Protecting Your Digital Information Legacy

Built Legacy: Preserving Historic Buildings Data

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Built Legacy: Preserving Historic Buildings Data

Outline

- Conservation Practice and Digital Data
- Built Legacy Research Project
- Context
- Findings
- Recommendations

Image © Dr David Parsons, Alex Turner, George Hammerschmidt, Christina Unwin, Dr D S Sutherland
Conservation

- Archaeology is **destructive**, record of field work is of understood value
- Conservation - **Management of Change**
- Demolition – Preservation by Record
- Repairs or Adaptation – Opportunities to record
- Increase Understanding
- Inform Design Decisions
- Now and in the future
Built Legacy: Preserving Historic Buildings Data

Historic Buildings Data

- Historic Building Recording
- Building Investigation resulting in drawn records in CAD
- Photographic Survey
- Laser Scans
- Dendrochronology
- Geographic Information System (GIS) Files
- Area Characterisation
Digital Data

- Easy to update and share with project teams
- Easy to issue and access
- Perception of longevity, archiving is not backing up
- HBIM

Digital Born Data - data created in digital format

Digitised Data - hardcopy converted to digital
Context of Research

- External Engagement Award funded by the University of York
- ADS Impact Report Beagrie & Houghton, 2013

Figure A13: Areas of savings for respondents resulting from accessing ADS (N=241)

Research Methodology

- Online survey
- Telephone interviews
- Requests for information to local planning authorities

Conservation Professionals

- Register of Architects Accredited in Building Conservation (AABC) (many were also on RIBA Conservation Register)
- Conservation Accreditation Register for Engineers (CARE)
- Conservation Accredited Chartered Surveyors (RICS)
- Architectural Technologists (CIAT) on Conservationist Register
Others

- Heritage Consultants
- Conservation Officers
- Buildings Archaeologists
- Specialist Investigators
- Architectural Historians
**Historic Buildings Information**

- **Terminology varied**
- ‘Events’ = ‘Investigations or Intervention’
- ‘Contractor’ = ‘Professional carrying out the investigation’
- Specialist work subcontracted
- Quality and Validation

![Professional Work Output Graph](image)

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http://archaeologydataservice.ac.uk
Who commissions vs. who writes the brief

Clients commission and pay for investigation

BUT

Various people are responsible for defining the brief including:

• The investigating professionals themselves
• Other project team members
• And sometimes local authority conservation officers

Why is this important?

What is the information used for?

- The planning process or a faculty petition is the major trigger for historic building investigation and analysis.

- It is often used to inform decisions by clients and the rest of the project team.

- And some times used for funding applications.

Is future use and public access to the information a consideration?
Archiving Practice

- Majority issued digitally
- HER/ County Records have some impact
- 10% stated that their work was not archived to their knowledge!
- Clients are depending on their consultants.

Where is the Historic Buildings Data Kept?

- Hard-copy with the building owner/client
- Digitally with the building owner/client
- Historic Environment Record
- Academic Institution
- Hard-copy with an archive or County Records Office
- Other (please specify)
- It is not archived to my knowledge

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Where will the information be in 10 years’ time?

- ‘Who knows? We cannot operate as the County Archive.’

Lost?

- ‘Cynically, on a scratched out of date CD in the back of a cupboard in a probably damp vestry.’
- ‘If past experience is anything to go by, forgotten. Clients have short memories.'
Where will the information be in 10 years’ time?

Obsolete?

• ‘Digital Scans are generally retained by the survey company; however we don't currently require them to hold this data (and curate it to ensure it remains legible to future software versions) for any period of time.’
• ‘We have projects 15 years old for which we no longer can read the electronic data.’

Reduced local capacity

• ‘I cannot see archives and records being much of a priority in the public sector, certainly not a local level where cuts and closures are rife’
Where will the information be in 10 years’ time?

So much information to validate and curate

- ‘I am concerned that some Heritage Statements, which contain important new research are within reports primarily aimed at supporting Planning Applications and therefore look like advocacy documents so may not be archived.’

Who’s responsibility is it?

- ‘Quite possibly in our own archive, but not guaranteed.’
What information would you like to access?

• Drawings and specifications of all previous interventions, something like a log book.

• A national database of Heritage Statements, Statements of Significance and Heritage Asset Condition Reports.
Impact of Free and Open Access to Data

- It would improve the quality of our work.
- It would enable them to respond to our clients’ needs more quickly.
- It would reduce costs.

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So what are the other advantages to deposition?

1. It demonstrates **good practice** in terms of making a contribution the historic buildings community.
2. It provides a **secure, long-term, future-proof** archive of work.
3. It provides **accessibility** to the information for clients and the project team.
4. There is **commercial** advantage through demonstration of professionalism in a market where trust is important.
ADS has had major impact on the recording and dissemination of archaeological information in the last 20 years. What about historic buildings?

Have you used ADS to access information about built heritage?

- Never
- Sometimes
- Often

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Do conservation architects and their teams know that you can report historic building investigations through OASIS?

Awareness of OASIS

49%
I have never heard of it

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What’s the impact of the NPPF on historic building data?

‘Local planning authorities should make information about the significance of the historic environment gathered as part of plan-making or development management publicly accessible. They should also require developers to record and advance understanding of the significance of any heritage assets to be lost (wholly or in part) in a manner proportionate to their importance and the impact, and to make this evidence (and any archive generated) publicly accessible.’ NPPF
So what is happening in practice?

- 332 local planning authorities were consulted
- 33,600 + listed building consent applications in 2015
- Only 40% could respond to questions on supporting information about significance
- 65% reported it is validation requirement or is submitted in ≥ 95% cases

Is future reuse or public accessibility a consideration?
So what is happening in practice?

- 101 LPAs reported imposing a condition to record, usually in cases of demolition or substantial loss
- 247 individual conditions to record

Is future reuse or public accessibility a consideration?
- 19% referred to HER

Only 36% include a condition to digitally archive!
So what is happening in practice?

Public Access Planning Portal

‘for the foreseeable future’
‘the council does not currently have the capacity to digitally archive documents’
‘kept forever’
‘listed building applications are kept for 3 years’
‘viewed in perpetuity’
‘the information is not archived’
‘there is no expected end to this information being available’
‘all applications are available on the website however after 6 months a majority of the documents will ‘drop off’ the website’
So what is happening in practice?

Public Access Planning Portal

‘Following a system failure and in the light of new data management systems, it was agreed that only the most urgent reports would be salvaged, and the above reports were not among them.’
Exercise 1
Exercise 1

https://en.wikipedia.org/wiki/Bombe
Exercise 1

https://en.wikipedia.org/wiki/Colossus_computer
Exercise 1

Preservation problems

Technology

• Hardware experiences rapid change
Preservation problems

- As does storage media
Exercise 1

You have each been given a data storage item

• Put it on our time line
• Can you tell the group something about it?
• How would you go about using the information on it?
Digital Data

- Easy to create
- Easy to update
- Easy to access

But Fragile!

- Digital data is encoded
- Digital data requires software and technology to present content
Why is Digital Data Fragile?
Why is Digital Data Fragile?

• **Deterioration** of the storage medium
  – Degrade – Bit rot!
  – Can be easily damaged
  – Can be easily overwritten
Why is Digital Data Fragile?

- **Deterioration** of the storage medium
- Obsolescence of the **software**
Why is Digital Data Fragile?

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Why is Digital Data Fragile?

- **Deterioration** of the storage medium
- Obsolescence of the **software**
- **Obsolescence** of the storage medium
- Obsolescence of the **hardware**
Why is Digital Data Fragile?

- **Deterioration** of the storage medium
- **Obsolescence of the software**
- **Obsolescence** of the storage medium
- **Obsolescence of the hardware**
- **Failure to document** data adequately
"Digital information lasts forever - or five years, whichever comes first."

(Jeff Rothenberg, RAND Corp., 1997)
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Historic Building Data

Years in the making
3 days to record
Backed up in 10 seconds
Lost forever?

How can we prevent this?
Protecting Digital Data

• Recognise data is fragile
• Stop archiving data as objects rather than computerised information
• Professionally archive digital material

GOOD DATA MANAGEMENT IS ESSENTIAL