedlungen*, however, is ordinarily of the best. Some of the new schools are the best examples of modern architecture, outside and inside, for the eye and for use, that can be found anywhere. And there is often something fresh and arresting in the simplest sort of disposition of the shops and cafés.

The matter of preserving for the community the increment of value on store-sites, which is created by the community itself, is automatically taken care of in most of the larger developments merely because the shops are built in from the start and all the land and buildings remain in single ownership. And, particularly in Scandinavia, Austria, and Germany, the store which supplies daily necessities to the new houses is likely to be a con-

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sumers' co-operative in any case. Letchworth Garden City, by giving long leases at too early a stage, lost a very considerable part of its possible store-value increment. But Welwyn profited by its example and started with a large co-operative building, in which various departments were let out on short concessions. Long leases will be given only after the maximum of population has been reached.