

Mother of Invention 2022 - Virtual Tour of the British Library

Virtual Tour

By Seema Rampersad & Jeremy O'Hare



Welcome to the British Library!

The History of the current main building at St Pancras

History of Round Room of the British Museum

Physical Buildings and Architecture

Legal Deposit Library for the UK and Ireland

The Knowledge Quarter

British Library with a focus on Intellectual Property, Scientific and Business Innovations



READING-ROOM, BRITISH MUSEUM.

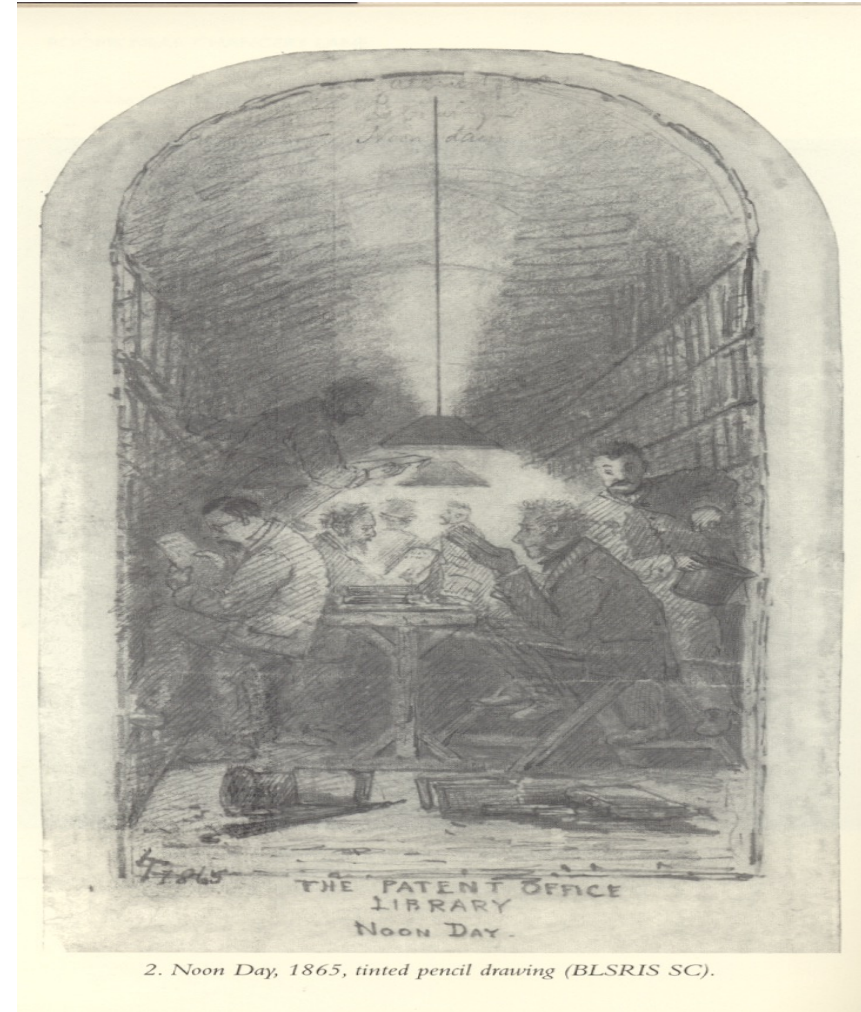
Background to the British Library

- National Library of the UK
- Established in 1972
- Over 150 million items held
- Services include:
 - Reading Room Services
 - Document Supply
 - Imaging Services
- New building in St Pancras opened in 1997



Road to the Business & IP Centre

- **1852:** Creation of **Patent Office Library**
- **1973:** Formation of British Library
- **1997-1999:** Opening of British Library St Pancras building.
- **2002/3 :** BL Chief Executive visit to **New York Science Industry & Business Library (SIBL)**
- **2005:** London Development Agency gives £1 million to help BL create Business & IP Centre
- **March 2006:** Business & IP Centre opens
- **April 2012:** Launch of Innovating for Growth



BRITISH LIBRARY



The British Library is for everyone who wants to do research – entrepreneurs, academics, commercial, creatives or personal

Hand over to:
Jeremy O'Hare - Intellectual
Property Expert

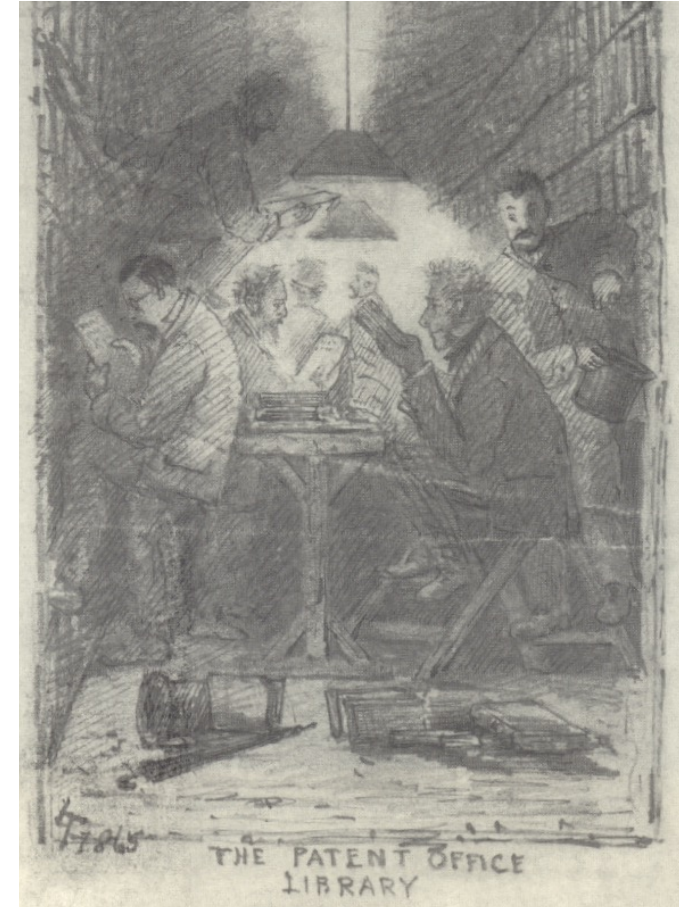
History of the Business & IP Centre

1852 - Creation of the Patent Office Library

1973 - Creation of British Library

1982 - Business information collection

2006 - Opening of Business & IP Centre



The British Library & Patents

- We are the national patent library
- We have a comprehensive collection of British & foreign patent documentation
- Our current physical collection is diminishing.
- Interest in our historic collection remains high

Patent Application Trends

- Last 20 years have seen steep decline in applications with the IPO. The drop has stabilised in the last 10 years, with signs of a small upturn in 2020.
- The curves for publications and grants are lower than that for applications
- Smaller portfolio applicants have halved since 2000 – (those with 1-10 applications).

This means that those who are applying are more serious about seeing it through - so therefore will be looking at a more rigorous search and feasibility early on.

Industries with highest applications

- Civil Engineering
- Computer Technology
- Transport
- Telecommunications have dropped.

Source UK Intellectual Property Office.

Trends the Business & IP Centre are seeing

- A drop in demand for patent searching*
- A high interest in Intellectual Property protection.
- A look at alternatives to patenting.



Trends in technology – The top 10*

1 MEDICINE

Microneedles for Painless Injections and Tests

Fewer trips to medical labs make care more accessible

2 CHEMICAL ENGINEERING

Sun-Powered Chemistry

Visible light can drive processes that convert carbon dioxide into common materials

3 HEALTH CARE

Virtual Patients

Replacing humans with simulations could make clinical trials faster and safer

Trends in technology – The top 10*

4 COMPUTING

Spatial Computing

The next big thing beyond virtual and augmented reality.

5 MEDICINE

Digital Medicine

Apps that diagnose and even treat what ails

6 ELECTRIC AVIATION

Enabling air travel to decarbonize

Trends in technology – The top 10*

7 INFRASTRUCTURE

Lower-Carbon Cement

Construction material that combats climate change

8 COMPUTING

Quantum Sensing

High-precision metrology based on the peculiarities of the subatomic realm

9 ENERGY

Green Hydrogen

Zero-carbon energy to supplement wind and solar

Trends in technology – The top 10*

10. SYNTHETIC BIOLOGY Whole-genome Synthesis



Image by [Konstantin Kolosov](#) from [Pixabay](#) on a CC licence

*Source: [Scientific American](#). Dec2020, Vol. 323 Issue 6, p34-45

Patlib Network & EPO

They are often referred to as "PATLIB centres", standing for **PATent LIBRARY**. However, not all PATLIB centres are actually libraries.

There are over 300 patent information centres spread regionally across the EPO's member states.

PATLIB centres provide local access to patent information and related issues. They are familiar with the local industrial, economic and business landscape, and provide valuable services to entrepreneurs, SMEs, private inventors and students.

Many PATLIB centre employees are experienced patent search experts. They may also offer other patent information services. These can include technology and competitor watches, patent statistics, patent valuation/audits, advice on patent strategy, guidance on commercialisation/technology transfer.

PATLIB centres can also provide practical assistance on other intellectual property rights.

Programmes: Innovating for Growth

Business & IP Centre London

Innovating for Growth: Scale-ups

LIBRARY HSILIBB

Receive £10,000 worth of business advice

If you are an exciting and ambitious start-up looking to scale up, we will provide you with three-months of free tailored support to turn your growth idea into reality.

Covering everything from intellectual property to reaching new markets and much more, our dedicated Relationship Managers will be on hand to guide you through every step to achieve your growth potential.

Apply by **Monday 25 April**

Find out more and apply
www.bl.uk/business-and-ip-centre/innovating-for-growth

The programme is fully-funded by the European Regional Development Fund and the British Library.

European Union
European Regional Development Fund

Innovating for Growth: Case Studies

Case Studies



A ► PHARMALEX Company

"The Innovating for Growth Programme helped CompliMed to realise our potential and grow in line with our values and beliefs." Dr Rina Newton, Managing Director



"The I4G programme helped me to scale the business and turn it from a kitchen table start-up to a global business." Jennifer Lam CEO & Co-Founder



"The British Library Innovating for Growth programme helped us to reflect on our progress and scrutinise every aspect of our business whilst supporting both personal and professional growth. The one-on-one mentorship was particularly beneficial in planning for future growth with a fresh perspective and innovative approach." Abi Purser, Founder

Programmes: Erasmus

The screenshot shows the website erasmus-entrepreneurs.eu. The browser tabs include 'EPO - Patent information centres' and 'European business exchange pro'. The website header features a navigation bar with 'Home', 'Contact', 'English', and a search icon. On the right, there are links for 'EYE Alumni', 'Intermediary Organisations' Corner', and 'IT Tool login'. Below the header, there are five main navigation items: 'Erasmus for Young Entrepreneurs', 'About the programme', 'Your local contact point', 'Frequently Asked Questions', and 'Apply now'. The main content area has a green background and features the text 'Erasmus for Young Entrepreneurs ONLINE AWARDS'. Below this, there is a call to action: 'Are you thinking of starting your own business, or have you recently done so? Or perhaps you are already running a successful business and would like to expand it to new markets, or get fresh ideas? Erasmus for Young Entrepreneurs could be for you!'. Two award winners are highlighted: Paulina Tsvetanova, Best Host Entrepreneur of the Year, and Artjola Puja, Best New Entrepreneur of the Year.

Back to Seema...

Photos of the Main Entrance



Entrance Hall & Knowledge Centre





The British Library at St Pancras

The British Library is the national library of the United Kingdom. It is based at St Pancras in London and Boston Spa in West Yorkshire, and acquires, creates and preserves the nation's collection of published, written and digital content.

The main site at St Pancras was the largest UK public building project of the 20th century. Its design and construction took 27 years and it won the accolade of architect Sir Colin Stanger's distinguished career. In August 2015 the Library became one of the youngest buildings ever to be awarded Grade I listed status by Historic England.

The red brick exterior of the building reflects that of neighbouring St Pancras Station and the 10 million bricks used in its construction came from the same source in Lancashire. It opened its doors to users via Ministry 24 November 1997.

The four basements in which much of the deepest in the UK, reaching Books are delivered to the Reading conveyor system that passes through which, at times of peak demand, can a day for registered Readers to come.

There are 1,277 desks in the Reading 150 open working spaces in the with area. Around 1.6 million visits are made each year, including 400,000 visits to our researchers and historians, genealogists.

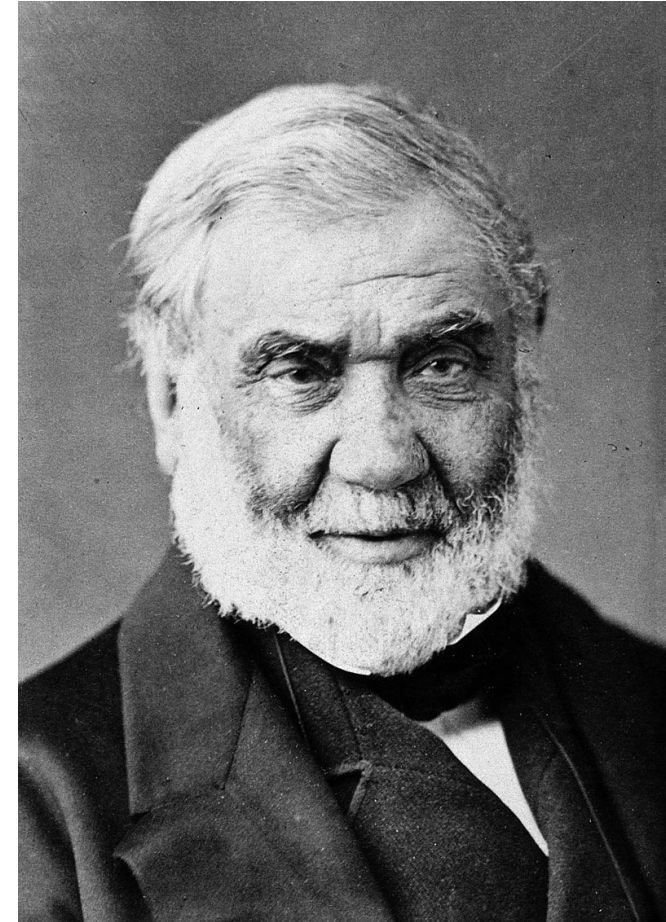
www.bl.uk
@britliblibrary
/britliblibrary

Architect



British Library architect Colin St John


Librarian



First Librarian of the British Library - Anthony Panizzi.

By Elliott & Fry. - [1], CC BY 4.0,
<https://commons.wikimedia.org/w/index.php?curid=33241543>

Founders



**Sir Hans Sloane
(1660–1753)**

Hans Sloane was born in Ulster, in the north of Ireland, and trained as a physician. An avid collector from an early age, he acquired over 200,000 plant and animal specimens, 71,000 objects, and over 50,000 books, manuscripts, prints and drawings. These later became the foundation collection of the British Museum.

Sloane travelled to Jamaica in 1687 as physician to the island's British colonial Governor and worked as a doctor on slave plantations. Using the expertise of enslaved West Africans and English planters, he collected hundreds of plant and animal specimens. When he returned to London, Sloane married Elizabeth Langley Rose, an heiress to sugar plantations in Jamaica. He was a shareholder in the Royal African and South Sea Companies, both of which profited from the slave trade. His medical income, his investments, and the profits from the forced labour on his wife's plantations enabled Sloane to build such a large collection.

20th-century replica after Michael Rysbrack, 18th century
BLWA 8

"It is too often said that the transatlantic slave trade is long behind us. An untold number of our ancestors' lives were completely ruined by men like Hans Sloane. Every one of their waking moments filled with violent abuse, torture, unpaid manual labour, rape and treatment as if less than human. That pain and trauma is still with us as we fight to make a world that is truly anti-racist. We cannot allow the glorification of enslavers and their legacies to continue through succeeding generations. We must remember these men for who they truly were, for their crimes as well as their accomplishments."

Reuben Massiah, Learning Facilitator, British Library
Chantelle Richardson, Chevening British Library Fellow 2019–2020/
Librarian, National Library of Jamaica



If it happens in the library it's **research**. Jotting down snippets of Sunderland history? **Research**. Working with a friend on the science of lichen? **Research**. Idling through the exhibition space? **Research**. Ordering from our Yorkshire vaults a Daily Mirror published on the bright morning you were born? **Research**. Coffee and gossi- 'they did *what?*' **Research**. Buying yet another small red notebook? **Research**. Emailing our business team for help finding all the weavers in Cornwall? **Re: search**. Scrolling through Twitter? Real time **research** into Marshall McLuhan's concept of the gravitational effect on cognition caused by new technologies. Enjoying a nice sit and a gentle think? **Research**. Learning about your cat's intermittent signalling of the laryngeal and diaphragmatic muscles? **Researrrrrrrch**. Requesting a 1989 thesis on the comeback of the French chanteur? **Reserge**. Being here, with hundreds of other curious wonderful wondering humans? With those who are new to our islands and with those who are old-hands? With librarians and readers and challengers and dreamers? **Research** ... into a big open shared future. **Welcome to the British Library.**



Living Knowledge

Living Knowledge sets out the British Library's vision for its future development as it looks ahead to 2023, the year of its 50th anniversary as the national library of the United Kingdom.



Custodianship

We build, curate and preserve the UK's national collection of published, written and digital content.



Research

We support and stimulate research of all kinds.



Business

We help businesses to innovate and grow.



Culture

We engage everyone with memorable cultural experiences.



Learning

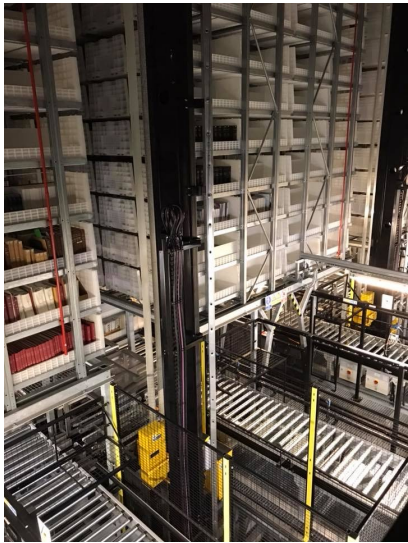
We inspire young people and learners of all ages.



International

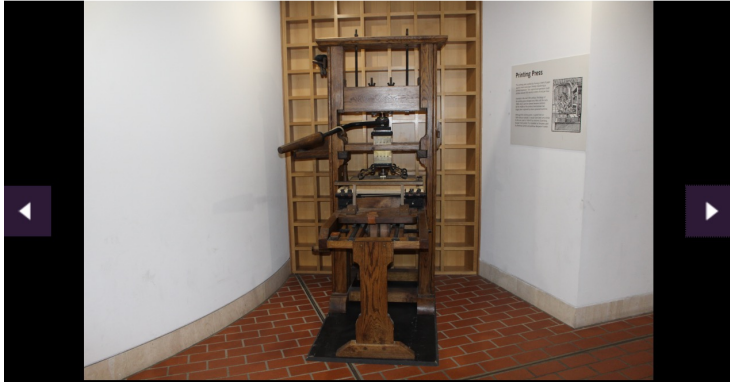
We work with partners around the world to advance knowledge and understanding.

Library as spaces



Renaissance to Industrial Revolution

Explore our collections



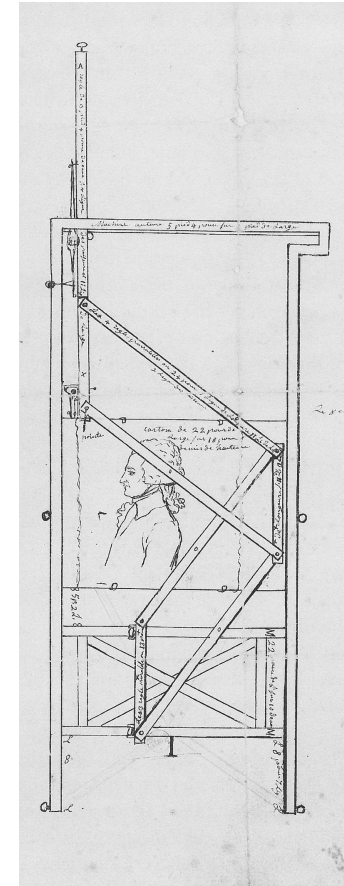
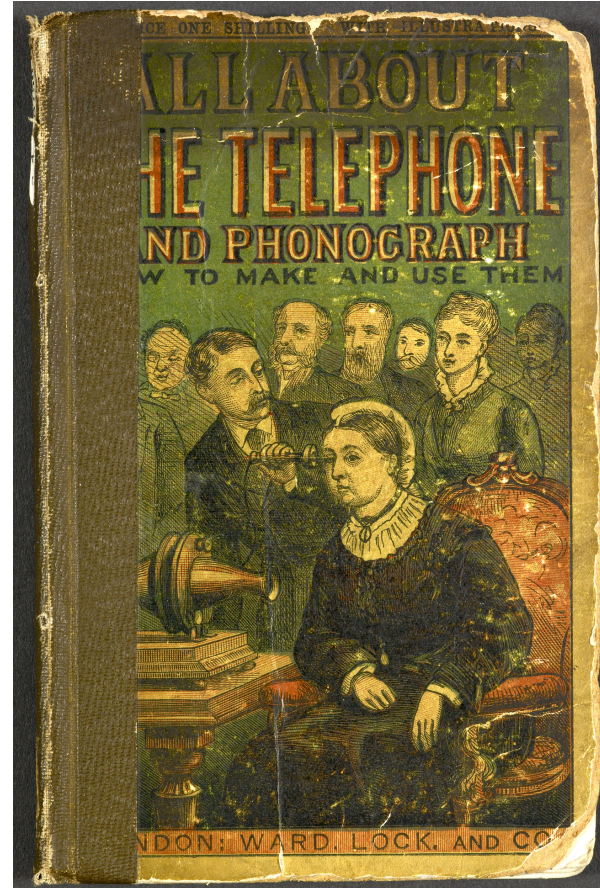
A replica of an 18th-century printing press (located on the Lower Ground Floor)



We may be a library but we're a lot more than just books. Take a look at some of the curious objects lurking around the building and in our archives.

A small selection of these include:

- [Jane Austen's writing desk](#) on display in our [Treasures Gallery](#)
- [Miniature 'pocket globes'](#), small enough to fit inside a pocket, on display in our [Treasures Gallery](#), or try giving them a spin [virtually](#)
- A replica of an 18th-century printing press (located on the Lower Ground Floor)
- [One of the world's largest atlases](#), on display outside the [Maps Reading Room](#) on the third floor



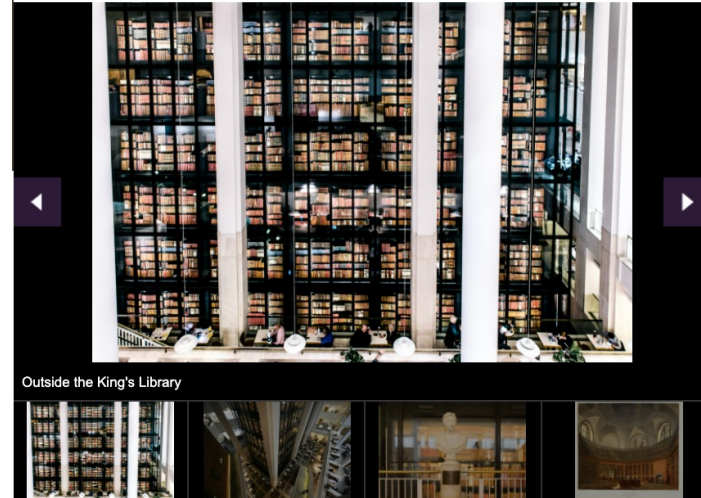
Treasure's Gallery – Free without a Pass



The King's Library



What is the King's Library?



Outside the King's Library

At the heart of the building, a tall glass tower – the King's Library – houses the collections of King George III (reigned 1760–1820).

It was one of the largest libraries in Europe by the King's death, with nearly 64,000 printed books and 14,000 pamphlets, together with manuscripts, maps and topographical views dating from the mid-15th to early-19th centuries.

Subject areas of the Library include history, geography, agriculture and military strategy, topography and literature in many European languages.

Alongside copies of the [Gutenberg Bible](#) and William Caxton's [first edition of Chaucer's Canterbury Tales](#), you can find a copy of [Micrographia](#) (1665) by Robert Hooke, one of the earliest scientific books in English. This work contains detailed illustrations of various specimens – often rather bizarre – which Hooke viewed under his microscope. These include the surface of frozen urine, the eye of a grey drone-fly, a piece of moss and the body of a louse, ant and flea.

How did the King's Library begin?

George III, who became King of Great Britain in 1760, believed he should have a library worthy of an 18th-century monarch.

He started his collection in 1765 by buying a large library from Joseph Smith, the British Consul in Venice, and spent the rest of his life adding to it. The King's librarian, Frederick Barnard, travelled all over Europe to buy books and even sought advice from writer and lexicographer [Dr Samuel Johnson](#) on what to collect.

Look out for George III's bust on the First Floor by the King's Library.

Events & Talks – What's Going On...



Reader Registration and Visitor Process



Digital Collections

Maps



Maps of the UK

A fascinating sampling of 19th and 20th century maps depicting places in the United Kingdom.



The Unveiling of Britain

This selection of maps and views traces the growing awareness of the form of British Isles and their place in the wider world from 800 to 1600.



Crace Collection of Maps of London

Over 1,200 maps and plans of the capital: a fascinating collection compiled by Victorian designer, Frederick Crace.



King George III Topographical Collection

Over 2,500 watercolours, drawings and prints from the vast collection amassed by King George III.



Special Digital Collections

Our digital collections

The Library subscribes to a variety of database and other electronic resources. Some are freely available but most can only be accessed in our Reading Rooms.



Digitised manuscripts

View digitised copies of selected manuscripts and archives including Beowulf and Leonardo da Vinci's Notebook.



Sounds Online

Over 95,000 selected sound recordings from the Library's extensive collection of music, spoken word and nature.



ETHOS

Browse our online record of all doctoral theses awarded by UK HE institutions. Free access to around 160,000 full text thesis.



Endangered Archives Programme

Explore archives, manuscripts, photographs and sounds from around the world.



Business and management

Download research reports, summaries, briefings, working papers and articles from key publishers.



Social welfare

A single point of access to our collections of research and information on social policy and the welfare state.

In-Library access or subscription
Why is this?

The British Newspaper Archive
One place, millions of stories

British Newspaper Archive

Over 10 million searchable pages, from more than 200 newspaper titles from UK and Ireland.

In-Library access only
Why is this?

Electronic resources

The Library collects a variety of electronic, or non-print items, and provides access to most of this content via subscriptions.

Physical Reading Rooms by Subject

LIBRARY BRITISH Search our website
Our website Main Catalogue

Catalogues & Collections Discover & Learn What's On Visit Business Support Shop Join

Subjects

These subject guides will help you to research selected subjects. They do not cover every subject, or everything the British Library has. To find material relevant to your research, please search our main catalogue [Explore the British Library](#) or our [specialist catalogues](#).

What are you looking for?

Africa
Historical and contemporary material for the study of Africa

Americas
Extensive collections from the Americas and Australasia

Arts and humanities
Collections for the study of history, culture and society

Black Britain and Asian Britain
Historical and contemporary resources on the experience of people of African, Asian and Caribbean heritage in Britain

Business and patents
Extensive collections on business, management, patents and trade marks

Central Asia
Our resources on Central Asia

Classics
Graeco-Roman antiquity, from the middle of the 2nd millennium BC to the end of the 6th century AD.

Contemporary Britain
Collections reflecting contemporary British society and culture

Digital scholarship
Undertake innovative research with our digital collections and data

East Asia
Resources for the study of East Asian languages and cultures

Family history
Primary sources and reference material for family history and genealogy research

Germanic studies
Resources for the study of Germanic countries, past and present

Law and legal studies
Historical and current resources for the study of law, legislation and society

Literature and drama
Collections relating to English literature and British theatre

Manuscripts and archives
Unique sources for the ancient, medieval, modern, and contemporary periods

Science Collection

Case studies

Helen Piel



Helen's AHRC funded collaborative PhD with the British Library and the University of Leeds explores the working life of the British evolutionary biologist John Maynard Smith (1920-2004) through his archive and both his popular and professional writings.

You get to know how people work in an institution like this... it's something I would like to do as well.

Published date: 2 January 2019

Helen's research takes her through the rich collection of correspondence, notes, papers and notebooks that are part of the British Library's scientific archives.

She is contributing to the processing and cataloguing of born-digital material (material on floppy disks and hard drives) contained within the archive.

Working with Undercurrent Theatre, she has scripted and performed a reading of letters from three major evolutionary scientists whose archives are held at the British Library. She has also given a popular lunchtime talk and writes for the Library's [Science](#) and [Untold Lives](#) blogs.



Science Reading Rooms & Events

Science Reading Rooms

Floor 2 focuses on Medicine and Life Sciences, Floor 3 focuses on Physical Sciences and Engineering.

- Find information on the open-access shelves
- Access online [databases](#) and electronic books and journals
- Order collection items to the Reading Rooms via our [catalogues](#)

If you need help, please ask our Reference Specialists at the Enquiry desk or contact the [Science Reference Service Team](#).

We offer a range of free [Reader sessions](#) and [1-2-1 consultations](#) to help you make the best use of the Library's collections.

You'll need a [Reader Pass](#)

Mon: 10.00 – 20.00

Tue – Thu: 09.30 – 20.00

Fri – Sat: 09.30 – 17.00

Sun & English Public Holidays: closed

[Opening hours for all Reading Rooms](#)



British Library Science Team
@ScienceBL

We are the British Library Science Team; we provide access to world leading scientific information resources, manage UK DataCite & run science events.

Euston Road, London [blogs.bl.uk/science/](#) Joined March 2010

583 Following 4,066 Followers

Followed by Claire Wotherspoon, BL Printed Heritage Collections, and 48 others you follow

Tweets Tweets & replies Media Likes

British Library Science Team @ScienceBL · 14h
Join us to see these amazing films highlighting some of the most urgent global health issues. This afternoon @britishlibrary

MED Festival London @medldn · May 13
Congratulations to all the winners of the @WHO Health for All Film Festival 🎉 Join us in-person @britishlibrary this Sunday at 3pm for a FREE event to watch the films and for discussion with filmmakers and guests. Register at [medlondon.org/who-health-for...](#) #HealthForAll #MED2022

2022 PROGRAMME ABOUT GET INVOLVED OTHER CITIES MED FROM HOME

HEALTHY CITIES

HOW DO WE MAKE LONDON HEALTHIER AND HAPPIER AFTER COVID-19?

In collaboration with

Sunday May 15, 2pm at The British Library, London

Join us for a FREE series of talks at the British Library on Sunday May 15, 2022 as we discover how to make our cities healthier and happier after the COVID-19 pandemic.

Science Technology & Medicine Resources – Physical & Digital

Collection guides

Science overview



Subjects

Science
Our resources support the needs of specialists working in academia and business, and can support multidisciplinary research interests.

Our resources support the needs of specialists working in academia and business, and can support multidisciplinary research interests.

About the collection

As the national library we have most of the scientific monographs published in the UK and a large proportion of the English-language journals published in Europe and North America. We have an extensive collection of journals including scholarly peer-reviewed journals and trade and professional journals.

What is available online?

We also have available the harder to find material including large collections of conference proceedings, research reports and statistic series as well as access to UK Doctoral thesis through [EThos online](#). This is in addition to the wide ranging collections of patents, market research, trade and business directories, company and financial information.

What is available in our Reading Rooms?

Access to our extensive range of material is available in our dedicated Science Reading Rooms. Also, an increasing amount of our journals are available electronically within our Reading Rooms.

You can perform detailed searches of your subject area using our wide range of electronic databases enabling you to find the most relevant journal articles and research publications.

BRITISH LIBRARY

FIND ELECTRONIC RESOURCES

Title
Subject
Advanced search

Subject	SubCategory
Remote access	All subcategories (98)
Science	Agriculture (5)
Science, Technology and Medicine	Biology (16)
Slavonic & East European Studies	Chemistry (9)
Social Policy and Welfare	Dissertations and Theses (3)
Social Sciences	Engineering (11)
Sociolinguistics	Environment (9)
Sociology	Food (2)
Southeast Asian Studies	General (27)
Statistics	Geography and Geology (1)
Tibetan Studies	Information Technology (4)
Women's Studies	Medicine (31)

Go

Powered by SFX

Resources – Readers Remote Access

Results: 25

Agricultural & Environmental Science Database

Resources available on a personal device - Registered Readers

A full-text database covering comprehensive scholarly output and indexing supported by a controlled vocabulary. This database includes AGRICOLA, Aqualine, Ecology Abstracts, EIS, ESPM and Risk Abstracts databases.

NB: Reader Pass holders can access this resource on a personal device.



BioOne Complete

Resources available on a personal device - Registered Readers

Search or browse biological, ecological and environmental sciences journals.

NB: Reader Pass holders can access this resource on a personal device.



Biosis Citation Index

Resources available on a personal device - Registered Readers

Bibliographic database covering all areas of life science research. Includes journal citations and abstracts from Biological Abstracts with non-journal coverage (conference proceedings, book chapters, meeting reports etc.) from Biological Abstracts Reports, Reviews and Meetings. 1926-present.

NB: Reader Pass holders can access this resource on a personal device.



Book Citation Index (Sciences)

Resources available on a personal device - Registered Readers

Part of Web of Science Core Collection, Book Citation Index includes over 104,500 editorially selected books, with 10,000 new books added each year. Containing more than 53.2 million cited references. Coverage: from 2005 to date.

NB: Reader Pass holders can access this resource on a personal device.



British Nursing Index

Resources available on a personal device - Registered Readers

Indexes the most popular English language nursing journals published primarily in the UK. 1985 to date.

Science Citation Index Expanded

Resources available on a personal device - Registered Readers

Search across over 9,200 of the world's most impactful journals across 178 scientific disciplines. More than 53 million records and 1.18 billion cited references date back from 1900 to present.

NB: Reader Pass holders can access this resource on a personal device.



SPORTDiscus

Resources available on a personal device - Registered Readers

Contains citations and abstracts on sport, fitness and related fields. Subject coverage includes : sports medicine, physiology, biomechanics, training techniques, coaching, physical education and physical fitness. 1800 to date.

NB: Reader Pass holders can access this resource on a personal device.



Web of Science Core Collection

Resources available on a personal device - Registered Readers

Collection of databases providing multidisciplinary literature coverage – including cited references – in all academic subjects, not just science. Provides access to the Science Citation Index Expanded (1900-present); Social Sciences Citation Index (1956-present) and the Arts & Humanities Citation Index (1975-present). Also provides access to the Book Citation Index Science (2005-present); Book Citation Index Social Sciences & Humanities; Current Chemical Reactions (1993-present); Index Chemicus (1993-present) and information from the Conference Proceedings Citation Index- Science (2006-present) and Conference Proceedings Citation Index- Social Science & Humanities (2006-present).

NB: Reader Pass holders can access this resource on a personal device.



Zoological Record

Resources available on a personal device - Registered Readers

Comprehensive index to zoological and animal science literature. Covers journal articles, books, conferences and reports on all aspects of zoology. Covers 1864 to date.

NB: Reader Pass holders can access this resource on a personal device.



Engineering - Technical and Innovative

The screenshot shows the British Library website interface. At the top, there's a navigation bar with links like 'Explore Home', 'Feedback', 'Basket', 'Request Other Items', 'My Reading Room Requests', and 'Help'. Below that, a search bar contains the word 'engineering'. To the left of the search results, there are filters for 'Material type' (Images, Web Pages, Reports) and 'Author/Contributor' (The British Library, Great Britain, Dept. for Business, Innovation and Skills, etc.). The main search results area shows five items, each with a star icon, a title, a description, and a 'Details' link. The items are: 1. Science and engineering skills framework (Report), 2. Engineering skills: Perkins Review progress report (Report), 3. Howard Stevens - civil engineering jargon (Web Page), 4. Civil Engineering - Voices of Science disciplines (Web Page), and 5. Michael Parsons - civil engineering satisfaction (Web Page).



- British Standards and how they define IT service standards are asked about
- Building standards and questions around structural material we get asked about . We also have the up to date building regulations that get used
- Engineering data sheets get used quite a lot – you get an idea of the scope of the resource from the catalogue record.
- Popular Title: ESDU engineering sciences data.
Contributor: [Engineering Sciences Data Unit.](#); [Royal Aeronautical Society.](#)

Examples of Queries

- Do you have copies of any versions of ASTM D1857 (measurement of ash fusion temperature)?
- I am trying to access some Elektrische Bahnen articles. (Electrified rails) The reading room request service states that this is not possible as they are available at the Science open access shelves.
- Do you hold all parts of BS12913 please? This is a British Standard dealing with acoustics _ soundscapes.
- Availability of IEE Proceedings. Radar, Sonar and Navigation 146(5) pp 243-250, October 1999 at The British Library.
- Availability of FEM (European Materials Handling Federation / Fédération Européenne de la Manutention) standards 4.001f, 4.001k and 4.001m.
- Hello, I am looking for the below 3 items: Jakobsson, B. and Floberg, L. (1957) The Finite Journal Bearing, Considering Vaporization, Trans. Chalmers Univ. Tech., Goteborg, 190 Olsson, K. (1965) Cavitation in Dynamically Loaded Bearings, Trans. Chalmers Univ. Tech., Goteborg, 308 Elrod, H.G., Adams, M.L. (1974) A computer program for cavitation and starvation problems, Proceedings of 1st Leeds-Lyon Symposium on Tribology, Leeds, UK Are you please able to confirm whether you hold them/cost for retrieval and if you would be able to send copies over by today?

Special British Library Digital Initiatives

Digital Research

The Digital Scholarship Department works to enable innovative research based on the British Library's digital collections through:

- Getting content in digital form and online
- Collaborative projects
- Offering digital research support and guidance
- Events, competitions, and awards

Our team of cross disciplinary experts in the areas of digitisation, librarianship, digital history & humanities, computer and data science, are here to help you with your digital research.

Contact us at digitalresearch@bl.uk

Twitter: [@BL_DigiSchol](https://twitter.com/BL_DigiSchol)



Collection guides



Digitised printed books (18th-19th century)

Over 60,000 out-of-copyright digitised books from the 18th and 19th century available for viewing, search, download and digital research.



Datasets for image analysis

Image collections suitable for large-scale image-analysis-based research



Datasets about our collections

Bibliographic datasets relating to our published and archival holdings



Datasets for content mining

Content suitable for use in text and data mining research



UK Web Archive

Preserved web resources of scholarly and cultural importance from the UK domain



Digital mapping

Geospatial data, cartographic applications, digital aerial photography and scanned-in historic map materials

Search



- The main catalogue

First World War Centenary, 2014-18

You are here: [Topics and Themes](#) / First World War Centenary, 2014-18

This collection includes a huge variety of websites related to the First World War (1914-1918), particularly the war memorialisation and critical ref...

[Read more](#)

Search within "First World War Centenary, 2014-18"

Heritage Lottery Fund

This is a subsection of the First World War Centenary, 20...

934 sites in collection

1915 then and now

Alan Turing Institute in The British Library

The Alan Turing Institute

AI and data science in the age of COVID-19 →
Tuesday 24 Nov 2020
Time: 09:30 - 17:00

David Spiegelhalter | Devi Sridhar
| Neil Lawrence | Adam Kucharski
| Maxine Mackintosh | Christina Pagel

Understanding bias in facial recognition technologies →
A guide to understanding bias and discrimination in facial recognition technologies

Leslie, D. (2020). Understanding bias in facial recognition technologies: an explainer. The Alan Turing Institute. <https://doi.org/10.5281/zenodo.4050457>

We believe data science and artificial intelligence will change the world.


Learn more ↓ The Turing's response to COVID-19

STEM & Data Science – Alan Turing & Enigma Code

IWM Visit Our Museums ▾ Objects & History ▾ Research ▾ Learn ▾ Support Us ▾

HOW ALAN TURING CRACKED THE ENIGMA CODE

Until the release of the Oscar-nominated film *The Imitation Game* in 2014, the name 'Alan Turing' was not very widely known. But Turing's work during the **Second World War** was crucial. Who was Turing and what did he do that was so important?



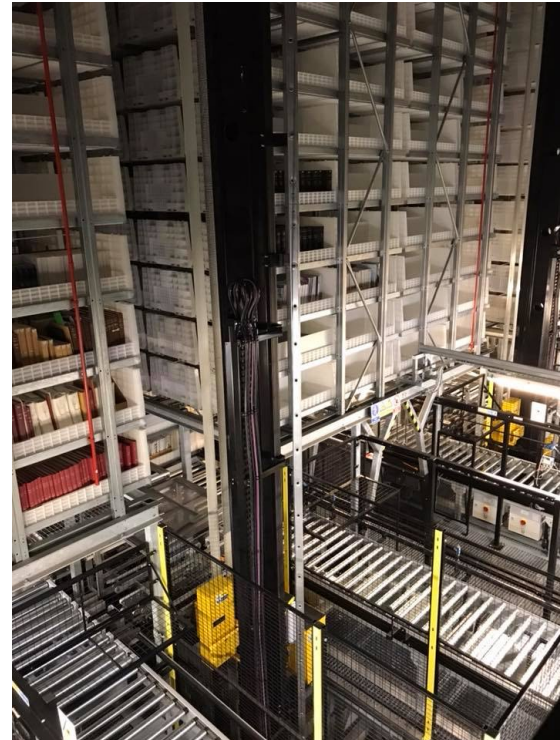
© National Portrait Gallery

MATHEMATICIAN

Alan Turing was a brilliant mathematician. Born in London in 1912, he studied at both Cambridge and Princeton universities. He was already working part-time for the British Government's Code and Cypher School before the Second World War broke out. In 1939, Turing took up a full-time role at Bletchley Park in Buckinghamshire – where **top secret work** was carried out to decipher the military codes used by Germany and its allies.



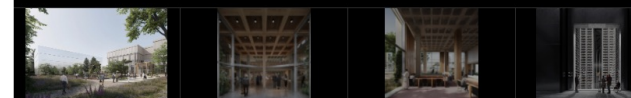
Boston Spa – Document Supply & Future



Transforming Boston Spa



Reimagined green spaces and visitor entrance (Image: Carmody Groarke)



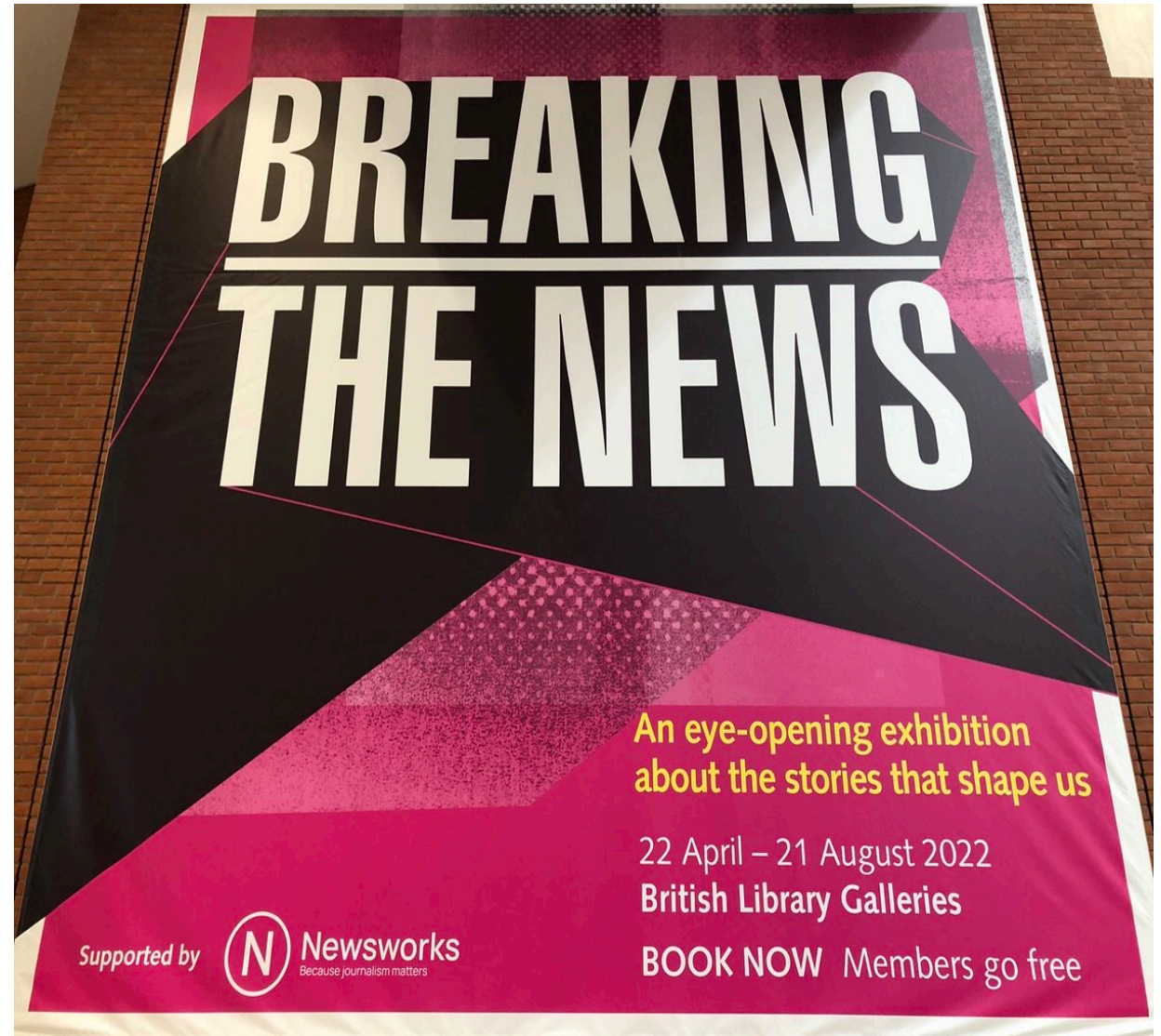
Formats – Web Archive, Sound Archive, News, Maps, Electoral Registers, Patents etc



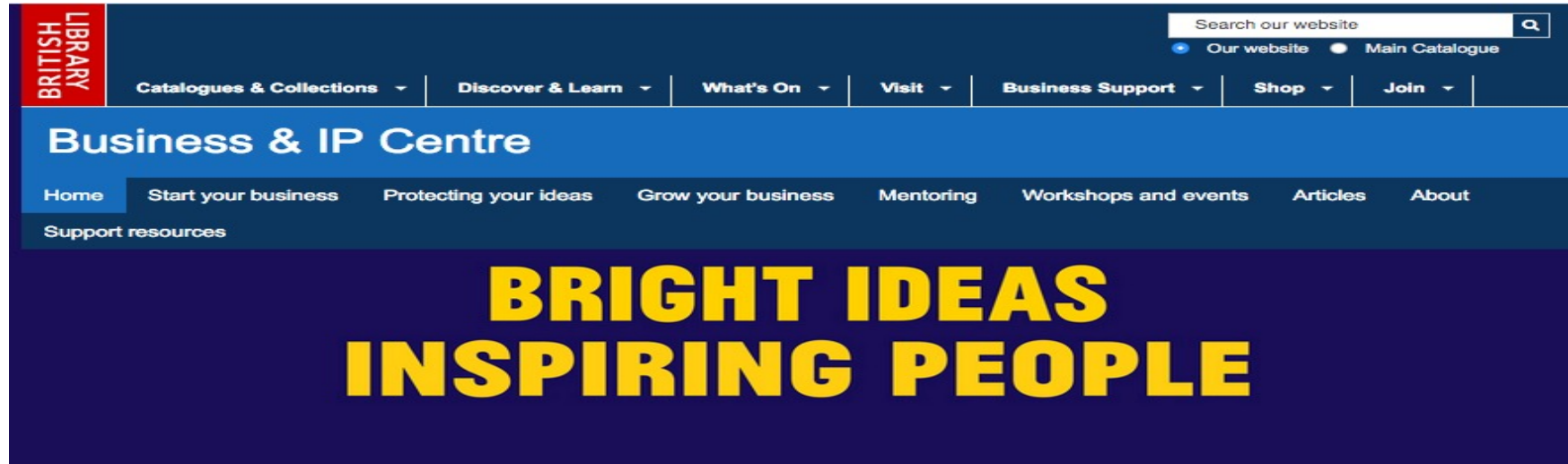
Sound Archive



Newsroom



Business & IP Centre



From Wednesday 22 July the British Library has started to open some of our Reading Rooms as the first step of a phased reopening. We're working really hard to open more of our spaces and services as quickly and as safely as possible. For more information, [click here](#). If you are able to come to our Reading Room, you will be able to access our [market research and company databases](#).

The Business & IP Centre will continue to run [webinars](#) and you can [watch previous events on our YouTube channel](#). Our reference team are also running online one-to-ones on [intellectual property](#) and [business information](#).

These are all available on our website alongside [articles](#), [blogs](#) and [Industry Guides](#). We're here for businesses and look forward to welcoming you back as we reopen.

We support small business owners, entrepreneurs and inventors like you. Our team are here to help you take the right steps to start up, protect and grow your business.

If you're an ambitious business owner, with plans to scale-up, we also offer £10,000 worth of free support through our [Innovating for Growth](#) programme. Or if you want specialised start-up support we have a programme for that too.

What's more we have a pilot programme, [Start-ups in London Libraries](#), working in a hub and spoke model with 10 London boroughs to collaboratively provide support to aspiring entrepreneurs and early stage SMEs as well as 15 [National Network](#) Centres around the UK, in addition to our Centre at the British Library.

The British Library, 96 Euston Road, NW1 2DB

Tel: +44 (0) 20 7412 7901

[Opening times](#)

For enquiries about our business resources and collection [email our Reference team](#).

Business & IP Centre




RESET. RESTART

Reset. Restart

Join one or more of our series of webinars for practical, jargon-free training and advice from marketing to sales, current trends and, of course, funding. Supported by Barclays.


Calling all business owners

Resources to help start, run and grow your business




Starting your business

Practical advice to help get your business off the ground, from business plans to market research.




Protecting your ideas

Make sure you understand the basics of intellectual property and how to protect your product, website and brand.




Growing your business

Want to go international or expand your product range? Get top tips for taking your business to the next level.




Databases and publications

Over £5m worth of current market reports from top publishers Mintel, Frost & Sullivan, Passport and more.




Free industry and IP guides

Up-to-date quality information on intellectual property and for researching key industries, handpicked by our experts.




Our research service

Pay our experts to do research for you.




Our Corporate Partners

Our corporate partners help us to support business owners like you from start up to scale up




Articles

Read our articles for top tips and advice on starting and growing your business and protecting your intellectual property



Information clinics

Our staff provide free hour-long advice sessions to talk through your ideas in confidence, helping you to develop your business ideas and business plan



Erasmus for Young Entrepreneurs

The EU exchange programme for new and budding entrepreneurs

Business & IP Centre



Democratising Entrepreneurship

Libraries as engines of economic growth and how Business & IP Centres have created over 12,000 new businesses between January 2016 - December 2018. [Click here for the full report, compiled by ERS \(PDF\).](#)

Business & IP Centre Network

Democratising entrepreneurship: libraries as engines of economic growth



A three-year economic impact analysis, January 2016 – December 2018

Driving economic growth

Helped to create **12,288** new businesses (47% in the Northern Powerhouse)

and **7,843** additional jobs

£78m GVA* created
*Gross Value Added

A payback of **£6.95** for every £1 of public money spent



Supporting diverse entrepreneurs



Of those who started a new business:

55% were women

29% were aged 35 and under

31% were black, Asian and minority ethnic

22% were from the most deprived areas

17% were disabled

Capitalising on existing assets

Delivered via the public library network



Source: ERS Research & Consultancy, based on a survey of 1,855 respondents conducted in March 2019



Creativity and Innovations – Science Collection

“I had no background in food and drink, so I spent six months in the Library researching the market and developing the business plan, including using the science collection to find out about the health-giving properties of pomegranates and how they could be processed to make juice.”

Adam Pritchard

Founder & MD, Pomegreat

Pomegreat now has a 75% share of the market by value and two million litres of the juice is sold each month.



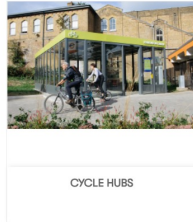
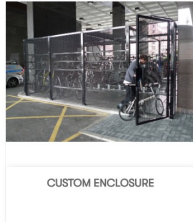
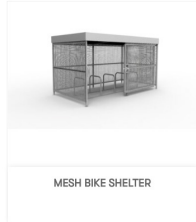
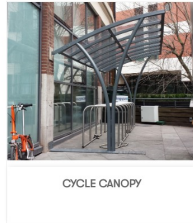
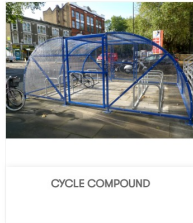
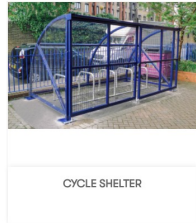
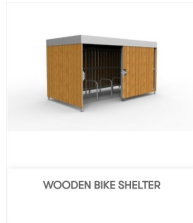
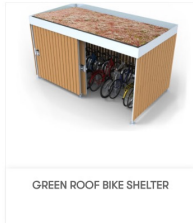
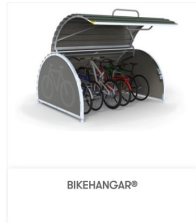
CreativeTech and Engineering

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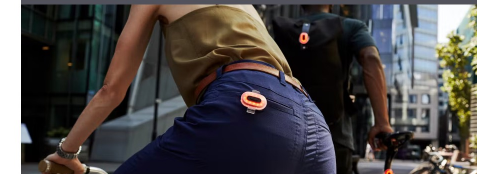


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LIBRARY
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Living Knowledge Network

Living Knowledge Network

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Partner libraries

What's On

Network power

Opportunity for partnerships

Partner libraries



The British Library forms nationwide network of libraries to share knowledge, collections and creativity



*** Living Knowledge Network of 21 major libraries meets for the first time at the British Library**

*** National Library of Wales and National Library of Scotland also founder members**

The British Library has launched the Living Knowledge Network, a nationwide partnership between the Library and 21 major libraries in cities and towns across the UK. The Network will combine local expertise and national organising power to share knowledge, resources and activities.

Funded by Arts Council England and the British Library for a two-year pilot period, the Living Knowledge Network aims to:

- **Enable knowledge exchange** – strengthening libraries' collective ability to deliver world-class library services to diverse communities;
- **Develop joint offerings for library users** – collaborating on programmes, activities and shared content;
- **Form a powerful partnership** – working together on funding applications, evidence gathering and to share programmes of activity with a combined audience of 13 million.

British Library – Happy Staff & Job Titles

Case studies from our staff



‘...Every day is genuinely different...’

Our award-winning Customer Services team is the first point of contact for many British Library users.



‘...Technology here is unique. It ultimately helps preserve our history...’

We're a mixed-skill, multi-disciplinary unit that's responsible for delivering digital services for the whole Library.



‘...I find my role hugely fulfilling...’

Seema is a Business Librarian in the Business & IP Centre providing reference and research services to readers, entrepreneurs and other external business customers.

Case studies from our staff



‘...Our team is constantly learning and developing...’

We have been at the forefront of digitisation and digital preservation projects for over two decades.



‘...You won't find these kind of challenges in many other organisations...’

Whilst we're structured like many other IT teams, what we do day-to-day ultimately leads to the preservation of our history and collective knowledge. And, because our collection is very diverse, it could be print or sound based.



‘...I get to collaborate with some incredible people...’

Our programme of workshops, led by specialist educators, encourages curiosity, creativity and exploration. Sessions develop critical thinking, research skills and visual, verbal and information literacy.



‘...The sheer size of the place means there are great development opportunities...’

We help people find and use material held in some of the most unusual and hard to search parts of our collection – answering questions from Readers as well as those phoned in or sent to us as emails and letters, or via our QuestionPoint and Chat services.

St Pancras Transformed & Community

Living Knowledge blog

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25 SEPTEMBER 2020

Transforming the British Library



Last year, the British Library signed an agreement with SMBL Developments Ltd, a consortium led by Stanhope plc, to develop the 2.8 acre site to the north of our existing Grade I Listed building at St Pancras. The new development, which combines a 100,000 ft² extension to the Library with 600,000 ft² of commercial rental space, will create a global hub for research and innovation, including in data and life sciences.

This week, the Library and our development partners (SMBL) have signed an agreement with Transport for London (TfL) to design and deliver future Crossrail 2 infrastructure within the proposed scheme, concluding a complex negotiation and enabling the Library Extension project to move forward into a period of public consultation.

International Projects

International

What are you looking for?



Our vision

- Business
- Culture
- Learning
- Custodianship
- Research

We work with partners around the world to advance knowledge and understanding.

Scholarship has always sought, sometimes against the odds, to reach across boundaries of language, politics, faith and geography. Today, the international community of libraries is a powerful and resilient network of institutions with shared values and missions. What's more, the digital era has delivered tools and platforms that are bringing this network closer together in compelling new ways. The British Library has a distinctive and important role to play alongside others in this global system, not least as our collection is perhaps the most international of its kind, with rare and unique items reflecting all major language groups and faiths.

Our priorities between now and 2023 to support our International purpose are to increase our engagement in those regions of the world whose cultures and histories are reflected most strongly in the Library's collections. We also want to take a professional leadership role in the national library network of Europe so that we can contribute to the development of a global distributed digital library. And, we plan to grow our capacity to support other institutions whose collections are at risk from war or civil emergency.



Anti-Racism Project and Race Equality Plan



Enacting change – rolling out our Race Equality Action Plan



Over the course of 2021, staff at the British Library engaged in an unprecedented and powerful conversation about race and equality.

The [Anti-Racism Project \(ARP\)](#) involved members of staff drawn from all levels, across all areas of the Library, with the aim of enacting a generational shift so we become a more representative and diverse organisation that is welcoming and empowering for everyone.

Last autumn, the six working sub-groups of the project submitted their recommendations, which form the basis of a [Race Equality Action Plan](#) ([click to download](#)) which was presented to the Library's Board and Strategic Leadership Team, for their input and endorsement.

Sponsored by our Chief Librarian, Liz Jolly, and strongly supported by all of our senior leaders, the project is now moving from the planning and analysis phase to an organisation-wide process of implementation.



SEEMA RAMPERSAD

SENIOR RESEARCHER AND SERVICE MANAGER
BUSINESS & IP CENTRE AT THE BRITISH LIBRARY

Tell us about your favourite conference theme:

I loved SLA's Destination Everywhere as it highlighted the global network of information professionals and specialized libraries



[@SeemaRampersad](https://twitter.com/SeemaRampersad)



[Seema Rampersad](https://www.linkedin.com/in/SeemaRampersad)

SLA President Elect 2022-2024



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REDESIGN | REFLECT | REBOOT

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Members

Join SLA Europe today and learn more about what you can do for the association.

[Get involved](#) >

Coronavirus Hub

Our dedicated hub collates resources to support our members during this pandemic.

[Find out more](#) >

SLA Europe Career Stories @ The British Library



Questions?



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Thank
you

