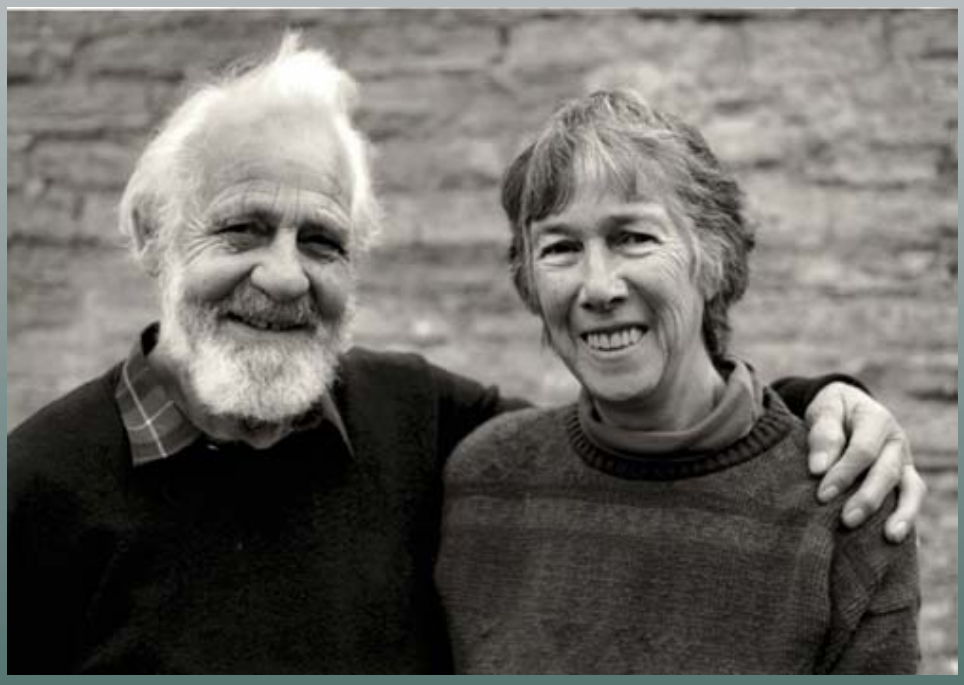
Transforming traditional archives in a digital world:

The practice archive of F.W.B. and Mary Charles Chartered Architects

Introduction

The purpose of this case study is to highlight the issues around digitising collections held in Archives and other repositories and making them publicly accessible online. The issues of digital preservation and digitisation are a challenge for the Heritage Sector, as more material is both born-digital and digitised from existing collections. This case study is focused on the issues around digitising existing physical collections to create a digital version, however, many of the issues around storage and long-term preservation apply equally to born-digital collections. This document is based primarily on the findings and issues that were encountered during the cataloguing and digitisation of a collection held at Worcestershire Archive and Archaeology Service (WAAS) called the Charles Archive. Through this project, the case study explores the wider issues facing the Heritage Sector.

The practice archive of *F.W.B 'Freddie' and Mary Charles Chartered Architects* was deposited with Worcestershire Record Office (now WAAS) shortly before Freddie's death in 2002. Freddie Charles (1912-2002) was an architect and nationally recognised expert on the conservation and repair of timber-framed buildings. Alongside his wife, architect Mary Charles (nee Logan, 1924-2005), he set up an architect's practice, based in Worcestershire, that eventually specialised in the conservation and restoration of historic timber-framed buildings. Throughout their long careers Freddie and Mary were involved in the restoration of many important timber-framed buildings including the Ancient High House in Stafford, The Old White Hart Inn, Newark (Notts) and over 250 buildings in Worcestershire, many of them of national importance including Middle Littleton Tithe Barn and The Great Barn of Bredon.



Photograph of F.W.B. 'Freddie' and Mary Charles taken by Malcolm S. Kirk and captioned 'with warmest memories of my stay with you at Churchill Mill'. Kindly provided by Nickie Charles

Funded by Historic England

Explore the Past

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Mary and Freddie were very much a partnership and she was essential to their joint work, managing the day to day business while Freddie focused on his research and campaigns. A talented illustrator, with a mutual passion for timber-framed buildings, her drawings bring life to many of their publications including the seminal *Conservation of Timber Buildings*, first published in 1984, *Medieval cruck-building and its derivatives: A study of timber-framed construction based on buildings in Worcestershire* (Society for Medieval Archaeology. Monographs; no.2 – 1967) and *The Great Barn of Bredon: Its Fire and Reconstruction* (Oxbow Monographs 1997). In terms of the practice's wider influence, it was a training ground for many of the next generation of architects working on the conservation of timber buildings. The practice also completed the accelerated resurvey of listed buildings in Herefordshire & Worcestershire in the mid-1980s for English Heritage, resulting in a collection that documents many of our most important timber-framed buildings.

In 2018 Historic England funded a joint project between WAAS and Worcester City Historic Environment Record to catalogue the collection, to digitally capture a selection of images (over 1000), to make those images available through the City and County Historic Environment Records and online via the Archaeology Data Service (ADS). The project explored a number of themes as the project progressed, including the methodology for the integration of historic building conservation archives into Historic Environment Records; the best ways to link up information held in Archive Service catalogues with HER databases; and understanding how best to integrate historic building conservation records into online repositories in order to preserve them and make them accessible now and in the future. The challenges of digital preservation, virtual storage, online access and future management of these archives need to be understood and addressed as more archives are created or born-digital.

Digital Preservation

Digital Preservation can be described as 'the series of managed activities necessary to ensure continued access to digital material for as long as necessary'.

Digital materials include:

- Digitised non-digital collections;
- Information created as a digital publication;
- Born-digital information created as part of the day-to-day business of an organisation.

Digital materials pose extra challenges to repositories in terms of maintaining long-term access, because of the threats of technological obsolescence and physical deterioration that they face. The notable differences between paper-based and digital material which lead to these challenges are:

- Machine dependency – the requirement of specific hardware and software to access digital material;
- Timeframe in which action needs to be taken – unlike paper-based material that can last centuries, advances in technology means the period in which action must be taken is reduced to only a few years, perhaps 2-5;
- Fragility of media – digital material is inherently unstable and without proper storage or management can deteriorate quickly even without appearing damaged;
- The need for changes to be made in order to manage digital material poses challenges to ensuring the integrity, authenticity and history of the records;
- There is a need for a continual programme of active management from the point of creation, therefore technology requires archives to adopt a life-cycle management approach in order to appropriately maintain digital material.

Although digital technology provides considerable opportunity for rapid and efficient access to information, materials are created in such a way that even short-term viability cannot be assured and therefore there is much less prospect for access by future generations. Owing to the marked differences in the nature of digital materials, there is a need for a very different approach to be taken in their management – one which is proactive and which is planned and reviewed at regular intervals.

Within the Heritage Sector there is a clear need to for consistent and holistic approach to this challenge and pressing reasons why this needs to happen soon:

- Digital material will quickly become inaccessible. Loss of data will need to be justified to depositors, clients and/or to other stakeholders with an interest or need for access to the material;
- Many services have statutory obligations to provide access to Public Records. More and more material is now born-digital and there is a need to accept deposits of records in this form; obligations will remain the same regardless of the format they are received in;
- If access to digital surrogates cannot be maintained beyond the short-term then it may be difficult to justify the initial, often substantial, investment in creating any digital resources;
- Retrospective preservation of digital material can be prohibitively costly or, in a worst case scenario, impossible due to media deterioration. It is widely acknowledged that the most cost-effective means of ensuring continued access is to consider preservation implications as early as possible, preferably at the creation stage;
- Digital material (images, documents etc) has value. This may be in terms of the value of reproducing that material for sale to users, whether onsite or remotely; or in terms of the value of its content for evidential purposes, especially where legal and regulatory compliance is implied;
- If access to digital material cannot be provided it could have a huge reputational impact for organisations (for example, if material is required for a Freedom of Information request and it is no longer accessible because the material has not been effectively preserved).

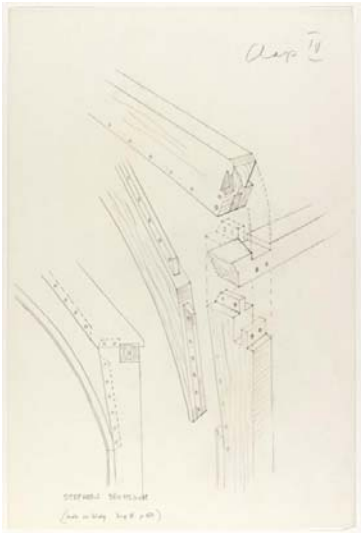
The Charles Archive

The Charles Archive is representative of many collections held by Record Offices and Archives nationally, containing important information about historic buildings that would provide enormous benefit if easily accessible. Ongoing cutbacks to local authority conservation services means that now, more than ever, easily accessible information is critical to decision making.

Just over 1000 images from the Charles Archive have been digitised and these have been added to each of the buildings they represent within the Historic Environment Record (HER) for both Worcester City and Worcestershire County Councils. The information has enhanced each of these records to give details such as building layout, build date and conservation and restorative repair work. Around two thirds of the buildings are Listed and details of previous work will be invaluable in determining future repair and restoration. The Archive also contained details of eight buildings that were previously unrecorded in the HER, with six of those no longer standing today. The information on these particular buildings is invaluable, as we now have locations and details of buildings that have been lost in the course of time and re-development. The low resolution images, linked to the HER records, can be viewed by the general public, students, academics, local authority conservation officers and other professionals.

The majority of the archival quality, digital archive has been deposited with the Archaeology Data Service (ADS) in York and can be viewed online. ADS is the only Accredited Digital Repository in the UK for heritage data and has all the necessary safeguards in place for the long-term management of the digital data. It is hoped that this inclusive access will engender greater understanding of Worcestershire's built historic environment, facilitating local authority conservation, archaeological and planning officers to make more informed management and development plans to preserve the county's historic buildings.

Sketches ,drawings and photographs of a 15th century building in Droitwich digitally captured from the physical archive in 2018. During his survey in 1967 Freddie described it as having "the finest solar yet discovered in Worcestershire" This information is now being used in the current restoration work.



Discussion

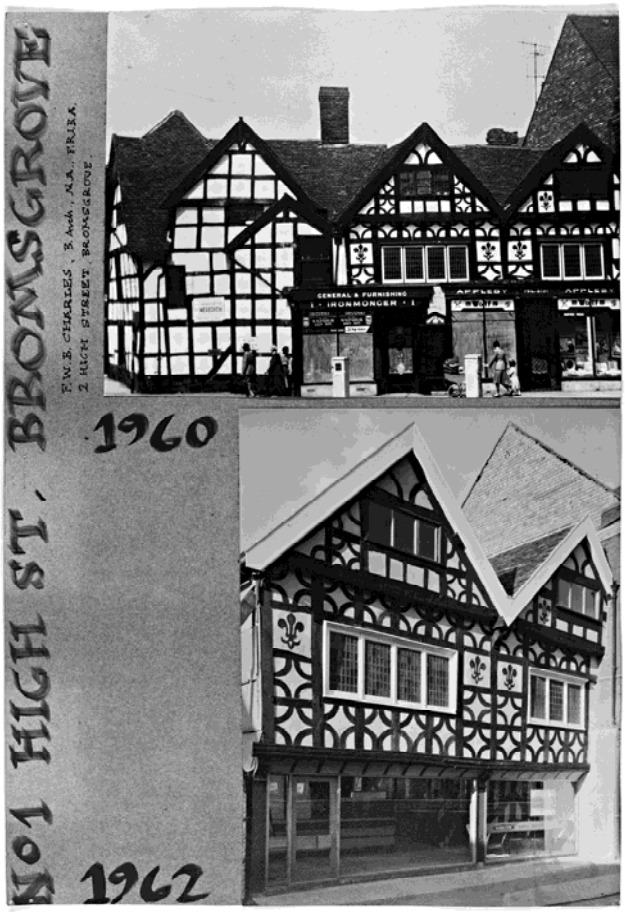
The project ran comparatively smoothly, but there were issues that required more input than was foreseen at the outset. The cataloguing of the original archive, the digitisation of chosen material and the integration of digitised material into the HERs progressed as planned. These activities are very much part of the everyday work of both the HER and the Archive, so problems were not expected to arise, and these tasks ran broadly to schedule.

When the material was catalogued and photographed, however, it became apparent that copyright attribution was not as straightforward as originally anticipated. The Archive was deposited **with copyright** in 2002, and it was thought that all of the material now belonged to Worcestershire County Council (WCC). Whilst this was the case for the majority of the Archive, it became clear that there was a reasonable quantity of material that was unlikely to have been originally under the copyright of the Charles practice, or where copyright was unclear. The project team had to establish whether the work of other architects was completed under the employment of the Charles practice, and therefore now copyright of WCC. Permission also had to be sought for material that was clearly alternate copyright, including for photographs now established as copyright **Martin Charles / RIBA Collections** and photographs copyright **Walter Horn/ Getty Research Institute, Los Angeles (920087)**. While all of the issues were eventually resolved and WAAS was granted permission, by all parties, to create and hold digital copies, the process was far more involved than envisaged. For older archives where copyright owners cannot now be traced, this would be far more difficult.

For future projects to digitise existing collections within the Worcestershire Archive a lot more time would to be allowed to establish copyright, and a contingency will always be included for projects where this is not anticipated to be an issue at the outset. At the project planning stage, a copyright risk assessment will be undertaken, with time built into the project design to deal with any issues raised.

Other than allowing a sizable budget for establishing permission and resolving copyright issues, there is not much more that can be done for existing physical collections already deposited in archives. Often these collections were deposited before digital preservation was a consideration. The Worcestershire Photographic Survey (WPS) is a good example of this. The WPS was a project initiated by the Record Office (now part of WAAS) in the 1950s and originally involved staff carrying out photographic surveys of the historic buildings and landscapes of the county. Later the project also asked volunteers to take photographs and submit them to the Record Office. Over 80,000 images were deposited over c.40 years, largely as prints. Some volunteer photographers retained copyright of their work, some didn't, often now it is not clear whether they did or not. It would be a fantastic resource to hold digitally and be able to make available online, but no permissions were sought for that at the time because it would never have been considered possible then. Now tracing dozens of copyright owners from addresses that they inhabited 30-70 years ago would be almost impossible and prohibitively expensive.

For the future deposit of physical collections to the Archive, there is the option to ask for permission at time of deposit. Currently the depositor form does not ask about digital archives, and the questions are the same whether the items come in paper or electronic format. Permission to create digital versions from physical collections in the future is not requested. Digital copies would only ever be created as a result of a specific need, not as a matter of course - eg preservation copy (which copyright law allows), exhibition or online access. The situations could be quite different each time, so there could not be a blanket permission for all depositors at time of deposition. There could, however, be consideration on deposit of whether there would be benefit for the collection to be accessible online.



Sketch drawing of FWB's modernist design for the new corner building at 1 High Street, Bromsgrove (705:1246/BA14485/2/1; b705:1246/BA12857/5/14; s705:1246 BA14644/14; f705:1246 BA14644/4) and photographs taken in 1960 and 1962 before and after the conservation work.

Below, the updated record in the Historic Environment Record database and a photograph of the building taken in 2019 © Worcestershire County Council

WSM01395: 1 High Street, Bro

Monument MWR10323

New | Copy | Delete | Link | Task | Bookmark | Report

Record Type: Building (BLD)

Name: 1 High Street, Bromsgrove

Summary: Listed Grade II early 17th century timber framed house.

Confidential: No

Type(s): INN, TIMBER FRAMED BUILDING, SHOP

NGR: Centred SO 9584 7063 (11m by 9m)

Description | Tree | Location | Status & Codes | Land Class | Contacts | Sco

Three storeys, 19th century bargeboards. [1]

Late 16th century timberframe house, originally with 4 gables to street (two a
North). South façade: concave sided lozenges and some fleur de lys motifs. [2

Rebuilt circa 1600 - 15th century solar wing all that remains of earlier building?

Probably early 17th century. 3 storeys, Geometrical timber framing with 3"fle
century barge-boards. 1 window on second floor has early leaded-lights, rema
Tile roof. [4][5]

Bainbridge, J. 2000. Francis Frith's Worestershire Photographic Memories. [6]

Bainbridge, J. 2000. Francis Frith's Worestershire Photographic Memories, this photograph shows the missing portion of this building. [7]

Visible on Google Street View. [8]

Material digitised as part of NHPP7624 Charles Archive Project. Report, drawings and photographs of timber framed house. [9] [10]
1 High Street, Bromsgrove (P2130591-603) Drawings, report and photographs. FWBC's modernist design for the new corner building.[11]
Further colour photographs of 1 High Street, Bromsgrove.[12]

LibraryLink: 0|0 Resources: 0 Tasks: 0 XY

Most collections would not be worth digitising in terms of a cost:benefit analysis, and many contain sensitive information that would be inappropriate for online publication. Where it is identified that a collection would be suitable and beneficial for digitisation and online dissemination, however, this could potentially be negotiated at the time of deposit. There would need to be a clear understanding of what the permission would be for (i.e. would it include commercial reuse), but this is an option that could be explored for those few collections, like the Charles Archive, that would provide considerable benefit if available digitally.

The Project Team also recognised that the Charles Archive project would have to comply with the General Data Protection Regulations (GDPR) Act (2016, enforceable 2018) and advice was sought from the County Information Governance and Compliance Manager to ensure that the project took the appropriate steps to protect the personal information and rights of individuals. It was agreed that client names mentioned in the Charles Archive would be redacted on the lower resolution images deposited with the Worcestershire County and Worcester City Historic Environment Records but that they should be retained on the archival quality TIFFs, deposited with the Archaeology Data Service and National Heritage List for England, so as not to compromise the original archive. The names of architects and local authority planning officers were retained on all images. A decision was taken not to digitise personal correspondence, which not only contained the names and addresses of individuals but also, in many cases, detailed heated exchanges between contractor, client and local authority.

The decision not to digitise personal correspondence was an easy decision to make in the case of this collection, given that only a selection of images was ever planned to be digitised and there was so much else of greater value. For other projects involving different collections (or further work on this collection) this could become much more of a challenge. How do we maintain the integrity of archive collections and protect individuals' rights? This is a particular issue with archives that are too fragile to be used in their original form, or where the digital version is now all that is left. Redacting information that cannot then be found in original physical material would compromise the archive.

There are also challenges around public access to digital archives containing sensitive data. Largely these are the same issues as for the physical archives, for example researchers who have been granted permission to access medical archives sign an undertaking that they will anonymise such data so that persons mentioned cannot be individually identified. In other areas such as oral history, where living or recently deceased individuals are discussed, there are risk assessments to identify particular records which might raise such issues. These safeguards would also be applied to digital archives. With digital archives, the new challenges would be around making parts of an archive fully accessible online and parts of it closed or limited access. There are ways this could be done, with protected areas of websites that require a login for example, but these options are complex and expensive to deliver. The website itself may not be expensive, but the staff resources needed to identify and categorise data could be very costly.

One area where digital archives have a significant benefit over physical material in regards to public access is that it doesn't matter where the physical archive is stored. The Charles Archive is split across several different places. It is standard practice for Archives to collect geographically, so the Charles Archive was originally deposited to the Record Offices of individual counties. This was also in accordance with Freddie Charles's wishes, as he wanted material to be held in the area where the practice had undertaken the work. WAAS holds the largest collection of the physical archive as this is where the practice worked most often, but the project identified other deposits split across at least 15 other repositories nationally.

Where physical archives are split to ensure that local material is held locally, a complete digital archive can be created and held at all the locations or centrally online. This allows local access to locally important physical material and allows for a complete archive to be held in one place, albeit digital. This has the benefit of not only easily accessible material, but also of maintaining the integrity of the original collection.

The future management of archives as more are created or born-digital is a pressing challenge. Although the Charles Archive project explored the processes, as well as some of the issues, involved with digital archiving it did not address the long-term challenges that face the Sector. The costs of storing large amounts of digital data are high and there is the challenge of keeping pace with changing digital technologies. These are issues that affect not just collections held by Archives/Record Offices, but also Historic Environment Records, Museums, contracting units and many other heritage organisations. Although digital technology provides considerable opportunity for rapid and efficient access to information, digital materials are created in such a way that even short-term viability cannot be assured and therefore there is much less prospect for access by future generations.

The digital Charles Archive is over 70GB of data, and only a fraction of the collection was digitised. For this collection, Historic England provided funding for the submission of the digital archive to the Archaeology Data Service (ADS). As ADS has all the necessary safeguards in place for the long-term management of the digital data, there was no requirement for this collection to be stored on backed up Worcestershire County Council servers. The original material is all in fair or good condition and available for public inspection in The Hive; WAAS has copy of the original digital archive on a hard drive; and low resolution images (on backed up servers) are available through the City and County HERs.

Deposit with ADS is not an option for the majority of archives digitised through projects like this. There is not the funding within local authorities to archive to ADS, and online, secure, backed up storage is expensive. The fact that ADS is still the only heritage repository in the UK to meet the Accredited Digital Repository standards shows how hard that is to achieve. It is a standard that is prohibitively expensive for most local authority Record Offices and other public sector organisations. This is a challenge that requires a lot more investigation by the Sector as a whole and it will not be an easy challenge to resolve. The volume, complexity and importance of data that is being produced digitally is growing on a huge scale and without establishing an approach and setting up standard procedures for effectively dealing