# THE

OF

### BUILDING HEIGHTS

THE GEORGIAN GROUP
4 HOBART PLACE, S.W.1
Sloane 2844

Price One Shilling



## THE LIMITATION

OF

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#### Georgian Pamphlets:

- No. 1 Protection by Law of National Monuments and National Buildings (15.).
- No. 2 The Limitation of Building Heights (is.).
- No. 3 \*Paint, Colourwash and Climbing Plants (15.).

#### Surveys:

No. 1 Report on Cheltenham (1s.).

\* In preparation.

Note: Owing to its length and importance, "A Georgian Bibliography" will be published as a Handbook.

#### THE LIMITATION OF BUILDING HEIGHTS

THE work of the Georgian Group, which is trying where possible to save from demolition buildings exemplifying the Classical tradition in English architecture, naturally falls into two parts. In the first place the Group is concerned to stimulate an appreciation of the meritorious architectural qualities of such buildings, and secondly it seeks to protect them from wanton and unnecessary demolition. Fortunately there is evidence to show that the public appreciation of the heritage of Georgian architecture has notably increased during the last fifteen years and is still increasing. In spite of this, however, a number of recently published planning schemes, if carried out in their entirety, would involve the sacrifice of very many of the buildings of the type the Georgian Group is trying to preserve. On examining these plans it will be found that in nearly every case the proposed new buildings are considerably taller than the old, and it appears to be assumed that this increased height is "an economic necessity." The decision to pull down these old buildings, therefore, has nothing whatsoever to do with their architectural style, for if they were in the mid-Victorian style, or even in one or other of the twentieth-century styles, they would still have to come down if it could be argued that they failed to bring in the measure of financial profit per square yard of ground which in some circles is regarded as the test of whether or not a building can be described as an economic proposition. This type of financial pressure resulting in the demolition of old buildings has been steadily operating for the last thirty years or more.

Needless to say, the buildings which are most vulnerable to the onslaught are those in which the leases are just falling in, and as in very many instances the leases were of ninety-nine years' duration it follows that in any given year the mortality of buildings erected approximately a hundred years previously is exceptionally great. Thus between 1920 and 1925 the major part of Old Regent Street fell, for that was the end of its

legal span. And all over the country other terraces, other streets and other single buildings of approximately the same period were being pulled down to make way for taller buildings. Thus the greatest period of danger for the Georgian buildings lasted until about 1930, one hundred years after the death of George IV, by which time a large proportion, considerably more than half, of such buildings had already been demolished, not necessarily because they were worn out or had ceased to perform a useful function, but because they did not fit in with the financial dispensation of the day. Of the residue of these buildings aerial bombardment has taken a considerable toll, though it is estimated that the architectural loss from this cause is but a mere fraction of that sustained through the operation of so-called economic factors in time of peace. As the years advance, what may be called the mortality line creeps up past the Georgian period to the Early Victorian, and we witness the demolition of a whole series of buildings which, though not strictly Georgian, still carry on the tradition very creditably and in some cases with high distinction. Notably in Cheltenham, but also at Hastings, and in many other places, seemly street buildings were being designed even up to 1870.

During recent months there has been much discussion concerning the possibility of remodelling and adapting for modern usages the interiors of Georgian buildings, and the Georgian Group has done all that it can to encourage this method of approach to the problem of preserving beautiful individual facades and large-scale architectural compositions which add dignity to the towns where they are situated. It must be observed, however, that no matter how successful such remodelling may prove to be, the opportunity for carrying out the experiment will not be granted at all unless we are assured that the buildings in question will be exempt from a process of summary demolition on the ground that they are not tall enough to represent "an economic proposition." A town planner, therefore, who is invited to prepare a scheme for an area containing a large number of beautiful buildings of the periods here mentioned is completely helpless unless it is possible to insist upon a limitation of building height. To make this limitation effective the height allowed must not, in general, be greater than that of the tallest commercial or domestic building of the period under consideration. Under the protection afforded by that limitation of height it will be possible to judge the desirability of remodelling or adapting for modern usages all the beautiful old

buildings of the town, each case being considered on its merits. If the town planner makes a surrender on this question of the limitation of building height, or if such a regulation is not supported by the Governmental authority, nearly all the Georgian buildings and the later examples exemplifying the same spirit are automatically doomed, and any time spent in considering whether or not they could suitably be remodelled would be a work of supererogation. It is of vital importance, therefore, that the arguments in favour of limiting the height of all commercial and domestic buildings should be formulated clearly in order that this principle of height limitation should be embodied in

the laws relating to building developments.

Such a law, while incidentally it would protect Georgian architecture, would have as its prime justification its capacity to safeguard certain civic proprieties everywhere, no matter what the architectural style of the buildings might be. We are here dealing with a question of civic manners. There results a vulgar architectural expression when tall blocks of offices or flats overbear churches and town halls and other buildings of special social consequence. In the present age of anarchical building, any city or township which has preserved the timehonoured scale of values whereby the buildings which are culturally and socially the most important still look the most important, are fortunate indeed. They retain their former prestige and uphold a worthy standard of civilisation. Contrasting with these we see the newer urban settlements—they scarcely deserve the name of city or town—where no such convention obtains, where the height of buildings no longer has any relation to the importance of their function, but is apparently determined by chance or whim, or by the operation of an irresponsible finance. The result is chaos. There can be little question that occasionally the very tall buildings are the expression of a desire for advertisement on the part of their owners. Some of the American skyscrapers admittedly owe their origin to such a cause. In very many cases, however, the increased height is due to the determination of the ground landlord to obtain the maximum income from his property. But it need not be supposed that the untoward developments here described are entirely due to the rapacity of private individuals. It is unfortunately true to say that modern town planning regulations have themselves encouraged them. This is because building heights have been determined partly in relation to angles of sunlight, it being assumed that the broader the thoroughfare the taller may be the buildings on either side of it, irrespective of their function. Such a regulation appears to be based upon a study of one particular aspect of the problem to the neglect of certain important social and æsthetic factors. Thus in some of the London squares, just because there happens to be an open space of a certain size, the town planning regulations permit and even encourage the replacement of lovely Georgian houses by much taller blocks of flats.

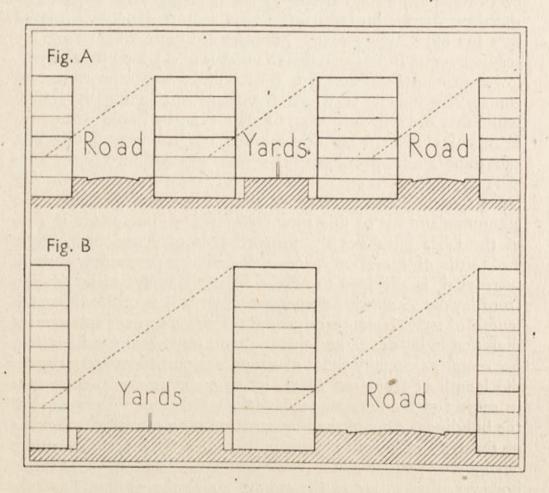
It is significant that the only overriding limitation of building height acknowledged by the London County Council in its regulations is based upon a utilitarian consideration, namely, that the London Fire Brigade, owing to the nature of its equipment, declares its inability to tackle fires occurring in buildings of more than a certain height. A few years ago the limit was 80 feet, but more recently in certain instances as much as 120 feet has been allowed. In some of the provincial towns, blocks of offices of 160 feet have made their appearance, thus rendering it obviously impossible for public buildings in the vicinity to maintain their rightful prominence in the urban pattern.

The purely "scientific," that is to say non-æsthetic, approach to town planning has resulted in yet a third criterion being applied in the limitation of building heights, the first being a consideration of angles of daylight and the second a regard for the capacity of the local fire brigades. The engineers have shown a commendable spirit of realism in pointing out that a building should not be taller than the nature of the subsoil might warrant. In New York the skyscrapers are built upon rock, so we are led to suppose that if London had had an equally solid earth beneath it there would be no practical objections to skyscrapers being built there also, assuming, of course, that the London Fire Brigade could rise to the occasion. Where there is no solid rock as a foundation, a skyscraper can sometimes be firmly supported on a foundation of piles. For the reasons here given, however, such very tall structures, even if their erection represents a triumph of engineering skill, may offend most grievously against an important principle of civic manners.

In urging the desirability of a limitation of height in the case of commercial and domestic buildings it is fortunately not necessary to run counter to the interests of those who are seeking to obtain the maximum commercial advantage from urban developments, because arguments will here be advanced to show that comparatively low buildings close together may bring in a greater revenue than would taller buildings farther apart. In

the past the urge to increase the height of buildings in a street has proved financially lucrative for the simple reason that in the days before the Town Planning Acts it was permissible to raise, the building height without increasing the width of the street. This procedure, while it had the effect of resulting in traffic congestion, had in the eyes of the speculator at least the merit of increasing the revenue to be derived from any given site. Under existing legislation, however, increased building heights will need to be accompanied by increased street widths, with the result that the degree of density of development on any given site would not necessarily be increased.

This point can best be proved by reference to the accompanying illustration. Fig. A shows in diagrammatic form what may be described as the normal old-fashioned urban development such as could be found, for instance, in the City of London



and in the business quarters of many provincial towns. Here the road width is 40 feet and the building height 50 feet, which allows for five floors in addition to a basement, or six floors in all. Fig. B shows a modern type of lay-out which complies

with town planning regulations. Here the road width is 80 feet, which allows for eight floors plus basement, making nine floors in all. The first thing to observe is that the density of development in each case, that is to say the amount of floor area provided in the buildings in proportion to the ground area, is the same, because Fig. A shows three blocks of buildings 40 feet deep with six floors, making eighteen floors in all, while Fig. B shows, on the identical site, two blocks of nine floors of the same area, also making eighteen floors. Thus it is established that the type of development illustrated in Fig. B does not necessarily represent a better commercial speculation than that in Fig. A. Indeed, the reverse is the case because it may be proved conclusively that the revenue to be derived from the lay-out of taller buildings farther apart will be considerably less than that from the lower buildings closer together. In the business quarters of a town it is well known that the most highly rented premises are those which have the readiest access from ground level, that is to say the ground floor, lower ground floor and first floor. These lower floors are, of course, the only ones which the shopkeeper normally wants, while they are also particularly sought after by Banks, Insurance Companies and many other kinds of businesses, including catering. The upper floors are usually devoted to offices.

A comparison between the two diagrams shows that in the lay-out of the lower buildings (Fig. A) as much as half the accommodation is of this specially valuable kind, while in that of the taller buildings the proportion is only one-third, while two-thirds of the floor space, a far higher proportion than is warranted, is allocated to offices. The advantage to be derived from lay-out A appears even greater when it is realised that the length of street frontage on any given site is 50 per cent. greater than that in lay-out B, and this is a most important consideration, for rentals, especially those of shops, are partly dependent upon the length of frontage. Next, let us compare the two lay-outs in respect of the amount of daylight which enters the rooms of the buildings. One of the arguments usually advanced in favour of the type of lay-out shown in Fig. B is that it enables more daylight to penetrate into the buildings. The diagrams show, however, that as far as the storeys above the ground floor are concerned the two lay-outs are on terms of equality, as in each case the angle of daylight in the rooms on the first floor is the same, namely, the angle of which the tangent is three-quarters. In the case of the ground floors the buildings shown in Fig. B

would have a very slight advantage, but in this case it is of little importance because, in shops at any rate, owing to the obstruction of daylight caused by the display in the windows, artificial light would usually be needed in the interior in any case.

The defenders of beautiful old street buildings, if they could secure the general acceptance of the foregoing arguments, would find their position greatly strengthened, because they would no longer be accused of neglecting economic and financial considerations when they express a preference for the type of urban development exemplified in the street buildings of the eighteenth and early nineteenth centuries. Instead of assuming the unpopular rôle of sentimentalists trying to check the march of time they can actually prove that they are better business men than are the latter-day town planners. Thus they may feel assured that the future is on their side and that the eighteenth-century convention of street building contains an element of logic which will enable it not only to survive, but to oust the ill-conceived substitutes for it which have made their appearance

in recent years.

It is noteworthy that a considerable proportion of the buildings in which the Georgian Group is interested is in the shopping quarters of our older towns. In quite a number of these a fierce struggle is proceeding at this moment between the shopkeepers and the municipal authorities in their area who are trying to enforce the type of town planning regulation which would decree very much wider traffic roads in the business quarters and the erection of taller buildings flanking these roads. The shopkeepers urge that their business is best conducted in just the type of fairly narrow street which our forefathers originally designed. They regard it as essential that their customers should be able easily to survey the shops on either side of the street, and that they should be able to cross the street without difficulty, which would certainly not be the case if the street was sufficiently broadened to allow for a "speedway" with four or more lines of traffic. Fortunately for the shopkeepers, their point of view has recently been to a certain extent reinforced by those professional town planners who favour the idea that the built-up area of a town should be divided into a number of "precincts," that is to say, quarters from which through traffic is excluded. If this principle were enforced, it would help to give the shopkeepers the type of friendly narrow street which they like, and incidentally, of course, it might lead to the preservation of this type of development where it already exists. Furthermore, and

this is an important point, the narrow streets have an additional justification inasmuch as they afford shelter from the wind. Here again our forefathers showed their common sense, for they caused their buildings, or a large proportion of them, to take account of the fact that in our English climate a cold and strong wind is apt to be blowing for at least six months of the year. There are occasions when such a wind is invigorating, but the housewife does not appreciate it when she is doing her shopping. The attitude of mind which would oppose modern developments which are the expression of modern necessities is, of course, reprehensible, but on the other hand it may be pointed out that the protagonists of novelty are apt to go astray in *unsolving* problems which have already been solved rather than in solving new problems. The upholders of tradition in architecture are

only justified in so far as they resist this latter process.

The type of street building which is here commended does not owe its essential virtues to the architectural style which happens to be exemplified in it. We are not dealing here with a repertory of ornament, but with certain forms of building which not only possess the attribute of urbanity, but are justifiable on utilitarian grounds. This is not to say, however, that the architectural detail of the Georgian buildings is of small account. The façades with beautiful doorways, elegantly designed windows and cast-iron balustrades, and the interiors often containing beautiful plaster ceilings, staircases, mantelpieces of the finest workmanship, are in themselves worthy of preservation; but if all these things were sacrificed and we were to obliterate all evidence of the distinguished English vernacular Classic style, there would still be an architectural residuum in the form of street buildings which have an essentially right relationship to the town as a whole. An important element in this right relationship is expressed in a limitation of height of all commercial and domestic buildings.

March, 1946.

This Pamphlet has been written for the Georgian Group by A. TRYSTAN EDWARDS, M.A. (Oxon); F.R.I.B.A., M.T.P.I.

The GEORGIAN GROUP was founded in 1937. Its aims are:

(1) to awaken public interest in Georgian architecture and town planning;

(2) to afford advice in regard to the preservation, repair

and use to-day of Georgian buildings;

(3) to save from destruction and disfigurement Georgian squares, terraces, streets and individual buildings of special merit;

(4) to ensure, when an area is replanned, that Georgian buildings are not wantonly destroyed, and that the new buildings harmonise (though they may contrast) with the old.

Particulars of Membership may be obtained from the Secretary.

This Pamphlet has been written for the Georgian Group by A. W. ACWORTH, B.LITT., M.A. (Oxon); of the Inner Temple, BARRISTER-AT-LAW.