# OLD BUILDINGS—PROBLEM AND CHALLENGE

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ALL concerned with the problem of old buildings, and aware of national and local policy on the subject in recent years, must have been struck by the astonishing—and depressing—gulf between theory and practice. That there is a major problem has been recognised not merely by members of private bodies, but by national legislation and by complementary activity on the part of many local authorities. Much excellent work has been done, but there has been no general realisation of the fundamental principles at stake. To some extent, these principles have even become obscured by the glow of complacency felt at what has already been done. In the last resort, members of Parliament and of the Church Assembly, local councillors and the man in the street, are still thinking of "Ancient Monuments" as a luxury to be given (in the jargon of our times) a very low priority.

This deep-seated misconception lies behind many losses of irreplaceable buildings, sacrificed not to real necessity, but to an expediency based on a false relative scale of values. Only too frequently buildings are condemned, or their condemnation condoned, by the very bodies legally responsible for preservation, and in the teeth of keen and informed local opposition. Confidence in the efficiency of present measures is repeatedly shaken when important buildings scheduled under the Ancient Monuments Acts are swept away with official sanction; when large numbers of those recently given "protection" by Statutory Listing are removed from the Lists as soon as there is a conflict with other interests; when really determined vandalism wins all along the line.

Such deplorable results are the effect, not of hypocrisy, but of blindness to the importance of the principle involved, a subconscious relegation of old buildings to a low category in the scale of human values. This scale usually finds material expression in the reduction of each individual case to financial terms: what will preservation cost, either for works of repair or in the modification of some project? In part this is due to survival of the nineteenth-century belief in material progress which has so strongly coloured national education, in part to the spreading sense of man's helplessness in face of his own invention, engendered by the wars and social and economic unrest of our time. What is new is automatically accepted as an improvement, without further question.

That there is no real or consistent policy simply reflects the absence of any philosophy of conservation. Few supporters of protection for ancient buildings and works of art could give a reasoned explanation, nor define the basis of their views. Is then the saving of the old (whether outworn or not) a mere sop to emotion, an affair of sentiment? Even if it were so, it does not follow that preservation would be unjustifiable. But unless we follow St. Bernard of Clairvaux in consideraing all material things a mere trap for the senses, we need not hesitate in attaching a real value to what possesses both beauty and utility.

The recognition of beauty and utility is highly subjective, but in both qualities there is a relative, if no absolute, scale of values, and few will support the proposition that the more beautiful or useful should be destroyed to give place to the less so. Hence, since it is implicit in such listing as that carried out by the Ministry of Housing and Local Government that the listed buildings do possess these qualities in a high degree, it should be necessary to bring overwhelming evidence of an even higher standard attained by any new proposals which involve their destruction. Evidence of this kind can only be assessed by an independent tribunal, for the present procedure of ministerial enquiry is manifestly unsatisfactory.

Emphasis has commonly, and rightly, been laid upon the aesthetic and amenity values of ancient buildings, but material considerations have generally been overlooked. While some aged construction is unsound, a far greater amount is not merely sound, but has a greater expectation of life than the modern structure which may be put in its place. This is due to two causes: the lavish use of prime materials which was formerly possible; and the high level of craftsmanship attained in the building trade before the development of mechanisation and of large-scale contracting. Medieval buildings in particular witness to the efficacy of provisions for the maintenance of a high standard at a time when the penalty for jerry-building was destruction of the offending work.

England formerly abounded in home-grown hardwoods of the best quality, widespread quarries of good building stone, and a

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vast number of locally exploited clays producing tiles and bricks. The timber has now disappeared, many of the quarries are exhausted or economically unworkable, and rationalisation in industry has put an end to the supply of sound common bricks and tiles made near the site. The consequently increased rarity of the materials of which our old buildings are made is in itself a reason of the utmost importance for their preservation wherever possible. Indeed, the irreparable loss to the nation caused by the wholesale destruction of work which it is impossible to replace with equally durable materials and workmanship is the most alarming feature of the situation. No nation can afford to waste its accumulated assets in so reckless a manner.

It is more than time that the country awakened to the squandering of its patrimony now in progress, a senseless destruction quite largely due to the people's own elected representatives in local government, and elsewhere inadequately combated by those representatives. The remedy will only come when a national sense of indignation at such waste has been aroused, for nothing short of this can remedy abuses. To arouse this deep and burning indignation is by far the most serious problem for those who already realise the facts.

On a different plane, conservation faces other serious problems of a technical character, some of which relate to the causes of decay, others to the means of maintenance and repair. Two causes of decay are of overwhelming importance: damp, and atmospheric pollution. Against the penetration of buildings by damp the only adequate safeguard is regular maintenance, which in its turn means constant vigilance. It is usually decay due to damp (most frequently in the form of dry-rot) that transforms a sound asset into an unrepairable liability. Hence regular inspection, particularly of roofs and gutters, is the first requirement for all building conservation. This has been recognized in recent provisions for the maintenance of historic churches, but is still too little understood by building owners in general.

While decay due to a wet climate has been present throughout our history, the erosion of building materials in a polluted atmosphere is a relatively modern phenomenon. Public attention has recently been drawn to this, and the creation and rapid extension of smokeless zones provide the only complete solution. In the meantime, vast sums of money are being spent upon palliatives and repairs: sums which ought to be available for other purposes. Since erosion most seriously menaces masonry buildings, the technical problem is primarily one of the treatment and repair of stone. In this field scientific results of great value have been reached through the patient work, carried on for thirty years by the Building Research Station. So far, no substance has been found which will act as a preservative without materially altering appearance, though coating with paint or with whitewash will act as a purely mechanical protection. Among palliatives, the best is undoubtedly cleaning by brushing with water only, or steam-jet, followed by hosing repeated regularly as a measure of normal maintenance. Washing, by removing harmful chemical salts, undoubtedly prolongs the life of masonry and allows original work to be retained for a much longer period before ultimate replacement with new material.

When replacement becomes unavoidable, there is normally a choice between natural and synthetic (plastic) stone. It cannot be too strongly urged upon building owners that the widespread use of synthetic materials is a false economy, besides being destructive of the permanent tonal values of the building. Plastic stone can be of real service when its use is limited to the making good of damaged details, where replacement with natural stone would involve the loss of more of the original, and would cause much greater disturbance to the fabric. But the refacing of large expanses of ashlar walling with synthetic material is completely indefensible and should never be accepted as the alternative to a certain degree of irregularity in a weathered and partially repaired surface. Repairs should always be limited to the minimum: in order to preserve as much of the original as possible for the longest possible time; to avoid the serious structural disturbance involved in complete refacing; and to spread the cost of repair. Indeed, it may fairly be laid down that the more closely repairs approximate to regular maintenance, the better they are.

It is a fallacy to suppose that any repair or restoration, however costly, can put a building permanently in order. Experience of the very costly restorations, often amounting to virtual rebuilding, of the last century shows that these were appallingly wasteful, apart from the unnecessary destruction of old work which they involved. In many cases too, the work done was not only wasteful, but structurally inept and badly executed. Among the most serious of the mistakes made in Victorian times are the choice of poor and unsuitable stone, and its use in thin veneers inadequately bonded to the old core. It is noteworthy that certain of the buildings on which most money is now being spent (for example, York Minster and Westminster Abbey), are precisely those upon which most work

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was done in the nineteenth, and early in the twentieth century.

The correct treatment of old buildings calls for long experience on the part of the architects and the leading craftsmen concerned. The subject cannot be learnt from text-books, useful as are such works as the late A. R. Powys's *Repair of Ancient Buildings*, and the excellent technical treatises and articles on special subjects which have been produced by the Building Research Station and by members of the Ancient Monuments Department of the Ministry of Works. It is, for instance, admitted by research petrologists that no amount of scientific testing of samples can take the place of the personal experience in the choice of sound stone possessed by a well-trained master mason.

Consequently the problem of providing adequate training, both for architect-conservators and for craftsmen, is one of the most serious difficulties to be faced. The steadily lessening use of traditional materials for new building has, together with general industrialisation, greatly decreased the number of fully trained craftsmen in the key trades of masonry, carpentry and plumbing. To a certain extent this decrease has been offset by the special arrangements made by the Ministry of Works for training craftsmen, but their numbers are utterly inadequate to cover the needs of the country as a whole. To the many adverse factors present for a generation and more has now been added, a disastrous final blow, compulsory National Service. It is not generally known that the fully trained master craftsman of the type now so close to dying out, served not merely a minimum apprenticeship of five years, but one of six or seven years with a further three years as "improver" or journeyman before he was regarded as qualified. Furthermore, to obtain the best results, apprenticeship should begin at 13 or 14, rather than at 15, the present school-leaving age.

The effect of National Service has been felt so severely that it is no exaggeration to say that the skilled crafts are doomed unless total exemption is granted. Of the still fairly considerable though fast diminishing number of apprentices in the building trades, allowed deferment until the end of a five-year term, hardly any are prepared to return to a three-years improvership after their period of service. All attempts to maintain a satisfactory level of craftsmanship are futile unless sufficient inducements are given to encourage apprenticeship, to enable the passed apprentice to complete his full training, and to provide him with proper employment at an adequate wage. At the present time the differential rates for highly skilled master craftsmen are so grossly inadequate that even of the few who can still maintain the best standards, a number are driven by sheer necessity to abandon their calling in favour of some less skilled but more remunerative work.

Dismal as are the prospects in the building crafts, they are hardly more so than those in the architectural profession. For well over a generation it has been the practice of most of the schools of architecture in Britain to give only the most perfunctory treatment to history, and to concentrate upon the use of the latest materials. A thorough practical knowledge of traditional methods of construction is no longer a primary requirement, and even the capacity to make accurate measured surveys of old work is very generally lacking. Against such a background it is clearly impossible to train within a short time a sufficent number of architect-conservators to deal with the thousands of ancient buildings throughout the country now in need of expert handling. No time is to be lost in putting the education of the conservator on an adequate basis of knowledge and experience.

Here again, incentives are lacking. There must be some guarantee that the work of conservation will be entrusted only to those with the proper training and experience, before entrants to the profession will be likely to undertake the arduous work needed to acquire special qualification. This in turn depends upon the methods of qualifying open to the student, for it is clear that general insistence on specific qualifications can only be based upon acceptance of these as satisfactory. Here it is necessary to consider the type of entrant whom it is desired to attract, as well as the methods by which competence as a conservator can best be attained.

Firstly, it must be recognized that the work of the conservator of ancient buildings demands a very high degree of patience and personal application; it is hardly putting it too highly to describe it as a dedication rather than a career. The work cannot be safely delegated to assistants until they themselves have had long experience. Architectural partnerships or offices of the normal type are seldom well suited to the purpose, and moreover in most cases deal to an overwhelming extent with the production of new buildings. The character of ancient and modern work differs so greatly that a mixed practice of this kind can very rarely be desirable. The conservator should be recognized as a special branch of the architectural profession, not in any exclusive sense, but in a way analogous to the present practice of specialists in town-planning.

Before considering in detail the ideal form which specialized

training should take, it is worth studying the methods at present available. These methods are four in number:---

(1) practical experience as an assistant to an architect specializing in work on ancient buildings, or in the Ancient Monuments Department of the Ministry of Works;

(2) practical experience of various kinds organized by the Society for the Protection of Ancient Buildings for holders of their Lethaby Scholarship;

(3) academic and practical training given in the Certificate Course in Preservation and Restoration of Historical Buildings, instituted in 1950 in the Bartlett School of Architecture, London University;

(4) lectures and visits given in the special short courses arranged from 1952 onwards by the York Civic Trust.

All of these apply to architects already qualified, or who, if they have not actually taken final qualifications, are in course of so doing. Of the four methods, the first is that which has produced almost all of those specialists now in practice and, however supplemented by more academic work, the need for such *long-term* practical experience remains essential. It does not, however, lend itself to any form of qualifying test, for which some other provision must be made.

Of the three more intensive types of course offered, that of the S.P.A.B. approaches most nearly to the ideal, consisting as it does of carefully arranged practical experience with different architects on various types of conservation work and surveys, opportunities to inspect craft processes and to attend conferences and lectures on related subjects. It suffers from the very small trust funds available, which limit the awards to a number far too low to have any appreciable effect on the general problem of training. In any case, the special virtue of the system is its highly individual approach, and it is hard to see how it could be extended, even were funds available, to the training of considerable numbers of students.

Short courses of the kind organized at York have the value of being easily attended even by those actually in practice, and it has been found that they have in fact been extensively patronised by relatively senior architects, surveyors and others concerned. As a means of refreshing the conservator's knowledge of up-to-date methods of treatment, courses of this type have great possibilities, but they are obviously quite inadequate as a qualification.

There remains the type of course at present exemplified by that offered at London University. This is, of course, available only to those living or working in the London district, and to provide for the country as a whole, similar courses would have to be instituted at other schools of architecture. Fundamentally, an acceptable formal qualification can only be provided on the basis of some such course and examination, but there is room for extension of the practical requirements before qualification is awarded. A substantial period of working experience of conservation (not less than three years) should be essential. On the other hand, it is already difficult for post-graduate students to undertake the present course. Not only must they attend several evening lectures weekly through some six months of the year, but during the remaining months produce two detailed restoration subjects and a thesis, and spend a fortnight upon a work of repair in progress. These are requirements by no means easy of fulfilment for those already in full-time employment or practice.

It seems clear that such courses would stand on an altogether better footing if they could be spread over a longer period, specialization beginning during the student's third or fourth year of the full-time course in architecture. This would enable a much greater emphasis to be placed upon the teaching of architectural history and traditional construction, and permit of senior students obtaining full-time practical experience of the right kind during the vacations. Such arrangements would also do a great deal to encourage adequate numbers of the younger generation to take up this study at the right period in their careers.

There should be no insuperable difficulties in effecting such a reorganization within the framework of the present system of professional education. But it may well be that the speed of events and the progress of the social revolution of the twentieth century may soon call for a more drastic reassessment of values. The architectural profession itself sprang from the ranks of those superior master craftsmen of the twelfth to eighteenth centuries, able to design and supervise the erection of major buildings. The superiority of the craftsmen must have been largely the result of better educational opportunities, but they remained craftsmen in that they all had first-hand experience of the manual skill required in the working of wood or stone. The weak point of the modern architect has always been that he is in the position of a musical composer unable to play a single instrument. It is by no means inconceivable that the progressive decline in the prosperity of the overtaxed professional class may drive its members to take a radically new view of their sons' education and prospects in life. It would be fitting if in some cases this new view were to take the

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form of apprenticing the professional man's son to one of those skilled crafts now in danger of extinction. Thus the architect might once more become the master craftsman, and the lamented gap between design and execution again be bridged.

The architect and the craftsman are two supports of a tripod, whose missing member is represented by the supplier of materials. Here again very great difficulties are faced, partly because of the exhaustion of certain sources of supply, as already mentioned; partly owing to the prevailing trend towards standardisation and the accompanying growth of the middleman with no personal interest in the raw materials which he handles. To some extent these difficulties can be overcome, and by persistence and tireless pressure have been overcome in favourable cases. Quarries have been reopened, some slight attention is now given to the planting of hardwoods; concerted steps must be taken to find an economic basis for the local brickworks, the plumber who operates his own casting table, the thatcher and the plasterer.

I have painted a gloomy enough picture of the present position. This country faces a challenge, nothing less than the loss of the most tangible part of its traditional heritage. Once the nature of the challenge is realised, and the penalty of failure to meet it, there can be no doubt that it will be met. But our greatest enemy is time: already there has been too long delay, and action must be immediate. Tomorrow will be too late.

#### BOOK REVIEW

The Restoration of Old Houses by Hugh Braun, F.S.A., F.R.I.B.A. Octavo, 192 pp. including 15 plates. Published by Faber & Faber Ltd. 1954. 16/-.

In his foreword Mr. Braun stated that "This little book is not intended solely for architects but for all those interested in the preservation of historic buildings." He is to be commended not only for undertaking such a book but also for the very excellent way in which he has succeeded in his efforts to avoid technicalities, whilst at the same time not "writing down" to the layman. He starts off with many pieces of good advice for those contemplating restoration, and as the book progresses, each of the main structural elements, such as walls, roofs, and fireplaces, are considered separately and in more detail. The whole is carefully illustrated with several very fine photographs, and a suitable glossary completes the work. The whole book is written in a pleasant and easy style, and should have a wide appeal to experts and laymen alike.

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