

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.¹

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 north-west 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 Chichester² 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 Castellveccio 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-

vention, repair and treatment works to a minimum. For any historic building this will involve an archival investigation and a survey of the building structure and fabric. It is then possible to make a conservation plan that assesses what needs to be done – if anything – and the repair techniques and technologies that will be used. If the planner and heritage manager are significant in conservation initiatives at an urban level, then individual building repair increasingly involves the architectural historian and building archaeologist, in addition to the team of architect, engineer, quantity surveyor and builder.

Every building, however humble, possesses a history, and buildings from different periods and regions are unique. All historic buildings undergo cycles of alteration in their lifetime. Typically, minor repairs are carried out periodically, with programmes of major maintenance, renovation and modification taking place at less frequent intervals. This pattern may alternate with periods of relative inactivity and perhaps neglect. Major changes are usually made to buildings to modify or extend their use, to update their style, and particularly to repair fire damage. Most country houses have suffered fires, while theatres in the western world, before modern fire prevention codes were developed in the second half of the nineteenth century, suffered major fire damage on average every eighteen years.

The first task is to carry out investigations through a combination of archival research and on-site survey. For the archival research, county and city archives, local libraries and the National Monuments Record in Swindon are usually invaluable sources. Where appropriate, an architectural historian may carry out this work. Meanwhile, engineering and other investigations into the building fabric, tailored to each situation, should be carried out. These will reveal how the building stands, and whether or not any structural work is necessary. It is vital that all members of the team understand the building and that a sequence for the work is planned. A shortfall in knowledge leads to surprises, and buildings are most at risk when they are being worked on. During investigations, appropriate caution and a basic knowledge of historic building technology are necessary. One builder took up all the floorboards in a Georgian house to examine the joists, not realising that the floors act as plate membranes, and the house collapsed.

With this information, it is then possible to assess the building and form a conservation plan. This document sets out the architectural history, and then presents a rationale and policy for the proposed works. The architect has to decide how far to wind back the clock and, in particular, a view has to be reached on the dilemma between respecting the intentions of the original architect and respecting the history of the building. In Bath, the Victorians lowered the sills of most Georgian houses and inserted plate glass into new, heavier sash frames with horns, in place of the original sashes with glazing bars and thin meeting rails. The question arose as to whether the sills in the Royal Crescent should be restored to their original height, at the cost of internal damage and disruption. If not, should Georgian glazing bars be inserted into the enlarged windows, which were never intended to be subdivided and where suitable proportions might not be

possible? Several years ago, the Bath Preservation Trust raised the sills of its headquarters at 1 Royal Crescent, but a recent debate with English Heritage about the remainder of the crescent decided against alteration.

Views constantly change, and current thinking leans towards respecting the history of a building. When English Heritage restored Lord Burlington's Chiswick House, the late eighteenth-century wings that Henry Holland added to this freestanding Palladian villa were removed. This undoubtedly enhanced the original building, but it is unlikely that the demolition would have happened under today's conservation philosophy. Taken to extremes, peeling away layers of history may leave alarmingly little. On the Acropolis in Athens, accretions of Byzantine and medieval additions were radically demolished to reveal the fifth-century BC buildings – the Parthenon, Propylaia and Erechtheum – but all that remained were ruins.

Concurrently with making these decisions, the architect must also plan the work to satisfy present requirements for function and safety in a way that is compatible with the building. The protection of life is paramount, but it is arguable that safety legislation for buildings exceeds that for other everyday situations, such as underground railway platforms and roads. There is an inherent conflict between conservation legislation and building regulations, and there are many situations that current codes of practice or conventional methods cannot deal with in historic buildings, at least not without causing unacceptable damage. Fire engineering and floor loading are just two among many areas where creative solutions – or lateral thinking – can be used to provide acceptable alternatives for a more sympathetic treatment. For example, if a building is being converted to office use, heavy storage may be placed in the basement instead of floors being invasively strengthened to recommended levels. A lintel in an old building, even when badly distorted, may be left undisturbed if it is still performing. If a timber beam works despite signs of decay or deformation, it may not require additional work, while deflection may not be a problem if flexible finishes are used. Sprinklers, even in domestic situations, may be acceptable and less invasive than partitioning and fire doors. Sometimes a sceptical approach is necessary. The fact that a building has stood for 200 years may be eloquent proof of structural soundness despite rulebook calculations that show its structure to be inadequate.

The next step before undertaking repair work is to identify which techniques are appropriate and decide how far one goes. Experience of traditional construction and skills is necessary, together with knowledge of the characteristics of materials, including how they decay and the reasons why modern materials frequently cause damage to old buildings. For example, lime-based products are fundamental to conservation work because they are flexible and breathable. Mortar must be softer than adjacent masonry to absorb movement and to be 'sacrificial' to the original stone or brickwork. Because of chemical reaction, cracks in lime mortar are self-healing, while hard, impermeable Portland cement mortar traps moisture and quickly loosens with freeze–thaw action.

When planning the works, there are also several philosophical principles to follow. The first is *minimal intervention*. The current philosophy is that

the total fabric and structure of historic buildings, not merely surface appearance, is integral to their character. There should be minimal interference with, or damage to, the original structural fabric. It is also important where possible to avoid change to the original structural mode of behaviour. *Reversibility* is also a keyword, and repairs should be capable of being undone in the future, as increasingly compatible materials and techniques are developed and conservation philosophy evolves. The only certainty is that future generations will regard what we carry out today with scepticism. Many twentieth-century conservation techniques have led to problems that cannot be reversed. It is also good practice to *conserve as found*. If the footings of a medieval timber-frame barn have settled, it is unwise to jack up the structure from its new equilibrium to the original alignment. Repairs should be *like for like*, using either original or compatible materials. In the twentieth century, many unsuitable methods were used in repair work. Iron and steel rods were commonly inserted into stone as reinforcement and grouted with Portland cement, but the iron rods soon rust and expand, cracking the masonry. Iron and steel were superseded by stainless steel, but this too cracks masonry, with its different coefficient of expansion.

These principles are only a guide, and traditional materials and repair methods are not always best. With historic roof structures, inserting steel to repair rotting members, rather than carrying out timber repairs, may avoid sections of the historic fabric being cut out and lost – and may be more reversible. Alternatively, a steel flitch plate inserted into a timber beam may be the least visible type of repair, but at the loss of reversibility. It is also unrealistic – and pointless – to search doggedly for authenticity in the use of materials. We would not wish to use toxic – and illegal – lead paint except in buildings of outstanding importance, nor to paint the facades of a listed weekend country cottage with ox blood. Nor could we live with truly authentic interiors. A glance at the squalid conditions suffered by our forefathers, as recreated at Cardiff's Museum of Welsh Life, would quickly dispel such thoughts. And for grander houses, the popular historic ranges of paint colours are in fact muted versions of the original colour schemes, which we would find hard to live with today.

In the present ultra-conservationist climate, it is arguable that conservation legislation has gone too far in certain situations. Conservation laws can have the opposite effect to what was intended, and some relaxation of guidelines would sometimes better serve the interest of a building. The blanket refusal to allow any change is artificial and can ultimately be damaging to a building. Throughout history, buildings have adapted to changing needs and situations. Sometimes a local authority's refusal to grant listed building consent may be an excuse for doing nothing. Eighteenth-century townhouses, with strictly regulated street facades, were freely extended and altered at the rear to allow for changing requirements – the so-called Queen Anne front and Sally Anne back.

Conservators today approach all these problems as a doctor to a patient, where radical surgery is not a preferred option; perhaps a drug, an aspirin or pacemaker can keep the problem at bay. All engineering and other repairs are invasive, but the conservation professional will usually strive for

localised repairs. Conservation involves taking what is there and improving it before cutting or adding, while at the same time being able to show that present-day standards of public safety and comfort and important legislative requirements are satisfied.

Endnotes

- 1 Christopher Booker's Notebook, *Daily Telegraph*, 15 July 2001.
- 2 Ministry of Housing and Local Government, *A Study in Conservation*, 4 vols (HMSO, London, 1968).