

R. GILYARD-BEER  
INTRODUCTORY LECTURE

It is a matter of common agreement that one of the most significant developments in the study of antiquity during our life-time has been the remarkable advance made towards the perfection of excavation as a scientific archaeological technique. Only a century ago excavation was still a rather haphazard affair of digging up pottery, other small finds, and the foundations of long-vanished buildings, and of speculating on their probable significance in history; in some countries an affair very largely left to the leisured amateur. In our own time it has become a discipline requiring training as well as talent, paying scrupulous attention to the stratigraphical context of what may be found, often recovering much of the historical sequence of events on a site by the aid of stratigraphy alone without the assistance of datable objects, and benefiting year by year from its association with several branches of science.

Many countries have played a distinguished part in this advance, but perhaps I may be forgiven here for recalling the name of a notable pioneer in the field who was also the first Inspector of Ancient Monuments in Great Britain — General Pitt Rivers, widely regarded as the father of scientific British archaeology, a man whose work and whose standards of recording and publication keep even today a validity that cannot easily be matched.

From the work of Pitt Rivers in the latter part of the nineteenth century to the work of the foremost practising archaeologists of today may seem a long step yet they are in fact all representatives of the same tradition of controlled research at different and increasingly accurate stages in its development. To the typological studies of artifacts, borrowed long ago by archaeologists from the armoury of the students of the principles of human evolution, there are now being added an increasing number of more mechanical aids to the dating of strata, aids provided by the development of science. We are all familiar with the light that has been thrown on the provenance and distribution of prehistoric implements by petrological analysis; we are familiar with the uses of pollen analysis, dendrochronology and other techniques as a means of dating deposits remote in time, and with the methods, only some fifteen years old, of dating organic material by its radio-carbon content. Some of these methods still produce approximations rather than precise answers, but we can look forward to increasing accuracy as they are developed and perfected.

All this is common knowledge, and I mention it only to express the hope that during this Congress we may perhaps hear of new and significant developments on these lines. What I wish to suggest more particularly in this introductory speech is that we may profitably concern ourselves not only with the existence of this knowledge and its effect on the conduct of excavations, but also with the general principles of excavation in the field.

The title and aims of this Congress ensure that all gathered here are interested in the investigation or the conservation of historical monuments, and there may be times when these two interests do not seem to be quite compatible, leaving a problem to be resolved. At the first Congress in Paris in 1957 the relationships between architects and archaeologists were studied in a stimulating and valuable paper by M. Stym Popper under the distinguished presidency of Professor Orlandos. With this sound foundation already laid, I would suggest that we may extend our discussions and study from the personnel involved to the disciplines they practise; in fact to the practical relationships between historical architecture and archaeology, and specifically to the relationships between the conservation of historical structures and their investigation by excavation.

It has often been said that excavation is destruction. This was well expressed by Professor Piggot in a recent book when he wrote: "The excavator bears a very heavy burden of responsibility: as he excavates, he does in fact destroy the site he is investigating and, apart from the actual portable and removable objects he recovers, the essential circumstances of their finding will only survive in the form of his records." Needless to say, this destructive aspect of excavation does not spring from any antagonism towards conservation on the part of the excavator himself, and the meticulous care with which the "portable and removable objects", in Professor Piggott's phrase, are recorded and preserved is sufficient proof of this. It is destruction that is inherent in the methods of removing or penetrating strata in order to record their sequence and to explore their relationships. The degree to which it may influence the preservation of structures varies from site to site.

Excavations are undertaken for different practical reasons. There are the campaigns carried out by universities for the purpose of training archaeologists in the field or for pure research not necessarily allied to the permanent preservation of features on the site being excavated. Since the war we have all become familiar as well with excavations carried out to win information from sites of varying archaeological importance before their redevelopment to suit modern needs. But the type of excavation on which I should like to dwell, because it concerns many of us closely, is the excavation of a site that is destined to be preserved in perpetuity as a national monument.

These are quite artificial categories, and experience shows that they need not be mutually exclusive. For example, at Corbridge and Wroxeter in England the Departments of Archaeology of the Universities of Durham and Birmingham respectively have for some years conducted schools for the training of field archaeologists on the sites of the Roman towns of Corstopitum and Viroconium, both of which are national monuments in the care of the Ministry of Public Building and Works. On these sites the excavators pave the way for the consolidation work of the Ministry by uncovering and investigating the stratigraphical context of the structures to be preserved, whilst at the same time they train their students in practical field work and greatly enrich our knowledge of the sites. Similarly at Portchester Castle in Hampshire excavation preparatory to erecting a minor modern building revealed the presence of a Roman gatehouse, with the result that the gatehouse will be fully exposed and preserved whilst the modern building will be placed elsewhere. Nevertheless it remains true in general to say that excavation and the preservation of structures can only be achieved together by delicate co-ordination of effort and intent, and that our aim should be the fullest possible excavation

of a site that is compatible with the interests of posterity.

One of these interests must clearly be the survival of those structures that have a lasting aesthetic and historical value. To take an extreme example, beneath several of the cathedrals and churches of Europe there are known to lie the remains of their predecessors — remains often incompletely explored because of the presence of the buildings above them. Desirable though it may be in the interests of pure research to complete the investigation of these earlier remains, I do not think that even the most ardent excavating archaeologist would contemplate the demolition of the Cathedral of Reims or Lincoln to achieve this end. Not only would this mean the loss of outstanding works of art but in the narrowest sense it would mean the destruction of archaeological evidence of equal or greater importance than that which might be won by further excavation.

For the elevation of a standing building has as much archaeological content as the plan of a destroyed building recovered by excavation after centuries have passed, and it is as much a rewarding typological study as the pottery and small objects recovered from such an excavation. It constitutes evidence of the achievement of the past that is wholly as significant to our proper understanding of that past as the evidence derived from excavation itself.

Beyond this, it has a peculiar value denied by circumstances to evidence derived from excavation alone. To quote Professor Piggott's words again: "the amount of reliance that can be placed on the evidence derived from an excavation is in direct proportion to the competence and skill of the excavator", and one might add that it would be quite unfair to assess the skill of the excavator without taking into account the techniques available to him at the time of the excavation. An excavator working in the nineteenth century cannot be regarded as incompetent because he lacked the scientific aids of today. Remembering this, we can say that the peculiar value of a standing structure is that the evidence it contains can be studied by future generations with increasingly better equipment; it can be critically examined time and again to the increasing benefit of posterity so long as it continues to exist. We do not depend for our knowledge of it on the written record of a single examination at a given point in time. It shares this value with the "portable and removable objects" of Professor Piggott's phrase, those small finds that remain in the museum as material evidence, and that have a lasting value because their preservation will permit the scholars of the future to re-assess their significance in the light of wider experience.

This is not to decry the value and effectiveness of excavation where, as I have already said, progress in recent years has been as spectacular as that in any other branch of historical study. Rather it is intended as a plea for the full and careful integration of excavation with its sister disciplines of architectural and documentary research, so that all the available resources of scholarship may be brought to bear not only on the immediate investigation of the problems connected with sites of archaeological interest and architectural importance to the best of our present ability, but also on the preservation of such parts of those sites as will be of permanent value to our successors equipped, we may hope, with more subtle methods than we possess today.

There is ample proof that excavation of this kind is essential to the proper understanding of a site. We have all seen the remarkable results obtained by the excavation of the sites of war-damaged churches in several countries and we all share in the increased knowledge this has given of the continuity of occupation

and sometimes of the reasons underlying that continuity. To take other and less spectacular examples, later in this Congress I hope to offer a short paper on this theme, dealing with the recovery and with the preservation of various features of a fourteenth-century house beneath its successor which is still in occupation, features without which the plan and parts of the structure of the occupied building would not easily be understood. One also remembers the apparently illogical behaviour of some property-boundaries within the City of London, the reason for which only became apparent when excavation showed that these boundaries still preserved, after a lapse of more than fifteen hundred years, the memory of an even more emphatic division of property, the defensive wall of Roman Londinium and its projecting bastions.

The opportunity and the need for excavation declare themselves in many ways. In illustrating some of these I will confine myself to English examples, although the principles and the practice could equally well be illustrated from other countries.

One of the most familiar types of excavation on a standing monument is that devoted to recovering the foundations of the missing parts of the structure. It has been extensively practised in the past on our ruined castles and abbeys, and the resultant plans have been marked out on the ground. It has proved particularly useful for indicating the course of former walls represented below ground only by robber-trenches, and for marking out wooden structures that have survived only in the evidence of their post-holes. There are cases in which it can serve to mark the lines of low walling built of soft or friable masonry that will not survive the normal changes of climate for any appreciable length of time. By these methods the surviving buildings of Rievaulx, Byland, and many others have been related visually to the complete plans that are their true historical setting.

Often this involves not only the study of the complete plan and the stratigraphy that may assist in dating it, but also the study of the relationship of the structure to the site it occupies. This was demonstrated recently at Farnham Castle in Surrey, where surface evidence had long suggested that the shell-kepp of the castle enclosed an earlier moat or Anglo-Norman castle mound. Here excavation proved and dated the addition of the encircling shell-wall to the mound, whilst at the same time it showed unexpectedly that the mound had been built to support a strong stone tower instead of the more usual timber defences. The foundations and well-shaft of this tower descended through the mound and into the natural ground surface beneath it, and through this excavation it has been possible to mark out the plan of the tower on the platform of the mound and to make accessible the chambers and well-shaft within the mound itself. An allied exercise in excavation at the small castle of Lydford in Devon has shown that here a mound was added outside the base of a stone tower, producing a surface effect not unlike that at Farnham but by a quite dissimilar sequence of events. We may hope that, when excavation takes place, a more dramatic example of this relationship between a building and the site it occupies may be forthcoming from Knowlton in Dorset, where the Ministry of Public Building and Works has taken into its care the ruins of a small and indistinguished medieval church standing in the centre of the earthworks of a typical henge-monument. The potential importance of excavation of this site, where surface indications point to religious use both in prehistoric and in medieval times, needs no emphasis.

Equally familiar and closely allied to these examples are the excavations devoted

to unravelling the details of the predecessor of a structure that still survives above ground. I have already referred to these in passing, and it will be sufficient if I cite as an additional example the plan of the first church of the Cistercian abbey at Tintern in Monmouthshire, determined by excavation and now marked out on the floor-level of its ruined thirteenth-century successor.

Nor is it only in the interpretation and dating of structural and stratigraphical sequences that excavation is essential to the full understanding of a monument. It can, by recovering from stratified levels small objects of everyday use and by displaying them under suitable conditions on or near the site, illustrate the life of past generations and transform an architectural shell into a living document in stone. Three simple objects, all found at the great Cistercian monasteries in the north of England, will serve to point the moral. The first is a meat-cleaver, found during the excavation of the early sixteenth-century abbot's kitchen at Rievaulx Abbey a few years ago; a most appropriate reminder of how the restrictions on eating flesh were relaxed in some monastic orders during the later middle ages. The second and third objects were both products of the excavation of the chapter house at Byland Abbey. One was the stone base of the portable lectern from which the daily chapter of the monastic rule was read, giving the room its name. The other was the large earthenware inkwell and penholder which we may guess was used when the deed of surrender was signed in 1539 as a prelude to the dissolution of the abbey and the demolition of its buildings. It would be hard to think of two simple objects, taken in the context of the room in which they were found, that could be more evocative of the alpha and omega of medieval monasticism in Britain — the basic purpose and the final act in the corporate life of a convent.

Another by-product of excavation is the evidence it may produce for limited reconstruction of the fallen parts of a monument. Here it must of necessity be used with caution, for reconstruction on these grounds, considered purely as evidence for posterity, has the same limitations as the published report on a site destroyed in the course of excavation, and like the report it reflects the talent and capacity of the excavator and the techniques at his command at a fixed point in time. Its advantages to contemporaries, especially in the field of education, are obvious, and one may cite as an example the conservative works of reconstruction based on the recent excavation at West Kennet which have made this prehistoric burial mound far more intelligible to the layman.

Turning from the need for excavation to the opportunities that arise for carrying it out, the work of consolidating a standing structure often creates these opportunities. To trench along the base of a wall in order to consolidate its foundations is recognised to be a disastrously effective means of divorcing that wall from its stratigraphical context, and therefore is nowadays accompanied by controlled excavation. Similarly the laying of new floors on a solid base within an old building provides opportunities for area examination. All this calls for close collaboration between the excavating archaeologist and the architects and technicians in charge of the structural works, and for mutual understanding of the problems on both sides. Collaboration of this kind has ensured that the raising of the fallen stones at Stonehenge has been accompanied by skilled excavation of their stone-holes, and the ability of today's technicians to provide this opportunity by lifting the stones is in itself a pointer to increased opportunities at other sites in the future, as the techniques of lift-engineers and structural-engineers progress.

Consolidation work also provides unrivalled opportunities for a more detailed examination of the archaeological aspects of a standing structure than is possible at any other time, and for employing methods familiar to the excavating archaeologist in such an examination. For instance, mortar analysis, so often used below ground, has shown that the upper storey of part of the claustral buildings at Rufford Abbey in Nottinghamshire was rebuilt in the fourteenth century, despite the fact that the building stones used in this work were of twelfth-century date. The interval between the removal and replacement of the facework on the upper parts of the walls of the keep at Castle Rising in Norfolk has enabled the beam-holes of an earlier roof to be freed from the later medieval mortar that blocked them behind the face, and they have been recorded in detail. Nor was it until the timber superstructure of the north tower of Stokesay Castle in Shropshire was undergoing preservative treatment that detailed examination proved it to be essentially of thirteenth-century date.

In this collaboration between archaeology and architecture we may look forward to the continued development of techniques that will enable the archaeologist to determine in advance, with growing accuracy, the areas of a monument most likely to yield results to the spade, so that his programme of excavation can be more closely related to the architect's programmes of structural work before the ground is disturbed by either. Since the time of the first world war we have benefited by the use of air-photography as a means of identifying and plotting buried structures under suitable conditions of lighting and differential growth of vegetation. Parallel advances are now being made by using electrical resistivity surveys and by the development of the proton-magnetometer. These and similar methods will help the archaeologist to predict to an increasing extent the likely impact of his future discoverers on the standing structures that are of interest to the architect.

They will also be of assistance in assessing whether specific areas of certain sites that might best be left unexcavated for the present. Our predecessors, working in the days when excavation technique was in its infancy, inevitably passed over and destroyed evidence that a modern director of excavations would recognise and record as a matter of course. This, coupled with the rapid development of techniques, has for some time suggested that it is prudent to leave parts of our most significant archaeological sites undisturbed so that future generations, better equipped than ourselves just as we are better equipped than our predecessors, may have the chance of adding precision to our own discoveries.

Excavation and consolidation, although they may appear superficially to have different aims and sometimes to be a little antagonistic to one another, are therefore in reality closely allied and each, when used with discretion, is capable of aiding its partner. Both are necessary if we are to understand our monuments and if we are to transmit to posterity the message enshrined in them, be it above or below ground. In our own lifetime both have become increasingly professional matters, and with the invention of ever more complex and demanding techniques the day has come when it may no longer be possible even for the professional to make himself a master of all the disciplines involved. It is therefore all the more desirable that we should familiarise ourselves with the principles and aims of sister disciplines so that we can judge their needs and provide them with their opportunities.

It is for this reason that I shall offer only the briefest comment on the

scientific treatment of objects recovered from excavations, in that my own experience does not lie in this sphere. Here again, recent years have seen impressive advances, and it is my hope that we may hear something of them during the sessions of this section of the Congress. The subject is now a highly technical one, the province of the scientist able not only to make full use of existing methods but also to evolve new ones through his own research. As an indication of the importance attached to it by archaeologists it is enough to say that the Gold Medal of the Society of Antiquaries, the most cherished award in English archaeology, was this year given to Dr. Plenderleith, formerly Keeper of the Research Laboratory of the British Museum.

In these introductory remarks on such a complex subject as archaeological excavation and conservation it has not been possible to do more than rehearse some general lines of thought, in the confident expectation that the distinguished scholars present here will clothe these generalisations with substance. The aspect of our studies to which I have given most attention is the integration of excavation and consolidation, and if some of the examples chosen by way of illustration have seemed minor and local in their significance it is because no one knows better than the archaeologist that truth resides in small matters as well as in large ones, and our common aim is to search after truth and to transmit it to our successors — an aim so well expressed long ago by Miguel de Cervantes that his words might be taken as a motto for the excavating archaeologist as well as for the historian:

“habiendo y debiendo ser los historiadores  
puntuales, verdaderos y no nada apasionados,  
y que ni el interés ni el miedo, el rencor  
ni la afición no les haga torcer del camino  
de la verdad, cuya madre es la historia”.

R. GILYARD-BEER  
CONFÉRENCE INTRODUCTIVE  
RÉSUMÉ.

*Le développement des fouilles archéologiques comme technique scientifique a été l'une des caractéristiques les plus significatives de notre temps pour l'étude de l'antiquité.*

*Au premier coup d'oeil la destruction inhérente à la pénétration des couches, afin d'établir leur contenu et de l'examiner, peut apparaître contraire au programme de conservation des monuments. Mais si les fouilles archéologiques sont soigneusement faites, ainsi que la recherche architecturale et documentaire, on peut garantir, non seulement que les problèmes immédiats d'un site sont examinés au mieux, mais aussi que, vraisemblablement, les caractéristiques qui ont une valeur permanente historique sont préservées pour leur transmission à la postérité.*

*Une étroite collaboration entre archéologue, architecte et historien doit exister à chaque occasion de fournir quelque chose aux autres, car il est essentiel que le message tout entier conservé pieusement par nos monuments nationaux soit transmis à nos successeurs.*