sciencemuseumlibrary&archives

Newsletter

Welcome to the spring/summer 2010 edition of the Science Museum Library & Archives newsletter. In this edition we'd like to tell you more about our free group tours and how visitors can come and see the best of our collections.

Some unusual book and journal titles in our collection

Jail Threats from the Recently Converted

The Secret Life of Dust

All Alive at the Edinburgh Festival of 1815: Addressed to a Nobody, to which is added a New Bow Wow Song

The Romance of Rayon

A Fifty-Year Love Affair with Organic Chemistry

Buzzwords: A Scientist Muses on Sex, Bugs, and Rock 'n' Roll

International Symposium on Batteries

Anti-Locust Memoirs

Star Wars: The Magic of Myth

Free group tours around the Library

Come and see the treasures of our collections!

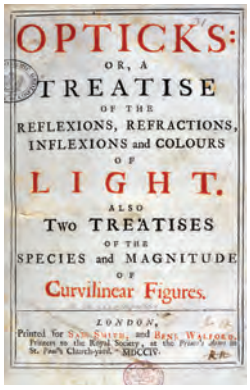
We offer **free** escorted group tours around the Library & Archives in Wroughton, allowing visitors the opportunity to explore our collections and find out how our resources can be of use if you have a particular research or hobby interest. If you join us for a tour you'll also have the chance to see behind the scenes at the Library. We'll show you the reinforced strongrooms where we store our most precious books and archives, and some of the **treasures and curiosities** of the Library, from our oldest book to our smallest book.

As well as showing you hidden highlights of the Library we'll lay out an **exhibition just for your group**. We'll show you the best of our collections, from antique maps and exploration to marvels of engineering and science. Visitors may see Galileo's or Darwin's original works, Egyptian tomb drawings or Barnes Wallace's plans of the bouncing bomb, to name just a few items from our stores.

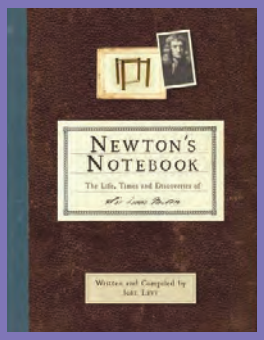
Alternatively, if your group has a **particular passion** or area of research we can orientate our display to your preferences. Just let us know what you're interested in – from family history to classic cars to space flight – and we'll do our best to provide a unique and remarkable exhibition on your chosen subject.

Our tours are free to interested groups between 10.00 and 17.00, Monday to Friday. Each tour lasts between about 1½ and 2½ hours, depending on the enthusiasm of the group. Group size is usually limited to 20 people, but we may be able to make special arrangements for larger groups in some circumstances.

If you're interested in a visit, please e-mail **SMLWroughton@sciencemuseum.org.uk** for bookings and enquiries.



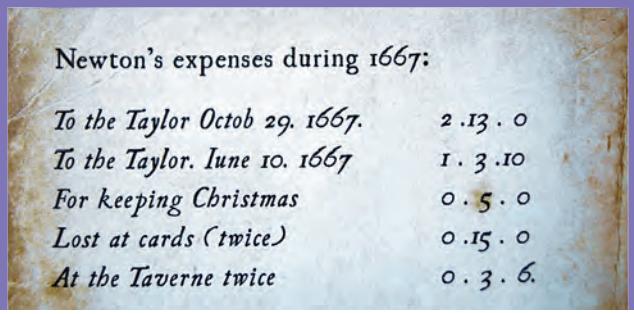
Newton's Notebook:
The Life, Times and Discoveries of Sir Isaac Newton
by Joel Levy – a review



This isn't another academic biography of Sir Isaac Newton. As the title suggests, *Newton's Notebook* is written, designed and illustrated to look like a personal notebook. Snippets of information, digressions and side bars alongside the main text are intended to bring Newton, the man behind the science, to life. One memorable example is a list of Newton's sins; Newton confessed whilst young to wanting to burn his mother and stepfather alive 'and the house over them'.

The account of Newton's unhappy childhood and apparent rejection by his mother put into context his volatile emotional state and his habit of violent and vindictive attacks against friend and foe alike. His ongoing and very public conflicts with Leibnitz and Hooke illustrate how he devoted large parts of his life to diminishing others' achievements, and how he revelled in 'legal duelling' with his contemporaries.

The author traces Newton's most famous work, *Principia*, from its genesis in 1686 to full publication, including the feud it provoked between Newton and Hooke. Newton nearly refused to publish the book and admitted to making it deliberately hard to read to 'avoid being bated by little smatterers in mathematics'. Levy explains the science in *Principia* with drawings and examples that make it easy to understand for those new to the subject.


Newton's expenses during 1667:

To the Taylor Octob 29. 1667.	2 .13 . 0
To the Taylor. Iune 10. 1667	1 . 3 .10
For keeping Christmas	0 . 5 . 0
Lost at cards (twice)	0 .15 . 0
At the Taverne twice	0 . 3 . 6.


Westminster Abbey, where Newton's tomb is the centre of a collection of memorials known as Scientists' Corner.

The book doesn't hesitate to explore Newton's personal life. Newton's failure to form lasting relationships is well documented. His only 'infatuation' was with a young Swiss mathematician, Nicholas Fatio de Duillier. Levy concludes that their relationship was more than platonic but questions whether it was ever consummated. What we do know is that Newton suffered a nervous breakdown after the end of the relationship and descended into a 'Black Year'. The author explores the possibility that Newton unwittingly poisoned himself with mercury, but again is careful not to jump to conclusions.

'God said "Let Newton be" and all was light.'
Alexander Pope

Newton is well known as the most original and influential theorist, who transformed the structure of physical science with his three laws of motion and law of universal gravitation. There is also no doubt that he was a complicated man who found it difficult to relate to most of his contemporaries. This book places Newton's achievements in a context that explores his character and life story in a lively and engaging manner. While there is little here that is original in content, the notebook format makes it an enjoyable and interesting biography. The book's accessibility prompts me to recommend it to those new to its subject or those wishing for an entertaining and yet well-researched read.

David Dawson

Latest news

Our next big event is participating in a military history fair in Swindon. **Swindon at War: A Weekend of Discovery** will commemorate conflicts both past and present, including stories of life in wartime as well as memories from those who served in the armed forces.
The event will host a **variety of stalls** from historical groups and museums, and visitors will be invited to talk about their own experiences of war and the military, with the aim of recording an **archive of oral histories**.

Our own display will highlight our military and local resources as well as showcasing some of the treasures in our collections. The event is **free** and open to the public.

Come and see for yourself at Swindon Central Library on **5 and 6 June 2010**.

Covered in glory: decorative book covers

'The covers of this book are too far apart.'
Ambrose Bierce

Book covers have become collectable. Find the right book cover, such as an original Penguin, and that cover will make the book more valuable than the contents within. We look at certain book covers as a form of art in their own right, as classic design icons of their times.

Several hundred years ago, making a book was an extremely labour-intensive process involving handmade pages and hand-sewn binding. Book covers were made out of heavy materials such as leather or wood in order to protect the valuable contents. Only the most prized books had covers embossed with precious metals, sometimes even gemstones. And only the wealthy few owned and read books.

The invention of the printing press changed all that. By the early 19th century the new technology made it possible to mass-produce affordable books. This combined with increasing levels of literacy to produce an explosion in book availability and choice. Small-scale printers and publishers grew into new large publishing houses. Business boomed until suddenly publishers realised they had a problem: there were now too many books on the market.

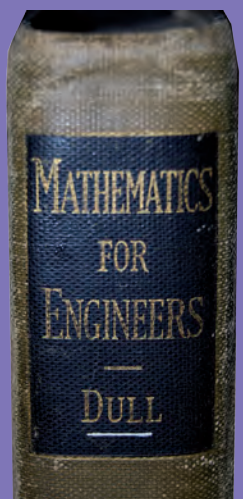
Further advances in technology such as mechanical bookbinding enabled cloth-covered boards to be used instead of leather, and improvements in colour printing allowed decorative book covers to be produced cheaply in huge numbers. Publishers jumped at this new opportunity to improve their sales. Book covers began to be decorated with designs that caught the eye and stood out from the rest.

Publishers became increasingly aware of the impact of design on their book covers. The demand for cover designs grew so much that by the mid 1800s graphic design was a recognised profession. And by the 1890s publishers were employing artists, such as Russian artist Alexander Rodchenko and the English illustrator Aubrey Beardsley, to design book covers. What started as advertising was transforming into an art form. In the early 20th century book covers began to reflect modern art movements such as Arts and Crafts and Art Noveau. Over time more complex cover designs and illustrations started to be introduced, many of which incorporated contemporary artistic ideas and themes. The advent of new technologies, social change, economic pressures and the human instinct to create and want beautiful designs combined to produce evolution in book design. Book covers changed first from practical, protective boards into crude advertising tools, and then grew into a meaningful and conceptual art form.

We have a significant collection of decorative book covers published during the 19th and early 20th centuries that perfectly showcase the emerging and developing art of book cover design. To view our collections or if you have any enquiries, please e-mail **SMLWroughton@sciencemuseum.org.uk**.

Finally, while the old saying goes, 'Don't judge a book by the cover,' sometimes it's hard not to.

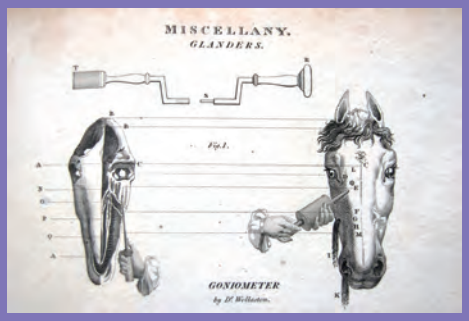
Rupert Williams

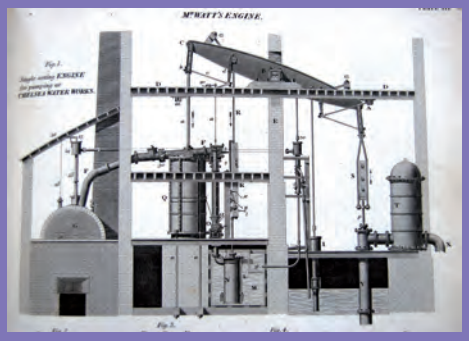


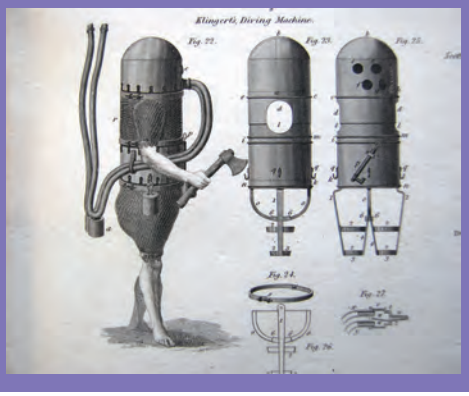
The subversive encyclopedia

'If he (the Editor) had foreseen the time and attention which the compilation and conduct of it required, and the unavoidable anxiety it has occasioned, he would probably never have undertaken it.'

From the Preface of *Rees's Cyclopaedia*







The New Cyclopaedia, or, Universal Dictionary of the Arts and Sciences was published in the early 1800s and is more commonly known as *Rees's Cyclopaedia*. It was described as outclassing the *Encyclopaedia Britannica*, with illustrated plates superior to any other in England. The editor, Abraham Rees, was a Nonconformist minister who rejected the official Church of England and its practices for Presbyterianism. Nonconformists were persecuted from the beginning. Although they were allowed to hold public office by the 19th century they were still politically mistrusted and discriminated against. When Rees was asked to edit Ephraim Chambers' earlier *Cyclopaedia*, his radical attitudes and eminent scholarship combined to produce a revolutionary piece of work.

None of the entries in Chambers' *Cyclopaedia* were original. He copied all the information from other books, following the normal practice of the day. Chambers called his version of the *Cyclopaedia* 'the best book in the Universe'. Rees disagreed. He insisted on originality. He was certain that all the important scientific and technological progress made during the previous few decades demanded a new type of encyclopedia, one in which all the entries were original and written by an expert in the field. Rees's idea makes perfect sense to us now, but it was ground-breaking at the time. And Rees's revolution didn't stop there. He chose 'eminent professional gentelemen' to contribute to the *Cyclopaedia*, those 'distinguished in these branchers of science to which they had devoted their talents'. These gentlemen covered everything from arts and the humanities to natural science, technology and medicine, and included John Dalton, Humphry Davy, James Edward Smith and Charles Burney, as well as the artist John Farey Jr and the engraver Wilson Lowry. Most of these eminent gentlemen were Nonconformists of various persuasions. Several were active in radical politics; one contributor was jailed for sedition and another indicted for treason. At a time when philosophical radicalism was treated with suspicion and mistrust, the *Cyclopaedia* was accused of subversion and condemned by the loyalist press.

The final version of Rees's *Cyclopaedia* comprises 39 volumes of text, 5 volumes of plates and 1 atlas, approximately 39 millions words in all. While the information may now be technically out of date, it's still a fascinating read. The *Cyclopaedia*'s plates of illustration are beautifully detailed, and its originality, and the depth and range of its subject matter, made it unique for its day. The entries now encapsulate for us the scientific and technical information of their time. And Rees's *Cyclopaedia* remains an invaluable resource for the history of science and society, perfectly reflecting the scope of knowledge during the early Industrial Revolution and the British Enlightenment.

John Underwood

London opening hours:
Monday to Friday 09.30–20.30, Saturday 10.00–18.00

The Science Museum Library is on Level 3 of the Central Library at Imperial College London, which is situated in South Kensington, just round the corner from the Science Museum. For a single visit, you need only show personal identification and sign the Visitors' Book at the Reception Desk; the attendant will issue you with a Day Ticket. If you intend to visit more often, you must apply for a Library Admission Card.

Contact us on **020 7942 4242**, **SMLinfo@sciencemuseum.org.uk**
www.sciencemuseum.org.uk/about_us/about_the_museum/science_library

Wroughton opening hours:
Monday to Friday 10.00–17.00

The Library & Archives are located at the Hackpen end of the Wroughton site on the edge of Swindon in Wiltshire. Access is via Red Barn Gate on the A4361 Devizes Road. Visitors should contact the Library & Archives in advance to make an appointment, and bring personal identification with them.

Contact us on **01793 846222**, **SMLWroughton@sciencemuseum.org.uk**