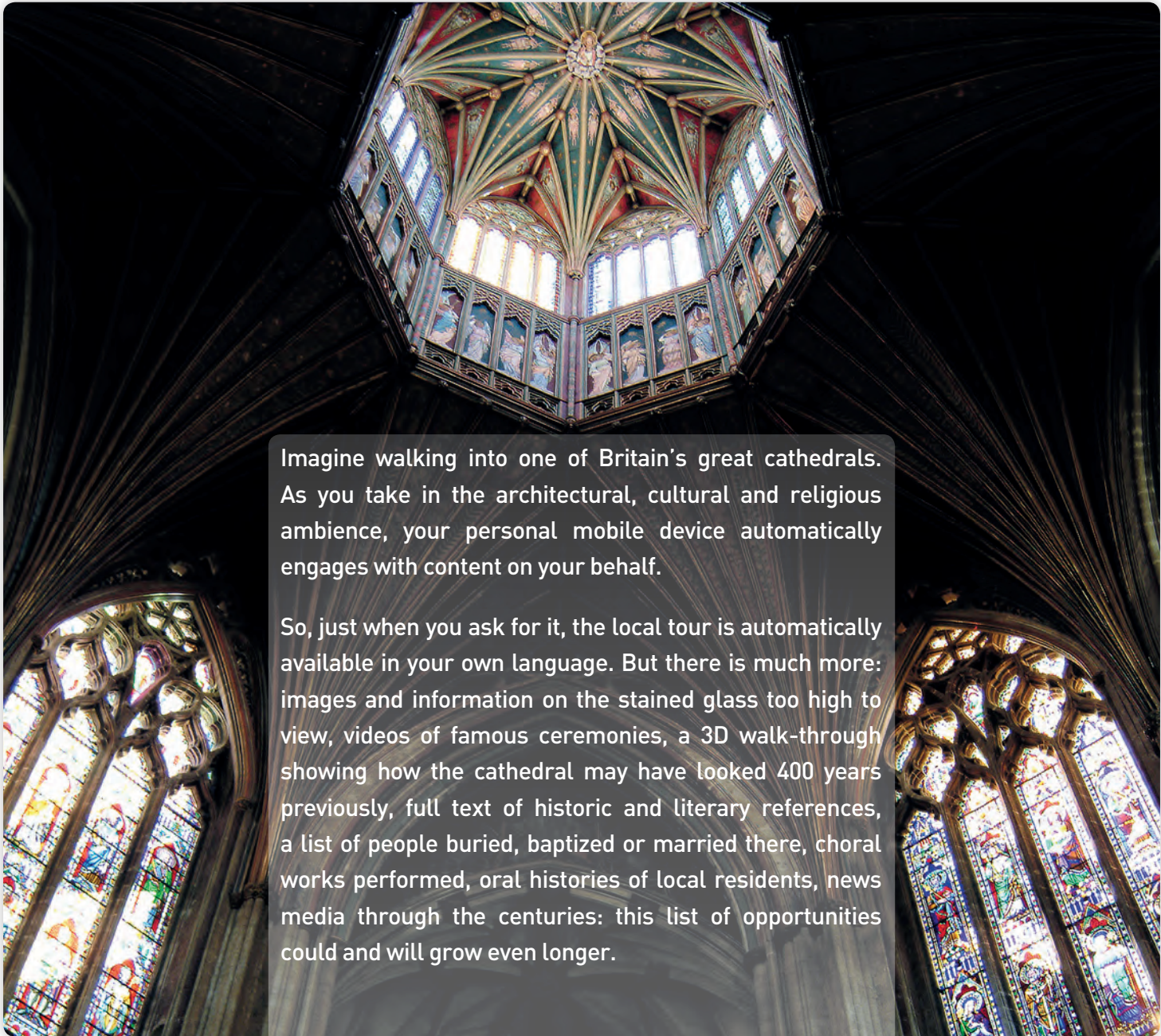


Inspiring Research, Inspiring Scholarship

The value and benefits of digitised resources for learning, teaching, research and enjoyment



Imagine walking into one of Britain's great cathedrals. As you take in the architectural, cultural and religious ambience, your personal mobile device automatically engages with content on your behalf.

So, just when you ask for it, the local tour is automatically available in your own language. But there is much more: images and information on the stained glass too high to view, videos of famous ceremonies, a 3D walk-through showing how the cathedral may have looked 400 years previously, full text of historic and literary references, a list of people buried, baptized or married there, choral works performed, oral histories of local residents, news media through the centuries: this list of opportunities could and will grow even longer.

A vision for the future

The opportunity to engage actively with British content that is educational, entertaining and deeply enlightening is not far away. Technology exists to drive forward a vision of intelligent environments that supply the right information to the right person at the right time. Paradoxically, what is missing is the depth of digitised content to make such technical developments more significant than mere playthings.

To achieve a Digital Britain that is digitally literate, educated and ready to exploit these new technologies, the treasure house of British content has to be digitised comprehensively.

For the intelligent Digital Britain we need beautiful information, authentic data, validated content and a critical mass that will drive economic impact, research innovation and social benefits.

What the Bodleian Library is doing now, in digitising large portions of our vast collections, is like the human genome project. Thousands of people can evaluate and use creatively the digital resources to discover new ideas and make innovations. Many hands make light work and those many hands will profoundly touch Britain's future capacity for learning, research and innovation.

Dr Sarah Thomas, Bodleian Library, Oxford University

The next phases of activity for UK-wide digitisation must aim to both increase the wealth of content and to disperse this content to an even broader audience.

Much has been achieved, but there are opportunities for much more impact, benefit and a greater return on investment if we continue to invest in the knowledge economy of Britain by digitising our astonishing cultural and scientific inheritance.



Written by Simon Tanner, King's College London with funding from JISC.

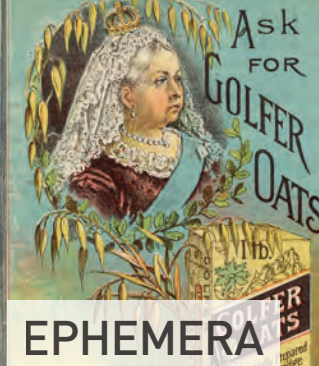
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BOOKS & JOURNALS



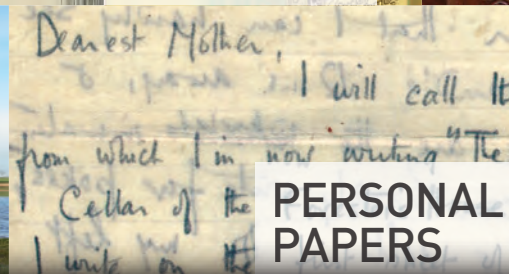
CULTURAL



EPHEMERA

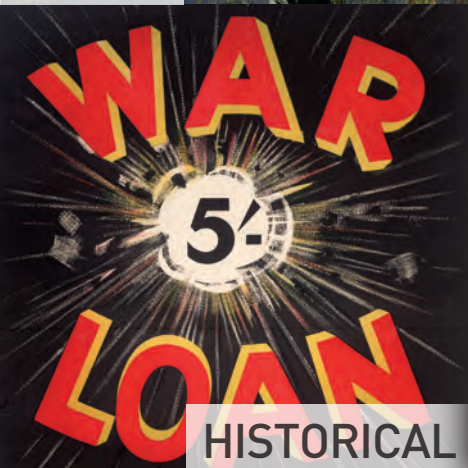


SOUND



PERSONAL PAPERS

SCIENTIFIC



HISTORICAL

"I want to make Britain the most connected, the most wired up, the most digitally advanced country there can be."
David Cameron, Prime Minister



NEWSPAPERS



STATISTICAL



FILM & VIDEO

AESTHETIC



Inspiring Research, Inspiring Scholarship

Britain needs a sustainable national content collection of compelling, rich and accessible digital content to foster excellence in research, learning and teaching.

Digitised resources continue to transform the research process:

- New areas of research are enabled.
- Rich research content is now widely accessible through innovative interfaces and friendly research tools.
- The researcher can now ask questions that were previously not feasible.
- Researchers can engage in a new process of discovery and focus their intellect on analysis rather than data collection.

Almost the entire field of bioinformatics has grown up because of data sharing.

Dr Paul Flicek, Vertebrate Genomics at European Bioinformatics Institute



The New History from Within

The **Old Bailey Online** offers a fully searchable database of the largest body of texts detailing the lives of non-elite people ever published, containing 197,745 criminal trials held at London's central criminal court with over 120 billion words recorded.

Alongside other key projects, such as London Lives 1690 to 1800, this makes eighteenth and nineteenth century London the most digitised where and when in the history of world. The Old Bailey Online is being used by people in their millions.

Old Bailey Online reaches out to communities, such as family historians, who are keen to find a personal history, reflected in a national story, and in the process re-enforces the workings of a civil society. Digital resources both create a new audience, and re-configure our analysis to favour the individual.

Professor Tim Hitchcock, University of Hertfordshire

Bringing Collections Out of the Dark

The **Archimedes Palimpsest** project has revealed to the world lost ideas by the ancient Greek mathematician and physicist Archimedes (287-212BC) – whose discoveries underpin much of modern physics – and this could only have been done through digital means.

This work was quite literally brought out of the dark by digitisation. Working collaboratively scientists and textual scholars from across the world have produced a readable text that reveals Archimedes' ideas, hidden for almost a millennium.

This sheds a whole new light on the history of mathematics.

From beneath the pages of the prayer book a second book emerged—a virtual Archimedes.

Will Noel, Curator of Manuscripts, The Walters Art Museum



Some way
 had given her many unpleasant feelings
 with respect to his own family; had
 made her more open to ~~any~~ disagreeable
 impressions

The **Jane Austen's Fiction Manuscripts Digital Edition** offers unprecedented opportunities for new scholarship, particularly in exploring the creative laboratory of her novels, so far an underexamined area of Austen studies. It also makes the manuscript sources freely available to the wider public.

Professor Kathryn Sutherland, Oxford University



Chap. 10.
 With all this knowledge of Mr. B. and his feelings in relation to her, she could hardly have been so much affected by what she had heard, felt, thought, and planned to do. She was so much affected, that she was almost insensible to the feelings of Mr. B. and his feelings in relation to her. She was so much affected, that she was almost insensible to the feelings of Mr. B. and his feelings in relation to her.

Early English Books Online itself has transformed research into early English literature. It has democratized the research process by extending this facility to individuals and institutions without easy access to specialist libraries.

Dr Sarah Carpenter, University of Edinburgh



Anon: The Papists politicke projects discovered, 1641. © Early English Books Online.



Benlowes, Edward: Theophila, or, Loves sacrifice, 1652. © Early English Books Online.



Barlow, Francis: AEsop's fables with his life, 1666 © Early English Books Online.

...the want of a certain quantity of the
 broke at intervals or silences of half an hour
 before they were joined by the Master of the

The Watsons, Jane Austen's Fiction Manuscripts Digital Edition.

Bestowing Economic Benefits

Higher Education has a key role in transferring ideas, research results and skills between universities, other research organisations, business and the wider community, conferring a whole range of benefits: economic, social and political.

The digital agenda and the digitised resources to support innovation are essential components for Higher Education investment.

Economic benefits include:

- Increased competitiveness: increasing value whilst accruing cost savings.

Digitised content and JISC Collections negotiations save the sector ~£43 million/year.

- Efficiency savings: saving time and effort whilst increasing effectiveness.

Chopin's First Editions Online is the only complete collection of his 1st editions, which otherwise are scattered across the globe... users have at their fingertips source materials which they would never normally have sight of, or only with considerable difficulty and concomitant expense.

Professor John Rink, Royal Holloway, University of London

- Doing more for less: more content and value for less money.
- New opportunities to create value through innovation, standards and services.

JISC Advisory services save the sector around £12 for every £1 invested (equivalent to around £38m).

Free access to medical research

Delivering free online access to almost 200 years of peer-reviewed medical research achieves a big economic impact. The digitisation of 20+ historically significant biomedical journals (**Wellcome Medical Journals Backfiles**) delivers an estimated 3 million pages within a sustainable framework. One title, the *Biochemical Journal*, attracts 300,000+ uses per month.

It's the immediate accessibility of a vast wealth of peer-reviewed resources that is most remarkable... [scholars] can access whole decades of invaluable resources on their desktops.

Professor Tilli Tansey, University College London



“The knowledge and expertise gained through our investment in people and innovation allows the UK to maintain a technological leading edge, build a strong economy and improve quality of life for its citizens.”

- Easier access to digitised scholarly content.

Newsfilm Online is a ground-breaking example of a creative partnership between higher education and a leading commercial news archive. It is set to move the agenda forwards in the appreciation of the long-term educational and scholarly value of broadcast news.

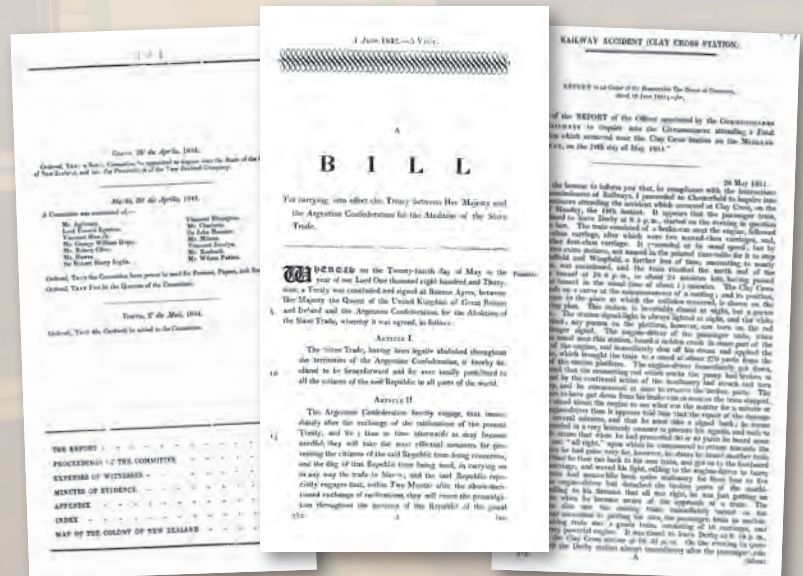
Professor Stewart Purvis, City University. Former Chief Executive and Editor in Chief at ITN



- Developing the brand for UK Higher Education.

The digitisation of the **proceedings of the 18th Century Parliaments** represents an enormously valuable resource – not just in Britain, but also in America and all of Britain's colonial possessions at the time. These sources, vast in their scope and comprehensive in their coverage, are now providing everyone with instant access to a treasure house of historical material.

Dr Paul Seaward, Director of the History of Parliament Trust



Connecting People and Communities

Connecting people and communities with digital content greatly improves life, work and leisure and ensures that all are included in our digital future.

- Community cohesion: sharing common interests and promoting a common vision.

It is fascinating, and very gratifying, to see the historical records of the Caribbean becoming more accessible to ordinary people. The on-line exhibition makes a great starting point for anyone interested in researching this part of Britain's heritage.

Andrea Levy, novelist commenting about Caribbean Histories Revealed



Connecting communities with news

The news, local, national and international, is a vital resource. Now it is put into the hands of everyone, and reveals a wealth of information about our daily lives of the last three centuries.

The British Library, funded by JISC, has digitised around 3 million pages of UK newspapers between 1620 and 1900. This is now available for public use.



- Lifelong learning and digital communities.

What a treasure trove of information you have here, the simple details that give away the thoughts behind the monarch. I had no idea this was here... It is archives like this that reveal the rich history that this country has.

Ellen Hogan, Financial Controller, amateur user of the Fine Rolls of Henry III

- Personal participation in society: information about family and ancestors, educational opportunities, medical and health information, entertainment, etc.

Digitised resources allow me to discover the hidden lives of disabled people, who have not traditionally left records of their lives. I have found disability was discussed by many writers in the Eighteenth Century and that disabled men and women played an important role in the social life of the time.

Dr David Turner, Swansea University

- A sense of place and time: a deeper engagement with the place and area people live and their personal histories.

With Harry Patch's death, any direct living connection to these [First World War soldiers'] records has finally been severed... Digitising these records makes them accessible to people around the world.

William Spencer, Military Records Specialist at The National Archives

Community Engagement

The **Great War Archive** is a digital project building new communities around content with more than 6,500 contributions from the general public. The public can submit photographs of memorabilia and souvenirs from the First World War and enter their family's story. They can also trace relatives who served in the First World War.

Travelling around the country, the Archive held 'roadshows' to which people brought First World War memorabilia they had uncovered in their attics. This was digitised on the spot and added to the project's website.

Availability of digitised resources teaches new skills and provides stepping stones for our universities to engage with a broader range of audiences.



Creating Digital Britain

Transformational digital content and resources support the broader government agenda to build Digital Britain and open up data for the twenty-first century. Our cultural and educational collections are our nation's prize jewels and should be at the heart of the agenda to expose national information to benefit the citizen.

Widespread access to digitised resources enhances education and research at all levels of attainment. They contribute to the vibrant cultural and intellectual life of the UK, promoting education and enjoyment for all whilst bestowing a range of benefits to local and national economies.

Asserting the value of the British brand

The Nineteenth Century House of Commons Papers...cannot be matched as a historical source in any other country in the world.

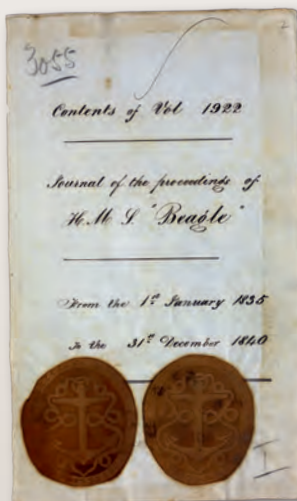
Norman Gash, *Times Literary Supplement*

Digitised resources emphasise the quality and innovation of UK education, thus helping promote the economy, and also actively assert the value of our British brand.



Leading the scientific world on climate change

The availability of the historical record, increasingly in digitised form, is one element of the scientific dominance the United Kingdom holds in the scientific discourse on climate change.



The observations from the logbooks on wind force and weather are astonishingly good... What happens in the oceans controls what happens in the atmosphere – so we absolutely need to comprehend the oceans to understand future weather patterns.

Dr Dennis Wheeler, University of Sunderland

The Freeze Frame archive is invaluable in charting changes in the polar regions. Making the material available to all will help with further research into scientific studies around global warming and climate change.

Pen Hadow, Polar Explorer

“Built up over centuries at an enormous expenditure of money and labour, library collections can be digitised en masse at relatively little cost – millions certainly, but little compared to the investment that went into them.”

Robert Darnton, Harvard University

Reconstructing past climate change

Hundreds of **Royal Navy ships' logbooks** have been digitised dating from the 1760s to 1923. The accurate weather information they contain is being used to reconstruct past climate change – hitherto untapped scientific data.

Digitising over 20,000 fragile photographs from 1845-1960, the **Freeze Frame archive** delivers to a worldwide audience some of the most important visual resources for research into British and international polar exploration. Personal journals and official expedition reports provide a narrative to the photographs.



Digitising Britain for our Digital Futures

Vision: a sustainable national content collection of compelling rich and accessible digitised resources for excellence in research, learning and teaching.

Spanning centuries, disciplines and sources, the pioneering JISC digitisation programme is unlocking a wealth of unique, hard-to-access material from the birth of writing to the present day, creating a critical mass of rich, permanent digital resources.

Much has been achieved, but there are opportunities for more impact, benefit and a greater return on investment if we continue to invest in the knowledge economy of Britain by digitising our wealth of information resources.

“We are sitting on a goldmine of content which should be within a coherent UK national digital strategy. To support Digital Britain we need to deliver a critical mass of digital content. Access... ought to be the right of every citizen, every household, every child, every school and public library, universities and business. That’s a vision worth delivering on.”

Dame Lynne Brindley, The British Library

The Way Forward

In order to realise this vision, what is needed is:

- **Collaboration** to achieve sustainable funding from a variety of different sources: public, private and commercial.
- **Partnerships** between content holders and consumers to build upon the JISC licensing and cost models to deliver more content currently within copyright.
- **Investment** in the digitisation of the rich collections to be found in the libraries, archives and museums in the higher education and associated sectors. We must:
 - Act together to fill gaps in content provision by engaging with national, regional, and cultural needs.
 - Create new online communities beyond the walls of the university.
 - Raise standards of digital literacy.
 - Help institutions be more effective/save money.
- **Excellence** in research, teaching and learning sustained by developing innovative tools and interfaces to digitised resources.
- **Expansion** of our national content collection by actively encouraging the creativity and enthusiasm surrounding user generated and annotated content.
- **Development** of sustainable and compelling public services based on open content in public libraries, museum and archives.
- **Competitive advantage** to UK Higher Education demonstrated through the continued evaluation and assessment of the use of digitised resources.