

## TRAINING FOR ARCHITECTS AND PLANNERS IN CONSERVATION METHODS AND TECHNIQUES

### INTRODUCTION

In all countries, a new realisation is dawning of the importance to our civilisation of its older city centres. In recent years, the increasing pace of urban change has altered many places beyond recognition; while every surviving older town has increased apace in significance. A new concern is today voiced by important international bodies like ICOMOS and the Council of Europe; and it is right that the needs of our ancient towns should receive the special attention of the International Union of Architects, whose members this movement may deeply affect.

Fig. 1. — Boston Manor (Brentford). A hand-painted wallpaper re-discovered during repairs.



### 2. THE DILEMMA : ARCHITECTURAL EDUCATION

In the latter half of the 20th century, architecture finds itself at a crossroads. In Britain, the professional architect-designer came with the Renaissance. Before this, most buildings were designed by a master craftsman — often a master-mason. Then the professional architect came on the scene as a guiding co-ordinator, increasingly pre-occupied with visual and design considerations. Later of course, especially after the Industrial Revolution, professional attention turned more and more to ideas of "taste", and to the eclectic choice and manipulation of established "styles". Then earlier in the present century, under the influence of movements like the Bauhaus, this excess of professionalism was in turn modified and tempered in a return to the true function of the design process — the analysis of functional/environmental problems, the capacities of materials, and the successful solution of the one by means of the other. More recently again, the architect has become belatedly reinvolved in the management of the building force, and in the co-ordination and planning of constructional processes and trades, as for example in methods of critical path analysis and system-building.

These changes in professional orientation have been reflected in the training of architects. The old system of practical experience backed by "articles", supplemented by academic lectures and examinations, has given place increasingly to whole-time school and university education. Part-time training and evening courses find themselves officially discouraged. To correct any otherwise over-academic balance, it has been found desirable in Britain to re-introduce the "sandwich" course, in which the trainee goes from his school into an approved office, between intensive periods of more sequestered learning. But the modern trainee architect has increasingly a university bias, and less and less contact with the craftsman on the site, his conditions, his tools and his materials.

What is the result of this change of emphasis, and this decreasing contact between "designer" and "maker"? Can the architect still effectively absorb, then sympathetically guide and control the old-fashioned crafts? Can he, faced with the problems of an old building, successfully identify himself with his predecessors and their products, identify their strengths and weaknesses, their defects and remedies, and effectively guide the work of conservation?

### 3. SPECIALISATION, OR COMPREHENSIVE TRAINING ? SOME DANGERS OF OVER-SPECIALISATION

Should, in fact, the conservation of old buildings become a preserve of specialists, trained exclusively in traditional methods and incapable of modern building? It need not, nor to my mind can it, be separated in this way. The skills of the architect are not limited to knowledge about differences of local or period tradition or method. The architect can never again become a purveyor of "styles". He above all is qualified to analyse — to identify the problems of a site or a building, and to solve them in terms of the best available constructional methods and materials. To make the best of an old building and to evoke its special qualities requires the same approach as making the best of a vacant building site. We lack, in English, an adequate word for this process. "Exploitation" comes somewhere near it; the French "mise en valeur"

comes nearer. The training of the conservator is largely a question of developing a basic attitude of mind — and this should be a part of the equipment of every architect.

It would not be true to say, at least in Britain, that the conservation of older buildings could ever in practice be concentrated in the hands of specially-trained practitioners. The owner of a building will more likely select his architect from personal knowledge or trust in a general capacity, than from analytical research and enquiry into his particular skills for an individual job. The architect who has repaired a house may next be asked to add a new garage, or perhaps to design a new house entirely; and the architect who designed a house is unlikely, if he did a good job, to be thought incapable of restoring an ancient gazebo in the garden. The relationship between architect and client is not one of limited specialist servant, so much as for interpreter, friend and agent. There is a valuable place for the occasional specialist: but the great majority of run-of-the-mill conservation of our architectural heritage is in

Fig. 2. — Boston Manor (Brentford). Decorations restored and requiring special care. Ornamental panel.



the hands of the private practitioner, in the same way as most normal attention to health is at first the responsibility of the family doctor. To licence a doctor with no knowledge of the ailments of old age would be criminal. To set loose on the public an architect qualified exclusively to design new buildings is only little less so.

Another danger of over-specialisation is "death by over-correctness". Very many old buildings are no longer able usefully to serve the original purpose for which they were built. The forces of social and economic change weigh heavily upon them; and if they are to live on, they must adapt themselves to new purposes and new values. Whereas an Egyptian sphynx or a Greek temple may only be restored as such, an early industrial mill may have to be converted as a youth hostel, a disused railway-station as a warehouse, or a castle as an hotel.

In adapting and revitalising old structures, an over-specialist conservator would be at a disadvantage. He may be anxious to re-create correctly an original

balance which time has destroyed. But history cannot be rebuilt, nor the clock turned back. The architect who can re-evaluate the assets of a situation or a structure and help it to meet new circumstances can sometimes achieve more for it, by bringing it back to life and use, than too historically-correct a "restoration". One more danger is that of preoccupation with restoring a building to its "original" form. A consultant's report on an ancient Church, in connection with which our Firm was recently called in to advise, started its recommendations section on a sinister note. "There seems no reason" it said, "why this beautiful Church should not be *straightened* completely ... Many of similar date have already been made almost as good as new". We in Britain have suffered much in the past from this kind of over-zealous "restoration". Hypothetical reinstatement can so easily be a slippery slope, leading only to out-gothicising the Goths.

Over-specialisation would be equally dangerous if an architect knew only the latest techniques. The degree of fundamental change in the basic building crafts is

Fig. 3. — Thundersley (Essex), St. Peter. A difficult architectural problem : a 14th-century English parish church sympathetically extended by a modern nave. (Civic Trust Award, 1969).





Fig. 4. — Lavenham (Suffolk). English village the Market Place after removal of "eyesore" buildings.

well illustrated in modern joinery. Every older craftsman knows with his finger-tips "what wood can do". Many senior architects are finding it difficult to adapt to the revolutionary new ways in which timber can now be used.

Timber is perhaps the most readily-obtained and predictable of everyday building materials. Centuries of daily use have developed a simple basic grammar of timber construction. As any carpenter and any joiner knows without a moment's thought, timber is a living material. Traditional woodwork is, for example, matched to normal timber sizes. Joinery construction was always panelled to permit natural shrinkage — especially across the grain. End grain was never displayed, but always protected. An extensive range of woodwork joints (from dovetailing to the tusk-tenon) was developed to meet every situation in the best possible way.

Today, timber is used entirely differently. It can be circumferentially sawn as a thin veneer in enormous lengths. It can be mounted on and bonded to non-shrink materials. The quality of seasoned hardwood one finds in an old table-top is almost unknown in building. Timber can be sawn into strips or ground to sawdust and reconstituted, often with waterproof bonding agents, as chipboard, insulating board or hardboard. Plywood is general — sometimes unpleasantly — grooved to echo the effect of matchboarding. The veneered flush door is everywhere standard, while a panelled mahogany door can cost

£ 300 or £ 500. In carpentry similarly, metal connectors are used instead of old woodwork joints. Laminated construction allows sizes unheard — of by the traditional carpenter.

This is only one material in which architects face an entirely new vocabulary in the use of a traditional material. The same could be said of stone. Reconstituted and reinforced "artificial" stone can be cheaply produced. It can be cast instead of cut. It will span distances ridiculous in natural stone. It can even be pre-stressed. The old-fashioned mason would be worried at the "unnatural" things which his material is every day asked to do.

The craftsman is far from home, and so is the architect. He is no longer of necessity trained in this basic sense, to know deeply and instinctively what his materials will do. The modern architect has many skills which his predecessor lacked. He can butt-joint sheets of glass with mastic, in an almost invisible line. He has at his fingertips endless systems of light-weight partitioning and external curtain-walling. *But he does not have the same capacity as his forebears to design within the capacity of his materials, and within the ability of craftsmen.*

Thus, when the young graduate architect comes to repair an ancient structure, he can find himself looking very foolish, and unable to produce naturally the architectural forms which were so immediate and direct a product of the earlier craft traditions.

What can be done to redress this balance? What special bias does the conservator-architect require? And how can this best be encouraged through professional training?

#### 4. SPECIFIC STUDIES IN CONSERVATION

Is it possible for young architects to continue beyond their normal training, and to equip themselves with special extra skills, for example, by postgraduate study? In Britain, it has not proved easy to attract enough graduates each year to extend by perhaps one or two years their already long training. The financial awards of work in conservation department just do not provide the necessary incentive to a young man, after six years of whole-time training, to attract any but the very few. Are these few enough?

Most of the specialist work done at national level on historic buildings in Britain is confined to the Ancient Monuments Department of the Ministry of Works, the Investigators of the Ministry of Housing, and to one or two of the largest Councils such as London, which can afford to maintain their own special Sections for advisory services on specialist groups of buildings. Yet despite wide advertising, neither of these Departments is at present fully staffed. It would seem that even here the need is not met. Coming to the wider ranks of the profession concerned, for example, in the repair of ancient Churches, it is clear that again there is a demand for skilled architects and assistants, which present educational arrangements simply do not meet. Two or three decades ago, every practitioner was expected not only to have a knowledge of historical design, but to cope more or less with the traditional crafts and their architectural implications. Since then, the advance of "system" building and the use of new non-traditional materials has stretched the training syllabus in new directions, at the cost expense of this older knowledge. To equip architects for the care of old buildings, either during or after normal training, what *subjects* can they be taught?

##### (a) *Historical architecture*

Firstly, of course, architects need a knowledge of historical architecture. It is impossible to instil history only as a "subject". The basic message to be conveyed is that architectural form is the direct result of its social and technological background. Without a Pharaoh there are no pyramids: without the oak forests and green pastures of mediaeval England, there could be no great timber-framed wool towns. A basic historical training should be part of the armoury of every

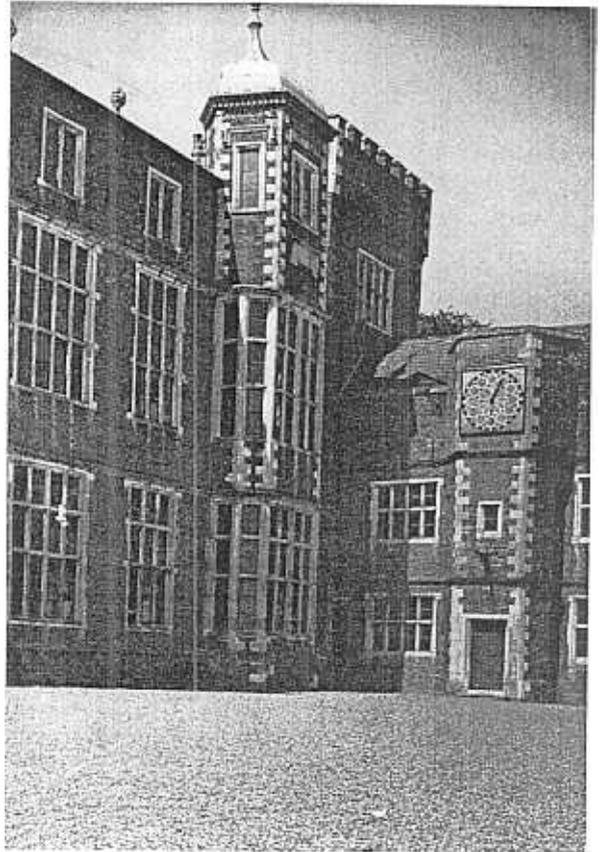


Fig. 5. — Burton Constable (Yorkshire). An English house endangered.

architect — not as an exercise in "styles" but as a deeper education in significance and form.

Teaching architectural history in the Schools might, it has been suggested, be linked wherever possible not only to the analytical study of style, but to the practical problems of re-using old buildings, and of strengthening them structurally and making them economically viable. There is much to be said for this view.

##### (b) *Collaboration in Specialist Research*

A *training in research* develops the enquiring frame of mind. Specialists include — the photographer, the genealogist or the archaeologist, the geologist or the historian. The conservator-architect needs knowledge to be able to define the problems, and to discuss them intelligently with the specialist. He needs a good working relationship with his fellow professionals — the valuer, the surveyor and the structural engineer. He needs the ability to work as one of team, and to collaborate to the best effect.

(c) *Survey*

Much of the success of the conservator will depend upon his skill in intense observation and analysis. "Measured drawing", as it was once taught in the Schools, was valuable in instilling just this discipline: no one for decades has written a study of historical detail as penetrating (albeit ill-presented) as Paley's "Gothic Mouldings".

Survey, it may be claimed, is merely "looking at a building". But the quality of the job is entirely a matter of painstaking, thorough, deep and observant searching — a searching into exact present form and construction, its historical derivations and its implications for the future. As Boswell understood his Johnson, so the surveyor must identify himself with his building until he feels he *knows* unerringly what it would do in any set of circumstances. Right and wrong in architectural conservation are rarely absolute. As in languages, they are a matter of usage. The chief skill of the expert may be in his depth of experience,

and his ability to call unerringly upon parallel examples, each intimately known and recalled, interrelated and applied.

This habit of detailed and penetrating observation distinguishes the expert, and is the chief aim of all training. It has been well said that skills of this kind can be "caught" rather than "taught". In this, individual and tutorial methods often achieve the most.

In addition, the conservator needs a thorough knowledge of practical survey techniques. The accurate measurement of buildings by constantly self-checking manual methods comes first. Then follows a knowledge of modern measuring and recording methods such as photography, photogrammetry and stereophotogrammetry.

Photography is a basic tool of recording, and it is said that "photography is a language". The conservator is always his own best photographer, since he knows exactly what the photograph is to say. The exact recording of each stage of a progressive restoration or

Fig. 6 — Wotton House (Buckinghamshire). Modern materials : a wooden cornice renewed in fibreglass after dry-rot.

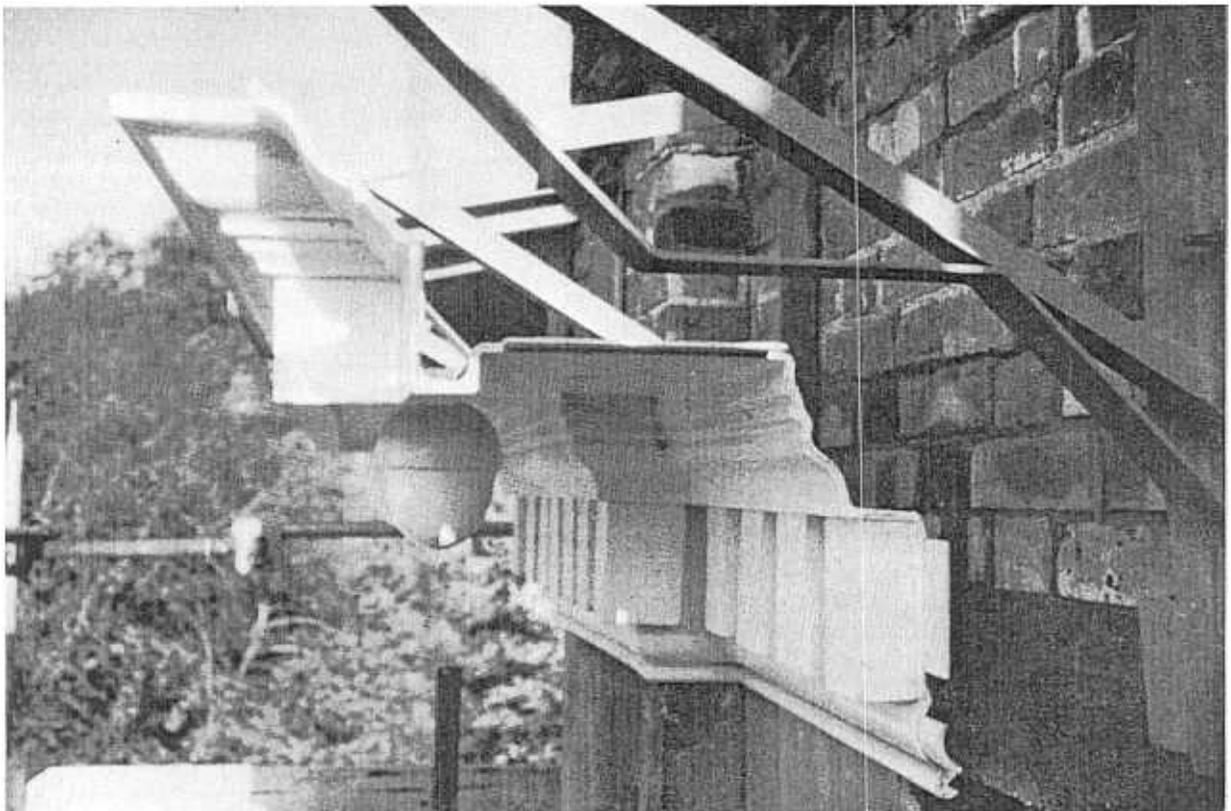
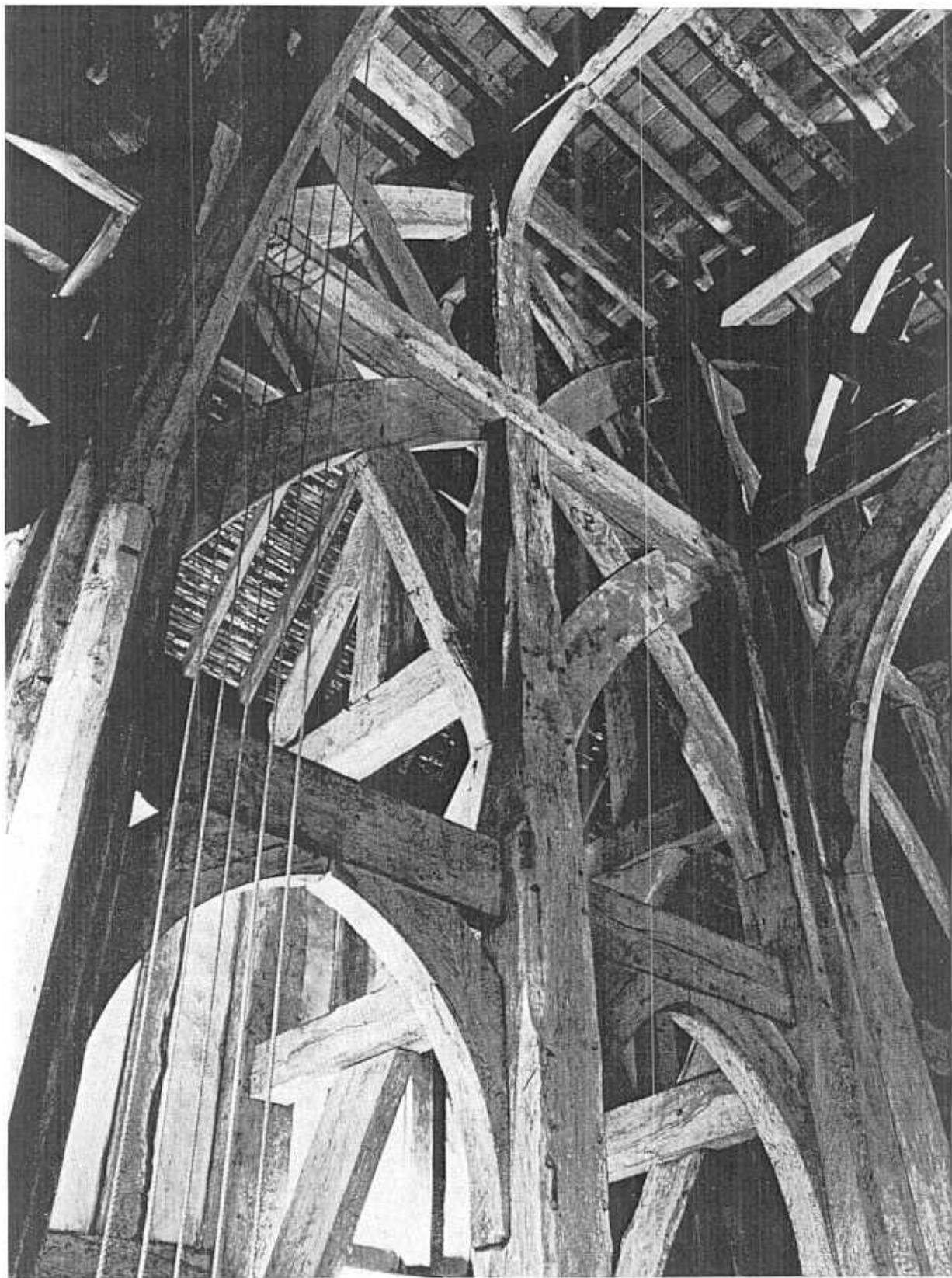


Fig. 7. — Blackmore (Essex). Timber constructions: Massive oak timbers of an English church tower, recently repaired.



repair job is a vital link in the chain of architectural evidence.

Photogrammetry and stereophotogrammetry are equally valuable tools, useful not only in their most sophisticated form, with prohibitively-expensive optical instruments, but in everyday simple forms like the plotting of stonework detail in a wall. Stereophotogrammetry can help to re-create lost and damaged parts of building, like the dome at our own Castle Howard, which was accurately restored by this means from old photographic records.

(d) *Diagnosis*

A detailed training in structural techniques and in failures, their diagnosis and repair, is a straight-forward matter. The traditional building trades follow the pattern of the basic building materials. Apart from the growth through time of architectural form, a thorough grounding in the historical development of building technique is as essential as a knowledge of conservation methods. This may be covered in items such as the following :

Fig. 8. — Trinity College (Cambridge). The Wrenn Library. Craftsmanship : Wood-carving in limewood.



— *Materials*

**Stonework :** geology of building stones. Quarrying and masonry techniques. Static and dynamic construction, walling, decoration and sculpture. Weathering and decay. Renewal, dentistry repair, chemical treatment and the availability of replacement building stones;

**Brickwork and Masonry :** clay building materials : bricks, tiles and terra-cotta. Traditional craftsmanship, bonding, mortars, weathering and decay, repair and renewal;

**Woodwork :** historical construction. Timber types in history and today. Felling, conversion and seasoning. Traditional carpentry and joinery design. Detail, paneling, carving, etc. Weathering, timber pests and fungi, methods of repair and strengthening;

**Roofing :** historical development. Thatching, tiling, slating, sheet metals — lead, copper, etc. Use and fixings. Repair and renewal;

**Glass :** history and techniques, including stained and painted glass and its conservation;

**Metalwork :** metallurgy and development in buildings : structural and decorative cast-iron, wrought iron, steel and non-ferrous metals historically and now, and repair techniques;

**Plasterwork :** development of lime and gypsum plastering and of decorative work, and its repair today;

**Paints and Decorations :** internal decorations, paints and protective and decorative finishes : methods of conservation.

— *Structural Movement, Consolidation and Repair*

**Foundations :** movement, inequality and structural adaptation;

**Live Structure :** the problems of "live" and vaulted structures, framed buildings and those designed to "give" like bell-towers or affected by special loading or vibration;

**Damp :** the prevention and eradication of damp and ancillary disorders;

**Fire Precautions :** means of prevention, detection and arrest. Structural discontinuity, and legal provisions for the escape of occupants, lightning conductors, installations, etc.

— *Special Studies*

**Gardens and Landscape :** historical development, gardening and management;

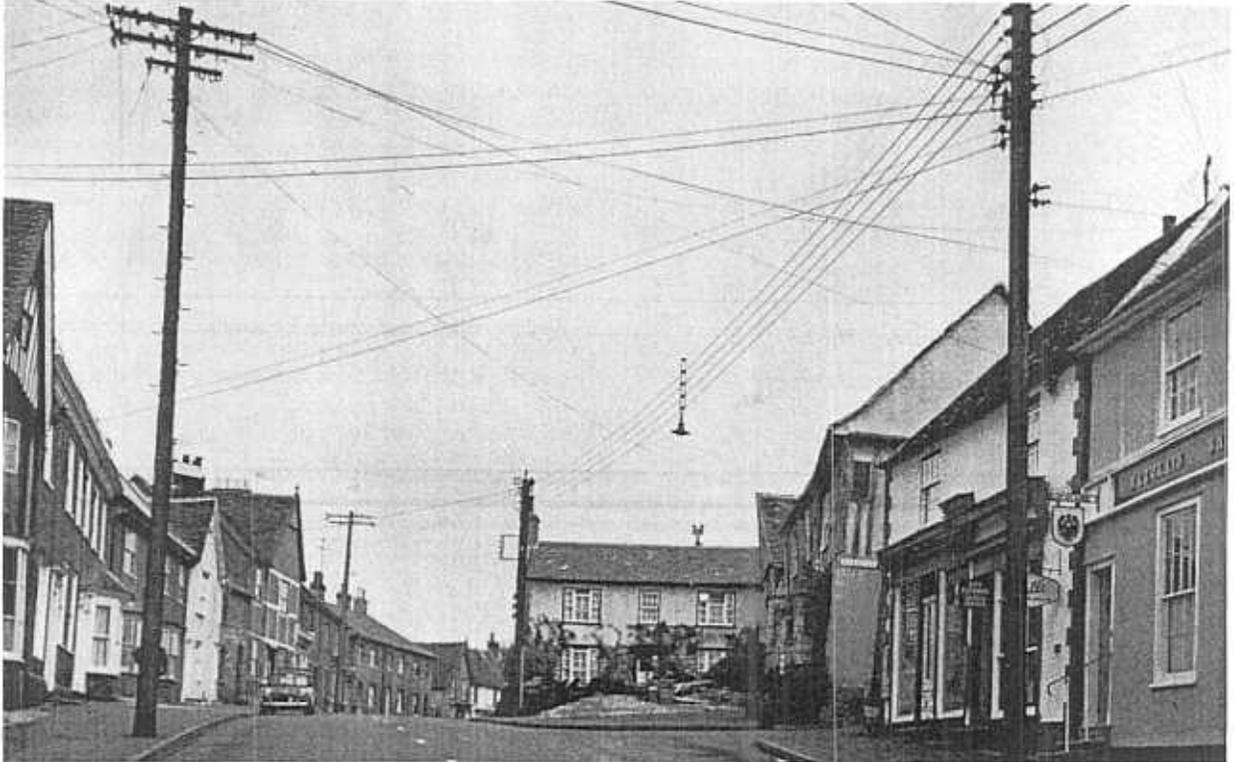
**Bell Ringing :** bell-frames, ringing techniques, casting and bell-care;

**Furniture :** co-operation with repair specialists;

**Wallpaintings :** history and conservation;

**Management :** houses open to the Public, Museums, display, taxation, staffing, daily maintenance and security.

Fig. 9. — Lavenham (Suffolk). An English village during improvement. Once marred by overhead wires; wires now reinstated underground.



(e) *Office and Site Experience*

A practical office and site experience is of great value in training. It should cover several forms of work, e.g. :

*Experience in restoration*

The full restoration of a monument to its original form is a task calling for special accuracy and detailed knowledge. It includes detective work in historical research and adept translation into modern materials.

*Experience in conversion work*

Adapting buildings to new needs calls for the analysis of its practical assets and debts, and their reorganisation to the best effect. Modern services such as electricity, heating and lifts will bring special problems.

*Experience in maintenance work*

The day-to-day care of buildings such as Churches and Cathedrals is a valuable object lesson in the phased

replacement of expended materials, and especially in the conservation of valuable original detail, like carved stonework and stained glass.

*Experience in manual work*

Actually handling materials on the site will help any architect to see every-day problems of organisation, labour difficulties, weather and programming by which a contractor is faced. Much misunderstanding would be avoided if every architect had experience of this kind.

*Communication - report and specifications*

But observation calls for another skill — that of communication. Able survey presupposes a subsequent ability to convey information, in written or verbally as in a report. Yet few architects in fact possess this ability trained in high degree. It is one thing to collect the facts, and another to be able to marshal, interrelate and re-present them in a balanced form for any specific purpose. Methods will differ. One way of describing

Fig. 10. — Wotton House (Buckinghamshire). An English house recently saved from demolition.



a building is by a sequential record of its historical development. Another is by a verbal perambulation, like a guided tour. Comment on actual or potential merits and faults may fall within this description, or may follow. The Report furthermore must be matched to those who will read it. It must distinguish and pursue its purpose whether to bring about a more balanced appreciation, or to assess defects and remedies, or to make suggestions for adaptation to changing circumstances. All this calls for a good deal of training and experience.

The communication of *instructions* to builders and craftsmen is next of supreme importance. Conservation work requires specification-writing of the highest order. The architect must stipulate the exact materials and methods, and envisage in intimate detail the sequence of actual building operations, the actual trades available, and their most economic use. He needs good architectural judgement in distinguishing, ever what may one day be significant, and must provide for endless unseen contingencies.

#### *Organisation and cost control*

Money for conservation is short. Indeed, too much money can even be an embarrassment, and a temptation to renew too much original work, with a consequent loss of character. Cost control in conservation work is the special, practical science of job management. Accurate estimating is difficult: and the architect must be able to work within a budget.

Architectural values are virtually as important as money. High on the list is the retention of original character. Once again, this may be irreplaceable. Many fine buildings throughout the world have been destroyed by over-restoration. One thinks of fine houses open to the public, with a dining-table but without any dining-chairs — an atmosphere of inhumanity and unreality. But as a dentist stops each individual tooth, so the identity of the stones and beams of a building can be given a maximum of life.

*Relative urgencies* of different repair elements may be a matter of sheer deterioration and its arrest. "Gallop-  
ing" decay increases at compound interest, and the

Fig. 11. — Blanchland (Northumberland). An English village recently surveyed and now under repair.

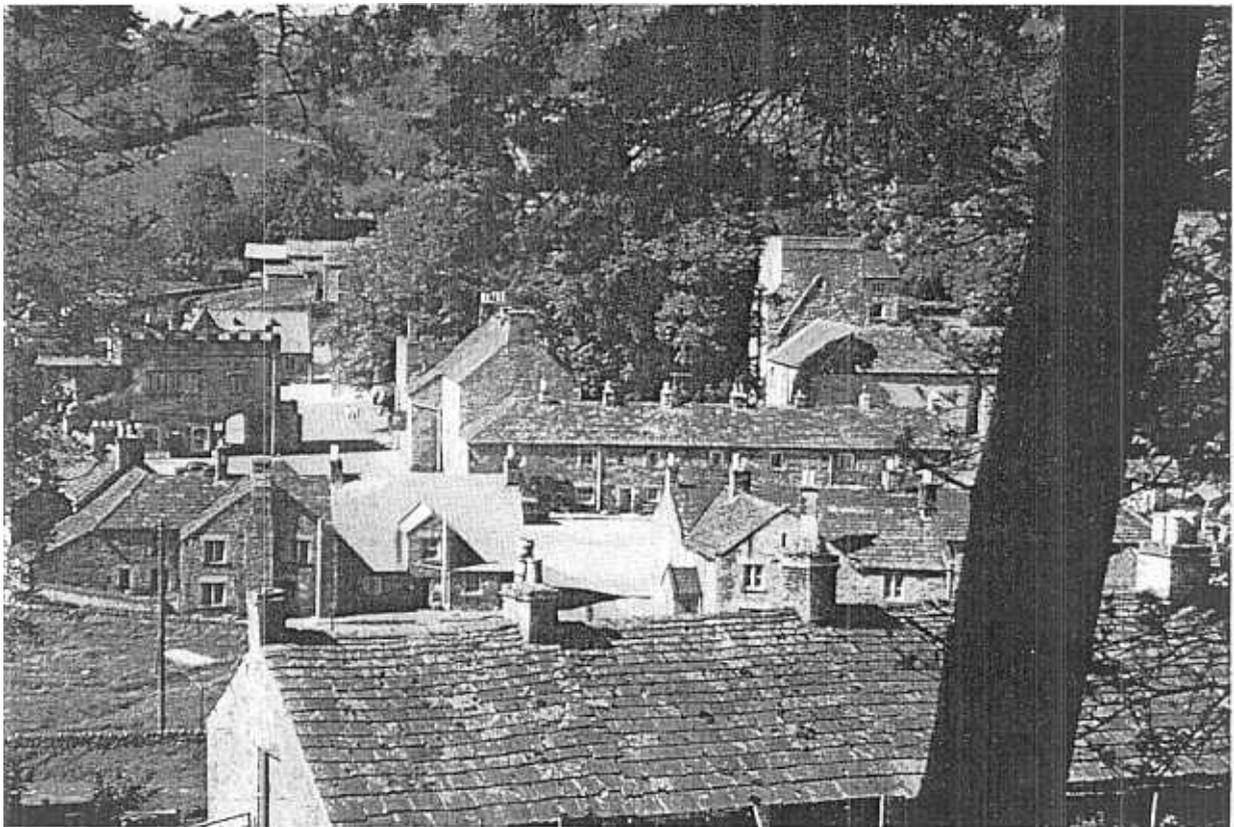




Fig. 12. — Belchamp Otton. A typical English country church, before and after interiors repairs.

emergency patching of a leaking gutter may decide the future of a building. Self-increasing defects claim first attention: but they may be in accessible. Some elements are less predictable in cost than others; and it may be logical to deal first with those whose cost is least known, holding back the more readily measured and costed items until the whole budget can be apportioned.

Methods of *cost control* vary considerably. Some architects are too pessimistic — most are too optimistic. The job then creeps and escalates in cost — sometimes out of all recognition. The best aim is to allocate budget elements from experience, working within these in a self-correcting allocation of available funds. But it is very hard to expect any newly graduated architect to have the "feel" for costs in such a highly developed degree. The more one thinks of the contrast between academic and practical experience, the more one sees how essential is the latter, and how difficult it is to train the sheepdog without an older dog to guide.

Above all this is so in contract administration, site supervision and cost control; and these are the fields in which the real battle is won or lost.

##### 5. *Training in town planning*

Not only in Europe, but in the Middle East and in America, the conservation of ancient towns, historic areas and groups of buildings is becoming a new science, with methods of its own. In Britain, this has been recognised in the commissioning of special *pilot studies* on behalf of the Minister of Housing, designed to develop new and adequate techniques of town survey and conservation. Actual *pilot rehabilitation schemes* are a natural next step, and these are already being undertaken on a wide and successful scale in France. In Britain again, the Civic Amenities Act now provides for the designation of Conservation Areas, for conservation and enhancement. Here a careful and realistic evaluation of the facts is essential, especially in

large and diverse areas of attractiveness and character. These surveys and these schemes will call for a great deal of professional expertise. Techniques of survey include not only traffic and commercial enquiries but architectural/historical and townscape surveys, and the individual and relative evaluation, indoor and out, of hundreds of older buildings.

Town survey and enhancement is in fact an inter-professional discipline, in which the best results are obtained by teamwork. The best rapport is reached when postgraduate courses draw together different disciplines in a single, combined training. This has only rarely been possible: a comparable example in Britain was the School of Planning and Research and Development, which largely under the influence of ex-service grants achieved so much during and just after the War. Would it not be an international effort to establish a Course on such a model, directed at the training of the urban conservation teams? In London and Rome, Ankara and Columbia, valuable courses,

by scholarship and otherwise, are already being run for architects, for ancient buildings. It would be a short step to extend these to the wider social, economic and traffic problems of towns; and it would seem a worthy aim of the International Union of Architects to promote and sustain this movement by every practical means.

There is so much to be shared in a world-wide exchange of views and methods, in the conservation of our international heritage of culture and environment, and especially of architecture.

Architectural training in the U.K. is co-ordinated by the Board of Education of the R.I.B.A. There are 33 recognised Architectural Schools: some of these offer facilities for students to specialise in their later years of training.

Under the Lethaby Scholarship, the Society for the Protection of Ancient Buildings trains 2 graduates each year, and also runs Refresher Courses of 1 week annually.

Fig. 13. — Trinity College (Cambridge). The Wren Library. Currently under repair (1969).



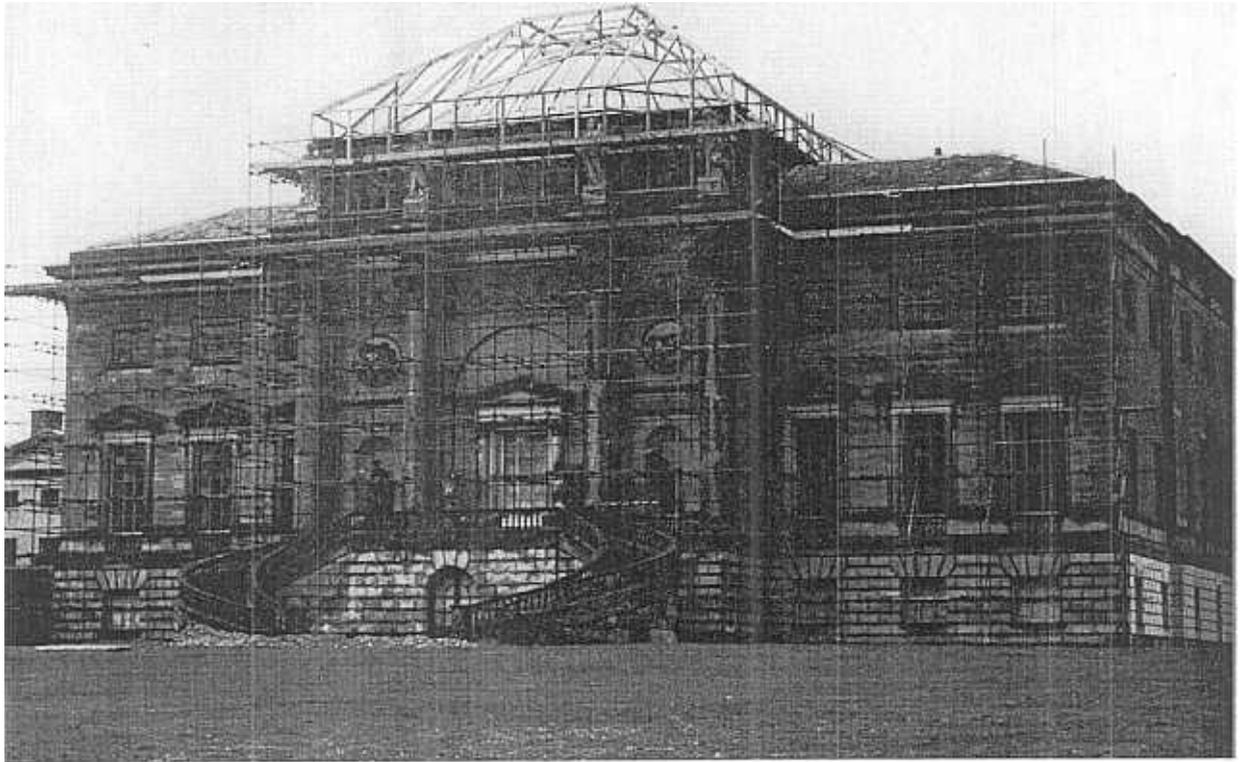


Fig. 14. — Kedleston Hall (Derbyshire). An English "Stately home" under repair.

A specialist postgraduate Course of 2 years is now held at the Institute of Archaeology in the University of London. The Standing Joint Conference for the Recruitment and Training of Architects promotes Introductory Day Courses for Students.

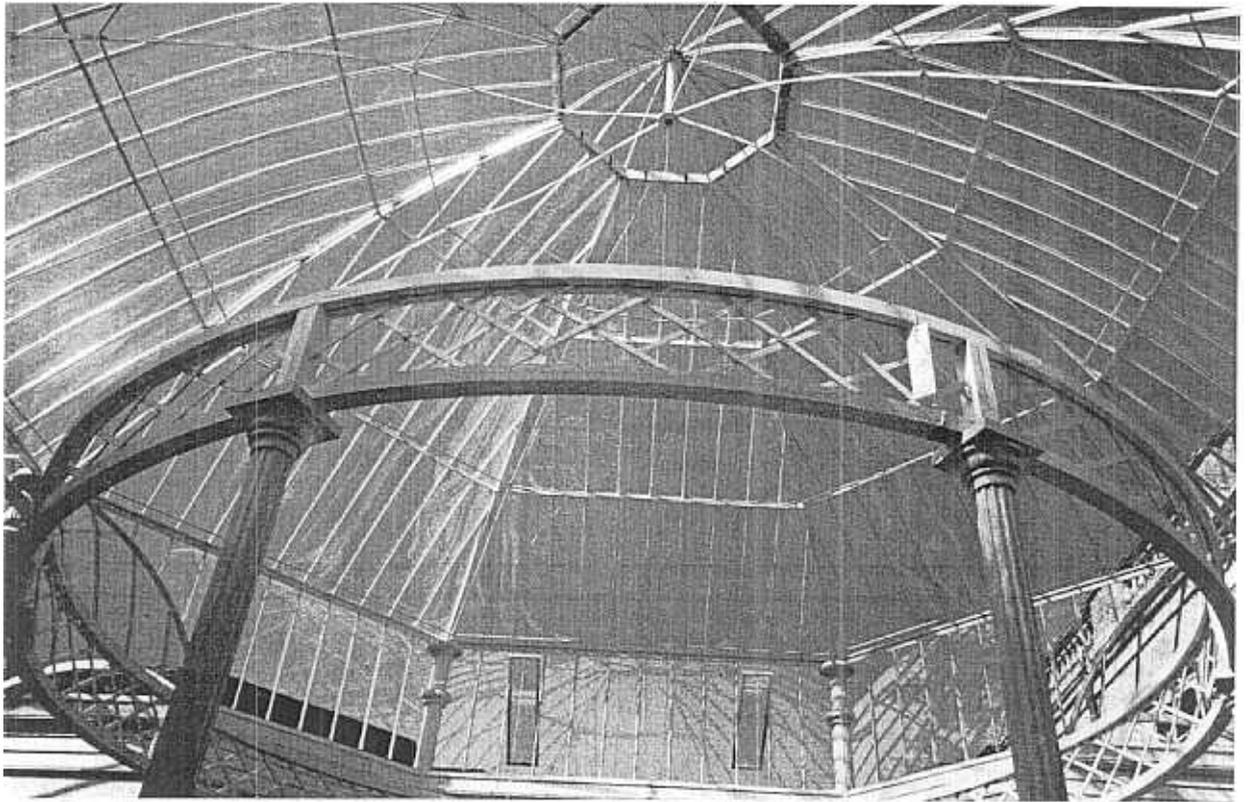
Many historic buildings in the U.K. are in private ownership: others are owned by the Nation. The Government and larger Local Authorities have special Architectural Departments in charge of historic buildings. Government Grants are available to private owners, who generally commission private architects and building contractors. So do Churches, each of which must be inspected every 5 years.

Four Historic Towns (Bath, Chester, Chichester and York) are currently the subject of specialist Pilot Reports commissioned by the Government.

David INSALL,  
International Union of Architects  
(London).

Fig. 15. — Came House (Dorset). A 19th-century conservatory. Recently repaired in modern materials.

Fig. 16. — Boston Manor (Brentford). A house restored near London and reopened by H.M. the Queen Mother (1962).



## RESUME

### SPECIALISATION DES ARCHITECTES QUELQUES RECOMMANDATIONS

*La Société impose aux architectes trois niveaux distincts de connaissance et de savoir-faire professionnels. Il y a, tout d'abord, le niveau terre-à-terre de ce qu'on pourrait appeler l'architecte-praticien, qui, tout comme le médecin de famille, est généralement le premier à examiner le « malade » et aura donc besoin de connaissances étendues lui donnant un jugement équilibré. Il doit savoir évaluer et analyser l'« état de santé » d'un édifice existant, compte tenu de ses conditions de vie et des services qu'on peut lui demander de rendre, et doit savoir effectuer des traitements simples et apporter des remèdes immédiats, y compris au moyen d'interventions chirurgicales simples.*

*Ensuite, tous les pays ont besoin d'architectes dont les connaissances sont plus approfondies parce que plus spécialisées. L'architecte spécialiste (par exemple, dans le domaine des édifices historiques) peut faire appel à une expérience pratique plus riche dans un champ d'activité plus étroit. Il saura, par exemple, obtenir d'un maçon occupé à rejointoyer une façade en pierre et à y pratiquer des injections qu'il n'étale pas son mortier comme s'il beurrerait des toasts. Il sait jusqu'à quel point il peut s'attaquer à un cancer sans tuer le malade.*

*Il existe, enfin, l'expert hautement spécialisé qui se consacre à un aspect déterminé des différents problèmes de la construction. Ses connaissances seront encore plus approfondies et plus étroites que celles de l'architecte spécialiste, et peuvent être le résultat d'une expérience acquise dans de nombreux pays différents. S'il croit connaître complètement son domaine, il se trompe; mais c'est pourtant lui qui pourra apporter la contribution la plus grande, avec le degré de détail voulu, en matière de peinture murale, par exemple, ou de réforme litur-*

*gique des différentes églises, ou d'exécution de relevés de zones historiques et de leur rénovation.*

*Or, à chaque échelon de cette spécialisation de nouveaux besoins sont à remplir à l'heure actuelle et de nouvelles possibilités sont à exploiter.*

*Dans le cas de « l'architecte praticien », une importance accrue devrait être accordée, dans la formation professionnelle courante, aux techniques traditionnelles du bâtiment, qui en fait ne servent plus pour la construction actuelle de tous les jours. Le meilleur moyen d'acquérir ce genre de connaissances est l'expérience directe des travaux de réfection. Dans ce domaine, l'UNESCO pourrait aider en insistant auprès des associations professionnelles des pays membres pour qu'elles se penchent spécialement sur la question.*

*Quant aux architectes spécialistes, ceux dont le domaine est la conservation des édifices ou un sujet analogue, ils ont besoin dans l'immédiat de pouvoir profiter de bourses d'études et de cours de formation plus nombreux et améliorés, dans le genre de ce qu'offrent les excellents programmes-pilotes récemment institués à Londres et à Rome et, tout dernièrement, en Colombie et à Ankara. Un financement plus généreux doit être trouvé pour ses cours, qui ont besoin d'être plus généralement reconnus, de manière à ce que les diplômés qui les sanctionnent confèrent un plus grand prestige.*

*L'UNESCO peut ici à la fois apporter une aide directe et appuyer toutes les démarches qui pourront être faites auprès des grands fonds internationaux, de même qu'elle peut promouvoir la mise en commun des sources d'expérience pratique, dans le but d'élargir les connaissances de chacun.*

Enfin, les experts hautement spécialisés pourront tirer un profit considérable de l'échange à l'échelle internationale d'idées et de connaissances, à l'occasion de travaux tels que la restauration des églises toscanes, à laquelle nous assistons. L'exposition de 1968 organisée à Pistoia contient, en effet, de nombreux documents qui pourraient utilement être condensés et reproduits, voire même publiés par le Centre de Rome, moyennant un

élargissement de son programme de publications. Un film international présenté à la télévision produirait, par ailleurs, une impression exceptionnelle, même si sa projection ne dépassait pas un quart d'heure. Nous espérons qu'il pourra s'avérer possible de réaliser un tel projet, de manière à faire partager par d'autres l'expérience spéciale acquise par nos hôtes, hôtes que nous tenons aujourd'hui à remercier si chaleureusement.

Fig. 1. — Boston Manor. Tapisserie de papier peint à la main retrouvée en cours de restauration.

Fig. 2. — Boston Manor. Panneau décoratif restauré avec grande attention.

Fig. 3. — Thundersley, St-Pierre. Problème architectural délicat de l'adjonction d'une nef moderne à l'église paroissiale du XIV<sup>e</sup> siècle.

Fig. 4. — Lavenham. La place du village après la disparition de bâtisses gênantes.

Fig. 5. — Burton Constable. Une demeure anglaise menacée.

Fig. 6. — Wotton House. Un matériau nouveau : corniche de bois vermoulue refaite en fibre de verre.

Fig. 7. — Blackmore. Construction en bois : charpenterie en chêne massif de la tour de l'église, récemment remise en état.

Fig. 8. — Cambridge, Trinity College, bibliothèque de Chr. Wenn. Artisanat : sculpture dans le bois.

Fig. 9. — Lavenham. Village anglais, avant et après la pose souterraine des fils.

Fig. 10. — Wotton House. Une demeure sauvée récemment de la destruction.

Fig. 11. — Blanchland. Village anglais répertorié récemment et en cours de restauration.

Fig. 12. — Belchamp Otton. Intérieur typique d'église rurale, avant et après restauration.

Fig. 13. — Cambridge, Trinity College, bibliothèque de Chr. Wrenn. Projet de remise en valeur (1969).

Fig. 14. — Kedleston Hall. Home en cours de restauration.

Fig. 15. — Came House. Conservatoire du XIX<sup>e</sup> siècle, restauré avec des moyens modernes.

Fig. 16. — Boston Manor. Demeure remise en état et réouverte en 1962.