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THE ARCHAEOLOGY OF BUILDINGS

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Introduction

What is the Archaeology of Building?

Relatively little attention was paid in the original Ove Arup Study to the archaeological potential of the secular buildings of York. This was in spite of the fact that the City demonstrates in its historic fabric an uninterrupted span of English architectural history, beginning with the tenements at Our Lady Row of 1316, and running through to the City's first Council housing at Tang Hall in 1923, supplemented and adorned along the way by the higher status churches, halls and gentry houses and major civic and communal buildings.

The original research framework went no further than c.1500 in its recommendations for research topics to which standing buildings could contribute. Generally, these focussed on land use and settlement patterns, and though the organisation of medieval households is included as one aspect of these, there is no recognition of the much wider range of research topics to which a study of medieval houses could contribute. Standing buildings can provide us the same sort of information as conventional archaeology of the sort discussed in Richard Morris' paper containing recommendations for the original framework for the medieval period (Morris 1991). But because so much more of their historic fabric survives *in situ*, and the investigation of the historic fabric of a building is far less destructive than archaeological excavation, standing buildings of all periods can tell us more than demolition and excavation.

The City's unbroken span of historic buildings can be used to demonstrate how increasingly sophisticated lifestyles are reflected in parallel with practical advances in building materials and domestic technology. An architectural approach to the analysis of buildings puts lives into standing buildings, and associates people and buildings with excavated artefacts, to offer evidence of the way in which lives were lived in and amongst them. It is an approach which can be applied to buildings and artefacts through later periods extending even to living memory as demonstrated by the oral history gathered for the archaeology of the Hungate dig.

Nor should this field of research be restricted to the City. Most of York's surrounding villages retain the architectural evidence of their history in their built environment, albeit on a smaller scale than in the City. But when set in the context of analysis of neighbouring settlements, investigation can contribute a great deal of comparative evidence to the wider study of vernacular buildings in the region. In turn, this will add to information about the way lives were lived in a rural environment, and to the relationship between the urban environment of the City and the villages of its hinterland.

Types of Research Material

Investigation and analysis of the fabric of buildings will yield information about building type and plan form, and the physical context for the lives of their occupants, their social status and degree of wealth. Besides such architectural analysis, the commentary of documentary sources, where available, increases considerably the potential range and subtlety of archaeological enquiry. The written record in the form of wills and inventories will amplify and aid understanding of the wealth and possessions of their occupants as well as their possessions, and the kind of tools and implements available to them, perhaps found as artefacts of conventional archaeology. Parish records, early street directories, estate records, and for more recent investigations, newspaper reports and oral history accounts will bring a human dimension to research, and set buildings into a functional context.

York is favoured with a wealth of documentary and photographic material to illuminate and complement archaeological research of any kind. These are held in a number of collections in the City, such as the City Archives, the Borthwick Institute, the York Archaeological Trust and the University of York. Additionally, between 1972 and 1981 four volumes of the encyclopaedic record of the historic buildings of the City of York were published by Royal Commission on the Historical Monuments of England (RCHME). Their purpose was to provide an inventory of historic buildings through detailed architectural descriptions recorded under headings which included building type and plan form, construction method, materials, interior features, and services. It was recognised in the Ove Arup Report that while the volumes were extensive they were not comprehensive (Morris 1991, para. 4.7.2 (3)).

During the 1990s, the Statutory List of Buildings of Special Architectural or Historical Interest for York was revised, building on the Royal Commission Inventories. In the process, RCHME records were sometimes supplemented, updated and amended by the addition of information about subsequent loss of historic fabric or, conversely, about features which had come to light later. In the Statutory List format the headings of the RCHME records were expanded to include additional information about supplementary or ancillary features, historical notes and documentary sources where available.

Opportunities for Investigation

The possibility of the complete archaeological investigation of any building in the City or the villages will vary according to the circumstances providing an opportunity. It appeared to be accepted in the original Arup Report that there may be an occasional opportunity to excavate completely one whole tenement (Morris 1991, para.4.7 (vi)), an observation which would tend to imply acquiescence to the total demolition of the building. At the present time, unless as a result of an Act of God, an opportunity of this kind is unlikely to occur in York where virtually all historic buildings are included on the Statutory List and permission for their demolition almost unheard of. The most complete building analysis will usually only be possible when a site is proposed for major alteration and refurbishment when it is likely to be the subject of a major planning application. In such circumstances, the submission of an Historic Building Assessment report is likely to be required, to enable a Statement of Significance to be provided to justify the application. Where more limited examination is possible, close investigation of its fabric will nevertheless be informative and much less destructive, and will add to thematic evidence of, for example, comparable building types, timber framing techniques and so on.



Illus. 1. Jacob's Well, Trinity Lane, Micklegate, dated 1474.

Jacob's Well in Trinity Lane demonstrates the information that may be revealed through a complete building analysis given the right circumstances. In 1991-92 the building underwent a major restoration including the unprecedented demolition of an added top floor, providing the opportunity for a detailed analysis of the building to be carried out. A full historic building record was produced covering building type, form of construction and materials, and architectural description inside and out. It is a baseline building, dated, and supplemented by brief notes as to its origins and purpose, through documentary research by a church warden at the time of its restoration.

This paper will set out what can be achieved by research into the form and function of these buildings, supplemented by the finds of conventional archaeology like those uncovered at Hungate and discussed in Section 7 of Paper 5 in the Technical Appendix to the Ove Arup Report.

Research Themes

Valuable information under the above headings may be extracted either from individual structures or from groups or complexes of buildings. Investigation of an individual structure will provide the opportunity for gaining an in-depth understanding of its form and function. The value of studying buildings in groups for comparative purposes can lead to the recognition of normal and abnormal practice and should not be discounted. Nor should such research be limited to the City of York but should be undertaken in any or all of the villages which form the hinterland and setting of the City. The same approach can be applied to the villages as to the urban environment and will demonstrate ways in which their relationship with the City changed, developed and evolved. Research into building types of varying kinds, their location and distribution in the rural environment will contribute usefully to the field of vernacular buildings study.

Themes which should be explored are the interpretation of house plans in standing buildings to trace changes and developments introduced to accommodate changing lifestyles. The development of timber framing techniques and the use and source of construction materials would be essential areas of research. Nor should research terminate around 1500 since these topics can be added to, and supplemented by, analysis of later buildings.

Building types and plan-forms

A fundamental strand of architectural history is the study of building types and the subdivision of their internal space as they evolved over time to meet the requirements of increasingly diverse activities and sophisticated lifestyles. Analysis of the arrangement of space within a building of any period will yield evidence about how the space was used and for what purpose. Provision of rooms dedicated to particular functions and circulation arrangements for moving between one space and another are aspects of equal interest.

Co-ordinated research into plan forms will enable a progression to be traced from the single-cell tenements of Lady Row through the small medieval hall house like Jacob's Well (Illus.1) to the eighteenth-century artisan house and the social housing of Tang Hall. The distribution of halls in medieval buildings, their size and position in the building plan would form an essential part of such a study. The progression from tenements accommodating both domestic and work activities within the same space through late- and post- medieval buildings in which these functions become separated, to the sophistication of eighteenth-century town houses is an essential study. So too the development of such dual purpose tenements as warehouses for storage or retail purposes to purpose-built shops (Illus.2) is important.

The timber-framed complex in Coppergate comprising 'Duttons for Buttons' and the White Swan hotel on the corner of Piccadilly was constructed as a row of tenements with at least one hall at the rear and possibly a second subsumed within the later White Swan. Its form was unrecognised until 1988 when it became clear that the tenements fronting Coppergate had been used as shops with access provided to the hall or halls at the rear through a central passageway. This arose from research carried out by Robin Thornes of RCHME when the plan form of the complex was compared to the fifteenth-century Tackley's Inn, in Oxford. Investigation of the White Swan is now essential to establish how much fabric of the timber-framed range may be incorporated into the late nineteenth-century hotel. The range

appears to have similarities with other medieval complexes in the City centre, and research elsewhere in the City may well yield further examples of this type of multipurpose structure.



Illus. 2. The White Swan, Piccadilly, and Nos.28, 30, 32 Coppergate

Relevant to these considerations is the influence of imported ideas and practices: for instance, where did the idea come from for the construction in York of at least three 'Wealden Hall' houses, native to the south-east of England: or is their distribution perhaps wider than the geographical area from which they take their name?

Increasingly sophisticated planning and allocation of space for specific purposes is demonstrated in later buildings of the eighteenth- and nineteenth-centuries. Research into the means by which changes were introduced and the influences which brought them about would be informative. It is received wisdom that all Georgian houses were built to the same plan but analysis of gentry houses in Micklegate, and no doubt elsewhere in the City, shows that this is not the case. A comparative study of the plan forms of these houses across the City, and of reasons for the differences, would be a useful contribution to the City's architectural history and relevant to the study of social history in the Georgian period.

Similarly co-ordinated research would demonstrate the comparable development of vernacular buildings in the villages encircling the City.

Materials

Building materials and the way they are used is another basic aspect of architectural history. In conjunction with the study of building type and plan form, materials contribute to the character of a building and provide evidence of its age, status and use. Associated with these considerations are the source and origin of materials and conditions governing their availability: Where did the timber used for medieval timber-framed buildings come from? What material covered roofs? Was the use of wall tiles for infilling in timber-framed buildings normal practice in the City, and for how long did it continue to be? If they were, where were they and roof tiles made? If they were not, what other materials were used for infilling in timber-framed buildings? Where were the brick yards located when load-bearing brick buildings became commonplace? Why do there appear to be no timber framed village houses around York (Fig.3)?



Illus. 3. 5 Main Street, Heslington; early eighteenth-century vernacular house

No. 5 Main Street, Heslington, an early eighteenth-century village farmhouse, is constructed entirely of brick (Illus. 3). Of interest is the reason for this and the origin of the brick and the way in which it was used. Other aspects for research are the use of space and the way the house is laid out; how it differs from vernacular houses in other local villages and the circumstances that influenced differences. All inclusive and comparative research into vernacular houses in York's villages will be of great interest and usefulness to local historians.

Supplementary to materials used for the construction of buildings are those used for external features such as ancillary buildings, walls, fences and railings. The type of boundary treatment is relevant, whether it is of cast-iron railings or timber fencing. In later periods, and particularly in more polite situations, the identity of craftsmen and location of workshops or forges becomes important.

Construction Methods

Besides being influenced by traditional practice and changing techniques, the method of construction responded to developments in, and availability of, building materials. What were the circumstances which brought about the change from framed to load-bearing construction? Changing techniques and materials provide fruitful fields of study as does the evolution of building types and house plans. Close and careful study of the detail of timber framing techniques, carpentry details and individual characteristics, including the numbering of timbers, in assembling a timber frame and roof structures, would result in a more informative and useful chronology of timber-frame typology. It could provide some indication of the distribution of the work of particular craftsmen within a certain period across the City. In load-bearing structures, the method of dressing stone and laying it to courses, or the bonding of a brick wall, are useful indicators of date and status. Cumulatively they could provide information about who were the builders and who the patrons.

Services

As important as the study of the way in which changing life styles influenced the arrangement of rooms within a building is the development of services to enable these changes. Fundamental in the development of plan forms are arrangements for heating, lighting and cooking facilities which can be traced through analysis of changing means for containing fire and evacuating smoke. It would be of interest to know which is the earliest fireplace and chimney stack in York. Similarly, development of the means of access between floors from the ladder stair to a fully developed staircase is essential to the process. Changing circulation patterns require new ways of enclosing space so that doors, windows and glazing acquire a new importance. Specific use of rooms stimulates the provision of interior fixtures and fittings like fire-places, built-in cupboards, wall coverings, panelling and domestic decorative schemes. Where they survive, all merit further study and research to provide social context to the development of buildings and their relationship with fashion, custom and social status.

Complex Sites

Individual or separate buildings will provide an opportunity from time to time for in-depth research, as will comparative projects within groups of buildings and village settlements.

However there is a considerable number of complex multilayered sites which require comprehensive programmes of archaeological and architectural research to explain their development over long periods of time. In the City these include projects like the ongoing research into the Hungate site. Comprehensive work currently being carried out at the Guildhall and the Mansion House will provide an example of what might be achieved through collaborative research. Originating in the mid-fifteenth century, the present Guildhall incorporates within and beneath it, archaeological remains of earlier structures and only reached its present form after successive campaigns of alteration and restoration in virtually every century of its existence. The Mansion House replaced earlier buildings ancillary to the Guildhall in the course of the second decade of the eighteenth century, though only now is an archaeological investigation to be carried out in the Guildhall yard to search for evidence of whatever lay on the site beneath the present buildings.

Together, the Guildhall and the Mansion House are of the highest historic and civic significance to the City, and of great importance in architectural history. The co-ordination of all aspects of research into the site will culminate in a comprehensive account of its development which will be used towards a decision on an appropriate future for the buildings with the pending removal of the Council's activities to new premises.



Illus. 4. York Central Development Site from the south-east

There are comparable sites awaiting initiation of similarly integrated research projects:

- the Minster precinct including below ground archaeological remains;

- St Mary's Abbey, its precinct and Museum Gardens incorporating the Yorkshire Museum;
- the Castle Piccadilly development site including Cliffords Tower, the Crown Court and the Castle Museum;
- St Leonard's Hospital and the Theatre Royal incorporating above and below ground archaeology;
- a full archaeological and architectural interpretation of the King's Manor;
- the Old Railway Station and new council Offices and below ground archaeology.

A less glamorous site in need of comprehensive research is the York Central development site (Illus. 4) which together with standing railway buildings encompasses a large part of the City's railway heritage and industrial archaeology.

A Development Brief for the site, approved in 2004, included the statement that 'proposals for redevelopment of the area must be preceded by an Historic Environment Audit which assesses the significance of the existing historic built environment (both statutorily protected and unprotected)'. An audit remains to be produced while in the meantime ad hoc and uncoordinated interventions are already taking place.

There are complex, multiperiod village sites inviting comprehensive programmes of research, many of them moated sites like that at Nether Poppleton which combines archaeological and architectural evidence. A site possibly with Iron Age origins, the parish church of St Everilda is twelfth century with Anglo-Saxon origins and the eighteenth-century manor house has earlier origins on a moated site. Limited preliminary research and on-going archaeology have demonstrated the rich potential of the site which would merit further, co-ordinated investigation.

There will be other similarly complex sites at the heart of many villages which need archaeological and architectural investigation to evaluate their significance. In many of these, as in the case of Nether Poppleton, piecemeal research has been carried out into some parts of the site, and it is important investigations are completed and the component parts combined to provide a comprehensive history.

Conservation Research

Because the conservation of historic buildings demands the application of specialist techniques and practical skills, a final area of research of academic interest both locally and nationally is the study of conservation practice in York. In the historic fabric of this City, the development of practical conservation can be traced from the pioneering campaigns of William Etty in the mid-nineteenth century to Dr Evelyn's battles at the turn of the twentieth century and the establishment in the 1960s of the Institute of Advanced Architectural Studies as a founding department of the University of York by Professor Pat Nuttgens.



Illus. 5. St William's College, 1465: demonstrates conservation practice at the beginning of the twentieth-century

Because for much of this time, the development of conservation practice in this city has been at the forefront of the field, its story would be a valuable and rewarding research project. It would be usefully complemented by studies of the architectural practices of the Atkinson brothers, John Bownas and William, nineteenth-century heirs to the mantle of John Carr, of the father and son practice of Walter and Arthur Penty, and of Walter Brierley, all of whom were conscious of working in the midst of valued historic architecture.

Research Outcomes

Set in the context of documentary evidence, the research outlined in this paper will contribute towards the wider objectives summarised by Richard Morris in his paper in the Ove Arup Report (1991, para 4.7). An examination of medieval buildings within the City and suburbs would be an effective way of helping to place the results of development-driven archaeology in a wider context. But more than simply tracing the pattern and density of occupation in the City during the medieval period, it will add evidence about how the City grew and expanded and how its relationship with its villages developed throughout the period. Research such as this will result in a more accurate building typology, and better dating tools, and a more accurate formulation of building chronology. There will be a better understanding of the way in which people through the centuries lived and worked and carried on their lives in the historic buildings we see around us and of the way in which the buildings changed to accommodate changed circumstances. In the process, the names of some of the men who made them and paid for them will emerge. Nevertheless opportunities for carrying out the kind of research recommended here will be

sporadic and random, and evidence will inevitably be collected over a considerable period of time. It must then be capable of retrieval and being collated with previous, earlier work so that the picture is being constantly supplemented and updated.

To make this possible, it is essential that research is made widely available and capable of retrieval through a central co-ordinated register. There needs to be a central bank or archive where it can be accessed, such as the Historic Environment Record (HER) but with the requisite resources for its management, to keep the record up to date and accessible. It must be possible for separate records to be correlated so that research from different, perhaps widely differing sources may be brought together, to complement and supplement each other. Some of this is already in the public domain, such as Statutory Lists. As noted previously, the purpose of the Royal Commission volumes on the City of York was to provide an inventory of historic buildings up to c.1840 through detailed analysis. Although it was not intended to reach definitive research conclusions, the introductory sections to all three volumes can be used together in order to obtain an overview. Some records would benefit from updating, and as a later survey the Statutory List should not be overlooked as a source of information to supplement, update and sometimes amend the RCHME record.

Besides published records, the outcomes of excavation and investigation projects commissioned by developers, and dissertations produced by postgraduate students, should be included in the register so that they may be accessed and combined to achieve more accurate conclusions. A chance consultation on the history of the York Central development site brought to light the existence of a postgraduate dissertation at the University of York on important industrial heritage assets on the site. It was only by word of mouth that this became known, an unsatisfactorily hit and miss means of communication about useful and relevant work which could inform guidelines for the redevelopment of one part of the York Central site. The point demonstrates the importance of ensuring that all research carried out into standing archaeology in the City is co-ordinated and integrated into the register, so that it is not wasted but put to positive use wherever and whenever possible. It is to be hoped that one of the outcomes of this framework will be better co-ordination and collaboration between what the City needs for development management purposes and projects academic research institutions are interested in pursuing.

The outcomes of research projects such as those outlined in this paper will be fundamental for the formulation of an accurate Statement of Significance, soon to be the cornerstone of future management plans for historic sites. The Statement of Significance will ensure that the appropriate level of protection is applied to a heritage asset through the planning system. The same purpose will be equally relevant for investigations carried out in the City's villages to record their individual growth and development, and supplement and complement research undertaken towards the production of Village Design Statements, Village Management Plans, and Conservation Area Appraisals.

Heritage Protection

The Statement of Significance is the basis for assessing the appropriate level of protection to be afforded to any heritage asset through its statutory designation as a Scheduled Ancient Monument, a Building Listed as of Special Architectural or Historical Importance, a Conservation Area, or as a building, structure or open space of local interest and importance on the Local List. Protection is made effective through national planning legislation applied locally by the Local Development Framework and its constituent documents. These comprise a compendium of guidance by which designated sites and structures are protected and kept in existence. Comprehensive and accurate descriptions of the historic significance of such assets are crucially important for producing the Supplementary Planning Documents which set out the guidelines.

Supplementary Planning Documents comprise Character Appraisals and Management Plans for designated conservation areas which, as well as large areas of the City, also incorporate most village centres. A Village Design Statement includes a section on the historic environment which informs guidelines for new development in the village. Design and Development Briefs are prepared for a similar purpose for selected major development sites. A Statement of Significance will build on information presented in Character Appraisals and Village Design Statements addressing historical development and growth, historic building assessments and descriptions - dates, materials, types, plan forms and uses, appearance and setting as relevant. Guidelines for protecting their significance and for managing the extent and type of new development on any such sites are given in Conservation Management Plans and Design and Development Briefs. All will be more effective and authoritative if they are based on competent and comprehensive architectural and archaeological research above and below ground.

An historic site like that of the Guildhall and Mansion House in York, both Grade I listed buildings and incorporating below ground archaeological remains, form a symbolic site of great civic importance and significance. Their status required the kind of comprehensive archaeological and architectural investigation recently undertaken which has led to the completion of a comprehensive Statement of Significance. With the pending move of the City Council and government to new offices, this Statement will be used to formulate appropriate plans for its future management and conservation. It provides a prime example of the results which may be achieved through a well-planned and co-ordinated scholarly research project.



Illus. 6. The Guildhall

Summary of Recommendations

1. All periods of the City's architectural history, and all areas of the City and its hinterland, should be investigated. Research into the physical fabric of the City should be carried out in the context of documentary sources where they exist, and should be used to:

- i. contribute to the wider studies recommended in Paper V in the Appendix to the Ove Arup Report;
- ii. provide evidence for the growth and expansion of the City and its evolving relationship with surrounding villages over time;
- iii. contribute to research into vernacular buildings in the rural environment;
- iv. develop a better understanding of the way in which people through the centuries lived and worked and carried on their lives in the buildings they occupied;
- v. create a more accurate building typology, better dating tools, and a more accurate building chronology;
- vi. support the provisions of the Local Development Framework through incorporation into Supplementary Planning Documents

2. Analysis should cover all aspects of building archaeology to inform research into a complementary range of associated projects. These should include studies into

- i. the evolution of multifunctional buildings to buildings with increasingly specialised and separated functions;
- ii. the development of the hall in medieval buildings;
- iii. technological developments introduced to accommodate increasingly sophisticated lifestyles;
- iv. materials and the way in which they were used together with circumstances governing changes in use and method.

3. Comprehensive programmes of archaeological and architectural research should be initiated for the complex multiperiod sites listed and for others which may emerge in future.

4. A central comprehensive register should be set up with adequate support to ensure that all research projects carried out in the City and its hinterland by whatever body, are easily and widely available and accessible.

5. Research should be conducted into the development of conservation practice in York.

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