



Edited by Michael Forsyth

# Understanding historic building conservation

Edited by Michael Forsyth

Department of Architecture and Civil Engineering University of Bath

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Understanding historic building conservation

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## **Preface**

This is the first in a series of books that combine conservation philosophy in the built environment with knowledge of traditional materials, and structural and constructional conservation techniques and technology. The chapters are written by leading architects, structural engineers and related professionals and practitioners, who together reflect the interdisciplinary nature of conservation work.

While substantial publications exist on each of the subject areas – many by the present authors – few individuals and practices have ready access to all of these or the time to read them in detail. The aim of the series is to introduce each aspect of conservation and to provide concise, basic and up-to-date knowledge sufficient for the professional to appreciate the subject better and to know where to seek further help.

Of direct practical application in the field, the books are structured to take the reader through the process of historic building conservation, presenting a total sequence of the integrative teamwork involved. The second volume, Structures & construction in historic building conservation, traces the history of structures in various materials and contains much guidance on the survey, assessment and diagnosis of structures, the integration of building code requirements within the historic fabric and much else besides. Materials & skills for historic building conservation, the third volume in the series, describes the characteristics and process of decay of traditional materials which inform the selection of appropriate repair techniques.

The present volume, *Understanding historic building conservation*, discusses conservation philosophy and the importance of understanding the history of a building before making strategic decisions, the vital role of each conservation team member and the challenges of conservation at planning level in urban, industrial and rural contexts and in the conservation of designed landscapes. The framework of legislation and charters within which these operate is described; at the time of writing, designation legislation in the United Kingdom is due to undergo substantial reform over several years, and the context of this is comprehensively reviewed. The book provides guidance on writing conservation plans, explains the basic issues of costing and contracts for conservation, and highlights the importance of maintenance.

The series is particularly aimed at construction professionals – architects, surveyors, engineers – as well as postgraduate building conservation students and undergraduate architects and surveyors, as specialist or

optional course reading. The series is also of value to other professional groups such as commissioning client bodies, managers and advisers, and interested individuals involved in house refurbishment or setting up a building preservation trust. While there is a focus on UK practice, most of the content is of relevance overseas (just as UK conservation courses attract many overseas students, for example from India, Greece, Australia and the USA).

Michael Forsyth

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#### Philip Whitbourn

Trained in Architecture and Town Planning at University College, London and spent ten years in architectural practice before joining the Historic Buildings Division of the former Greater London Council in the mid-1960s. After 20 years with the GLC, became chief architect to English Heritage for some ten years. Served as Secretary, ICOMOS-UK (The International Council on Monuments and Sites-UK), 1995–2002. Elected Fellow of the Society of Antiquities, 1984; awarded the OBE., 1993. Holds a Doctorate in Town Planning.

#### John Winter

Completed studies, Architectural Association, London, 1953; elected Associate, Royal Institute of British Architects. Completed first building, 1956, a house included in Pevsner's North-East Norfolk. Studied, Yale University, 1956–7 then worked with Skidmore, Owings and Merrill, San Francisco and Ernö Goldfinger, London. Taught, Architectural Association, London, 1960–64 and formed John Winter and Associates, 1964. His buildings have been extensively published in England, Europe, North America and Japan and received numerous awards. Awarded MBE for services to architecture, 1984. Member, Royal Fine Art Commission, 1986–95; Council of The Architectural Association, 1989–95. Appointed trustee of the Architectural Association Foundation, 1995 and of DoCoMoMo, 1999 and as Architectural Adviser to the Heritage Lottery Fund, 1996. Author of Modern Architecture (Paul Hamlyn, 1969), Industrial Architecture (Studio Vista, 1970) and of two co-authored books.

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# 1 The past in the future

## Michael Forsyth

Buildings can be victims of conservation interests. An Australian engineer, Tony Graham, bought the last remaining ironworks near Mells in Somerset. He planned to convert the handsome but decayed office building into a house. Different conservation bodies then descended. The site contained greater horseshoe bats, and became a Site of Special Scientific Interest and could not be disturbed. The Victorian Society, on the other hand, had the site listed and demanded that the office building be restored. The industrial archaeologists, meanwhile, took an interest in the foundry ruins and declared that the site must be cleared. Naturalists discovered rare ferns and said that the site was not to be touched. After prolonged disagreement the owner, wanting simply to proceed with the work, requested a site meeting with the local council and the parties involved in order to resolve the situation. Meanwhile, some boys caught in a rainstorm sheltered in the building and lit a fire to dry their clothes. The building caught fire and burned down.<sup>1</sup>

In the United Kingdom half of the building industry's workload, including maintenance, is concerned with existing buildings. Yet conventional training for architects and engineers provides little or no guidance on the care of existing buildings and too many historic structures are still being damaged by unsympathetic treatment. Despite this, and despite the changed construction methods and materials that replaced building techniques lost during the twentieth century, traditional craft skills are steadily being rediscovered. This is due in no small part to the series of fires at York Minster in 1984, Hampton Court, Surrey, in 1985, Uppark, West Sussex, in 1989 and Windsor Castle in 1992. Meanwhile, since the mid-1970s we have swung from an era that saw destruction of historic town centres and country houses alike, to a planning ethos where 'heritage' and 'conservation' are words that recur. We border dangerously on a museum mentality that fiercely resists change.

The Venice Charter – the philosophical manifesto produced by the International Congress for Conservation in Venice in 1964 – defined several possible approaches to conservation. Preservation involves the minimal repair and maintenance of remains in their existing state. Restoration involves the removal of accretions to return a building to an earlier state. Reconstruction also involves returning a building to an earlier state, but involves introducing new – or old – materials to the fabric. Conservation may involve one or more of these, as well as the adaptation of buildings

to new uses. Historically, the stance that we have taken on building preservation has constantly shifted, and the only certainty is that tomorrow's conservation philosophy will be different from that of today.

Until William Morris founded the Society for the Protection of Ancient Buildings (SPAB) in 1877, a ruthless philosophy of restoration and reconstruction was normal. The usual approach to church restoration was to undertake whenever possible a radical return to a definite style and to make the building look smooth and crisp and symmetrical like the new churches of the Gothic Revival. The eighteenth-century restorations of James Wyatt and his contemporaries posed a greater threat to medieval buildings than either neglect or fire. Wyatt's new west front to Hereford Cathedral of 1788 provoked an outcry even at the time. In 1818 at Chester Cathedral, Thomas Harrison added squat corner turrets to the south end of the transept. Anthony Salvin (a pupil of John Nash of Regent's Park fame) in 1830 refaced the south transept of Norwich Cathedral, replacing the original Perpendicular with a Norman design to match the north transept. At Canterbury in 1834 George Austin demolished the Romanesque northwest tower and replaced it with a copy of the south-west tower for symmetry. In the 1830s, the thirteenth-century nave of Southwark Cathedral was demolished, and at Bath Abbey a programme of correcting the building, including the addition of false flying buttresses, was carried out by George Phillips Manners. In 1870 Scott demolished the whole east end of Christ Church Cathedral, and rebuilt it in Norman style. And so the list goes on.

In the past, different categories of buildings were thought worth preserving at different times – mainly because they reached an age at which they were regarded as venerable. By the late nineteenth century, medieval buildings were sufficiently esteemed to be preserved for their antiquity. The first protective legislation was the Ancient Monuments Act 1912, which served to preserve decayed and obsolete structures that had artistic or historic interest. By the early twentieth century Jacobean and Queen Anne buildings became respected, but later Georgian buildings only gained sufficient historical perspective to be regarded as worthy of protection with the formation of the Georgian Group in the 1930s. The turn of Victorian architecture came much later. The 1960s and 1970s are now recognised as historical eras in their own right, and eminent listed buildings from this era now include London's Centrepoint office block and Norman Foster's high-tech Willis Faber & Dumas building, Ipswich.

With the 1944 Town and Country Planning Act, historical buildings were first seen for their townscape value as groups rather than on their own architectural merit. But the conservation movement as we know it was slow to gather pace following this basic legislation. Widespread destruction in the Second World War, and the social optimism of the era that followed, led to a comprehensive attitude towards redevelopment. In a lecture given at Bristol University in 1947 and published in his collection of essays *Heavenly Mansions*, Sir John Summerson pleads for the preservation of outstanding historic buildings. But his list of 'types of buildings which may in certain circumstances deserve protection' reads from our perspective as

positively advocating the comprehensive redevelopment schemes that swept away the centres of most historic English towns and cities after 1945. Following Sir Patrick Abercrombie's post-war plan for Bath, which proposed that the Royal Crescent be converted into council offices linked to a modern block at the rear, about one third of Bath's historic city – about 1000 Georgian buildings, of which some 350 were listed – were demolished between 1950 and 1973. By the 1970s, traffic problems added to inner-city congestion and decay. The countryside also suffered as badly. Multiple death duties during the First World War, often within months, caused the downward slide of hundreds of country houses. In the period from 1945 to 1973, 750 major country houses were demolished, and the impossibility of their upkeep culminated in the Labour government's wealth tax of April 1974 when the top rate of tax increased from 90% to 98%.

But the tide was turning. The Civic Amenities Act 1967 called for local authorities to designate conservation areas. Conservation studies were published in 1969 for Bath, Chester, York and Chichester<sup>2</sup> to examine methods of funding and repair of historic buildings. In 1973 an influential book, *The Sack of Bath* by Adam Fergusson, published for the first time the scale of destruction in this most intact of historic cities. Marcus Binney created in 1974 The Destruction of the Country House exhibition at the Victoria and Albert Museum, showing grim pictures of architectural decay and demolition. In the same year he set up the campaigning organisation SAVE Britain's Heritage, and the following year was European Architectural Heritage year. In 1976, faced with a flood of country houses coming onto the market, the Labour government replaced the wealth tax with a new Finance Act. Moreover, the new affluence of the 1960s brought about the car-owning society – by 1964, 20 million private vehicles were on the road – and this caused a new interest in the countryside.

From the early 1970s through to the Thatcher years of the 1980s, vast numbers of city dwellers dreamed of moving to the countryside and bought period cottages as first or second homes. Country house visiting became a major pastime and membership of the National Trust soared, doubling to 550 000 between 1972 and 1975, and reaching 850 000 by 1980. Particular interest in visiting historic gardens resulted, in the late 1990s and early twenty-first century, in members of the Historic House Owners' Association (HHA) rebranding their houses, open to the public, as gardens with houses attached rather than historic houses with gardens. In cities, too, fuelled by the country house interiors style, upstairs-downstairs films and the desire to own a period home, there was everywhere the wish to preserve or evoke the past. The heritage society had arrived.

With this swing of the pendulum came the new danger that our historic cities would lose their vitality and become heritage museums. There is a tension between keeping cities alive and conserving their historic fabric, a dilemma between 'development' and 'conservation'. Conservation has as much to do with breathing new life into old buildings as it has with repair. Nearly all buildings have evolved over their lifetime, adapting to the needs and uses of successive generations. Buildings decay when they are abandoned without a use, and their spirit dies when they become frozen in time

as near museum pieces. Historically, buildings that lost their purpose disappeared, and those old buildings that are still with us have usually undergone frequent adaptation or changes of use. When buildings have a viable use, there is the incentive to repair and maintain the fabric, while old buildings deteriorate rapidly when neglected or empty. Urban regeneration is a vital ingredient in conservation, involving a partnership of business initiative with the skills of town planning and heritage management. Buildings should preferably maintain their original purpose, but the door should always be open where appropriate to new uses, adaptability and extension. The conversion of redundant warehouse buildings has revived many dockland areas. The reuse of St Katharine's Dock in London, built in 1827-29, as apartments and a hotel led to numerous other schemes, including the conversion of Jesse Hartley's Albert Dock, Liverpool, of 1839-45 into a recreational and residential area. The conversions into art galleries of the Castellyeccio in Verona by Carlo Scarpa and of a redundant Paris railway station at the Musée d'Orsay are outstanding European examples.

Another important field for conservation at the level of urban planning is the consideration of new buildings within historic cities. An interesting example of the possible scope of this is the Historic Royal Palaces Tower Environs Scheme. Under the scheme, sightlines from within the Tower of London were projected into infinity to define the maximum height of new buildings around the Tower. This ensures that no building in the City or beyond may be visible from the enclosure of the historic buildings.

If one end of the conservation spectrum embraces the urban management of entire towns and cities, the other end, involving the care of individual buildings, ultimately concerns good construction practice and an understanding of how buildings were originally designed. At least when working on eighteenth- and nineteenth-century buildings, the conservation architect requires knowledge of classical architecture, in addition to a philosophical standpoint and knowledge of traditional materials. Western industrial cities - whether London, Paris or New York - can be thought of as fundamentally classical. Each comprises a legacy of buildings, whether classical, Gothic or whatever, that were originally designed by architects trained in the classical tradition. Builders, too, had knowledge of the same visual language, and from the eighteenth century onwards speculative houses were built with the aid of pattern books, such as Battey Langley's Builder's Jewel of 1739. These well-thumbed, pocket-size books explained everything the builder needed to know, from the construction of classical orders to the geometry of mouldings and the proportions of a room. Sadly, the classical training - with students routinely producing astonishingly competent renderings - died out in schools of architecture in the early 1950s. But when working on historic buildings, it is essential for present-day architects to have a working knowledge of those same principles in order to design even a glazing bar or a balustrade or to position a dado rail.

Before undertaking any conservation work on a building, it is essential to understand the building by carrying out a careful assessment of its history, the decay of its fabric and the causes. Repair work should always respect the history of a building, and this appraisal will help to keep inter-