

# Museum of the History of Science

*Annual Report, 1 August 2012 - 31 July 2013*

## 1. Highlights

### Exhibitions

The Museum staged two major new exhibitions which highlighted its collaborations across the University. *Atmospheres* offered a new perspective on meteorology and weather, and drew on the Museum's own collections as well as those of the Physics Department and the School of Geography. *Natural Histories* was a collaboration with the Natural History Museum during the period when it was closed for refurbishment work, and also featured material from the University Herbaria. The *Natural Histories* exhibition provided valuable visibility for both collections and underlined the role of the Broad Street building as the original home of natural history in Oxford. Both exhibitions had extensive and successful public programmes of events.

### Projects

The Museum received a grant of £49,988 from Arts Council England's Designation Development Fund for a project to improve access to its collection of prints. *Making Prints Public* will catalogue and digitise this hitherto little-known aspect of the collections and make it available online. Most of the project will be conducted during the year 2013-14 and its outcomes will appear in the report for next year.

In collaboration with lead partner the University of Leeds, the Museum was successful in a bid to AHRC for a project on *Innovating in Combat: Telecommunications in World War I* to run for one year from January 2013. The grant of £82,689 from AHRC supports a programme of public engagement, activities and partnership working with the Institution of Engineering & Technology Archives, Porthcurno Telegraph Museum and BT Archives. Dr Johnston is the Co-Investigator on the project.

The success of the Education Service in attracting external support was maintained by the award of a grant for 'Objects of Invention' under the Royal Academy of Engineering's public engagement grants programme, Ingenious.

### Visitor Numbers

The total number of visitors for 2012-13 was 184,523, a fall of 9% from the previous year. This is in line with the experience of other Oxford University Museums. Online visitors however continued to rise: 610,211 distinct hosts were logged, up 15% on 2011-1, reinforcing the significance of digital access.

## **Dr Jim Bennett**

Jim Bennett retired at the end of September after 18 years as Director. The dramatic transformations in the building, displays, teaching, research and public profile of the Museum over this period are witness to his energy and ambition for the institution. Dr Stephen Johnston served as Acting Director for the remainder of the period of this report, pending a new appointment.

## **2. Exhibitions, Public Programme, Outreach and Education**

### **Exhibitions**

The *Renaissance in Astronomy* exhibition, reported on last year, continued until 9 September. A study afternoon on the topic of 'Astronomy in 16th-Century England' was held on Saturday 25 August, both to coincide with the exhibition and to mark the accession of the Elizabethan dial by Augustine Ryther whose presentation by Howard Dawes was noted in the last report. Speakers included Jim Bennett, Louise Devoy, Stephen Johnston, Stephen Pumfrey and Katie Taylor. The exhibition received a guided visit from the Friends of the Royals Astronomical Society and the History of Astronomy Society on 5 September.

There were two new exhibitions in the Special Exhibition Gallery, each strongly collaborative. *Atmospheres: Investigating the Weather from Aristotle to Ozone* ran from 20 November 2012 - 7 April 2013 and provided a new perspective on meteorology, from medieval texts to modern satellite observations. The exhibition united instruments, documents and places to explore the scientific culture of weather from steadfast daily observers to intrepid balloonists. The exhibition was developed as a collaboration with the University of Oxford's Atmospheric, Oceanic and Planetary Physics and its School of Geography and the Environment. This made it possible to juxtapose objects from the Museum's collections with important but little-known material from elsewhere in Oxford, including the 18th-century meteorological records kept by the Savilian Professor of Astronomy Thomas Hornsby and satellite instrumentation from the 1960 and 1970s. Additional support came from the Natural Environment Research Council who lent a 'Magic Planet' spherical projection system to demonstrate climate modelling. The exhibition was opened by Sir John Houghton CBE FRS, who led the Scientific Assessment Working Group of the United Nations Intergovernmental Panel on Climate Change from 1988 to 2002, and whose Oxford DPhil work was represented in the the exhibition. There was an extensive public programme accompanying the exhibition (detailed below) as well as an associated academic meeting on 'Climate and Weather: Science as Public Culture' at the Maison Française d'Oxford in January 2013.

The closure of the Natural History Museum for a major project to restore its roof provided an exceptional opportunity to renew historical ties with the Old Ashmolean building in Broad Street. When our building opened in 1683 as the Ashmolean it was a museum of 'natural and

artificial rarities', and the natural historical collections remained here until the 19th century. The exhibition *Natural Histories* opened on 14 May and brought many natural historical specimens back to their original Oxford home. It emphasised the diversity of people and practices that have shaped our understanding and relationship with the natural world and included an interpretative strand aimed at younger visitors, with touchable objects on display. In addition to mineralogical, geological, zoological, entomological and archive material from the Natural History Museum, the exhibition was supported by additional loans from the University Herbaria and the Department of Zoology. As with the *Atmospheres* exhibition, it covered a broad period, from the origins of the subject to contemporary practice in Oxford. As well as the loan of material, the public programme drew heavily on the expertise of our partners, with a programme of lectures, talks and regular handling sessions throughout the exhibition run.

In addition to the Special Exhibition Gallery, there have been a host of other exhibitions throughout the Museum. The Globe project display is discussed under Education below while the Entrance Gallery saw five new smaller exhibitions opened through the year. Each responded to individual opportunities, from artist interventions to private collections and the development of collaborations across the University.

The artist Meredith Mackworth-Praed examined the interplay between science, art and technology in *Needlework and the Universe: Exploring the Sublime through Stitch*, 4 September to 4 November. A series of embroideries presented abstracted fragments of celestial bodies as seen in the telescope.

*Fancy Names & Fun Toys: Moving Pictures Before and After Cinema* ran from 6 November to 13 January 2013 and was curated by an academic visitor from the University of Padua Museum of the History of Physics. Fanny Marcon produced an imaginative display of Victorian optical devices based on her work to improve the catalogue of this part of the Museum's collection.

A selection of items from the privately assembled Fletcher Wallis Collection of Patented Inventions was on display as *Patented!* from 15 January to 10 March. It ranged from technological breakthroughs to subtle improvements and curious quirks featuring 18th- and 19th-century objects for teaching and medicine as well as seemingly unbreakable padlocks.

Opening to coincide with Brain Awareness Week, *Revealing the Brain* presented episodes from the history of neuroscience in Oxford, from Thomas Willis coining the term 'neurology' in 1664 to current state-of-the-art research. Staged from 12 March to 2 June in collaboration with Oxford Neurosciences it used objects from the Museum as well as material from the Department of Pathology, Anatomy and Genetics. With a dramatically illuminated "brain" as a beacon, the exhibition also inaugurated a more multimedia approach to the Entrance Gallery series, with a newly-constructed video wall at its centre.

The development of the Museum's own collections was highlighted by the final new show of the year. *What's New?* opened on 11 June and picked out three recently accessioned groups of objects: science teaching material from Headington School, a range of items preserved in the University's Department of Engineering Science and a private collection of measuring rulers of international scope.

The Basement Gallery has continued to host a series of small displays drawn from the Library and Archive Collections. *Beginnings of 3D: Early Stereoscope Photographs* continued until 13 January and was followed by a display of illustrated books curated by visiting researcher Dr Inga Soderlund, Director of the Observatory Museum, Stockholm. *Let's Get Physical: Instruments and the Teaching of Physics in the 18th Century* ran from 15 January to 12 May and was accompanied by a talk by its guest curator connected the display of illustrated books with apparatus on display. To complement the *Natural Histories* exhibition, a small selection of beautifully illustrated books and manuscripts on natural history from the Museum's own collection was displayed as *The Book of Natural History* from 21 May.

Finally, the Museum continued its support for artistic installations and interventions. We again welcomed students from the Art and Design Foundation course at Oxford Brookes University. *Space and Time* ran in the Museum's Entrance Gallery from 1 February to 3 March, with further exhibits available at the Pitt Rivers Museum.

Also as part of the 'Art @ MHS' strand visual artist Stephanie Douet was based at the Museum for a short residency in May and June. In *Real/Non-Real*, visitors had a chance to see her drawing and making in the Museum galleries as well as to view the work created. The artist was in conversation with Oxford neuroscientist Professor Andrew Parker at a special event on 23 May to explore vision and the deception of the eye, and she also led a series of workshops for both adults and children.

The value of the Museum as a sympathetic venue for novel and experimental installations was highlighted by an award to sound artist Ray Lee by the British Academy of Songwriters, Composers and Authors (BASCA). His installation *The Ethometric Museum* premiered at the Museum in 2011 and received the award for 'Sonic Art' at BASCA's 2012 British Composer Awards.

## **Public Programme**

Four quarterly programme leaflets were printed and distributed, featuring the now-established pattern of family-friendly events, gallery tours and 'table talks', along with the invaluable volunteer-led weekly tours.

Special events linked to the *Atmospheres* exhibition included 'From Microscopes to Cloud Cameras: the Poetry of Science' on 25 October. This literary event explored connections

between science and poetry with Dr John Holmes (Department of English Literature, University of Reading) and poet Lesley Saunders, who read from her science-inspired collection 'Cloud Camera' (2012). Lesley Saunders also led a series of public workshops, stimulated by the exhibition, for anyone wanting to develop or start their own writing.

Two events for all the family were offered as part of the *Atmospheres* programme. 'Snowflake' was our theme for the annual city-wide Christmas Light Night event on the evening of 23 November while an all-day Saturday event, 'Whatever the Weather', was held on 6 April. Both featured hands-on activities, talks and tours, with 'Snowflake' making a special feature of films and 'Whatever the Weather' offering storytelling.

The collaboration with Oxford Neurosciences responsible for the *Revealing the Brain* exhibition resulted in a number of events during and following on from Brain Awareness Week. During the week itself (12-17 March) there was a range of activities in the Basement Gallery presented by Wellcome Trust-funded researchers on the theme of 'Sleep and the Brain'. Subsequently scientist-turned-artist Dr Lizzie Burns arranged two brain-related activities supported by The Wellcome Trust as part of the C-Slide project: 'Build a Brain' on 27 April and 'Memory Makers' on 11 May. These were both popular family-friendly drop-in events.

The opening of the *Natural Histories* exhibition began a new programme of events, with staff and volunteers from the Natural History Museum providing table talks and regular handling sessions. Special events included this year's contribution to the annual nationwide Museums at Night festival: *Creatures of the Night* on 17 May. Large crowds enjoyed the nocturnal-themed programme which included living creatures and a showing of Murnau's silent film classic *Nosferatu* (1922) with live accompaniment. The exhibition also provided the inspiration for a Summer Quiz on 17 July.

Regular features of the annual programme were maintained, such as Marconi Day on 20 April, when Oxford & District Amateur Radio Society set up radio station GB4MHS to celebrate the birth of Guglielmo Marconi. We again contributed to Oxford's Open Doors events on 8 and 9 September.

The most radical experiment in the year's public programme was probably the staging of a concert in the Museum. As part of a small tour of museums across the UK, singer/songwriter Keaton Henson performed live on the evening of 28 February. Tickets sold out immediately they were announced and a second sellout performance was arranged for the following night.

*Public lectures linked to the exhibition programme were:*

4 September

'Thoughts and Things: the role of craft in 16th-century astronomy and cosmography'  
Professor Jim Bennett

4 December

'The Invention of Clouds'

Dr Richard Hamblyn

26 February

'Stormy Weather: Exploring Atmospheres in the Outer Solar System'

Dr Leigh Fletcher (Atmospheric, Oceanic & Planetary Physics, University of Oxford)

14 March

'Body Clocks, Sleep and Light'

Professor Russell Foster (University of Oxford)

2 April

'Who's to Blame for the Weather?'

Professor Myles Allen (Professor of Geosystem Science, University of Oxford)

25 June

'Virtuoso Naturalist'

Dr Anna Marie Roos (University of Lincoln)

## **Education Service**

With the transition to funding under Arts Council England (ACE) from April 2012, the Museum's education programme saw a shift in agenda from the previous emphasis on building provision for schools' and family audiences under the MLA's Renaissance in the Regions programme, to a greater emphasis on audience diversification, particularly adults and young people 18-25, innovation and contributing to a sector-facing leadership programme. The education programme at the Museum was well positioned to make this transition having established an ongoing programme for schools and families whilst initiating a move towards seeking external funding for innovative special projects. Earlier in 2012, the team was successful in obtaining grants to support special projects: £15,000 from the Heritage Lottery Fund for the Renaissance Globe Project, and £6,500 from the Royal Academy of Engineering.

This year saw an expansion of the primary schools' programme, its reach extending to over 35 schools in the Oxfordshire region with over 1800 students participating in facilitated workshops at Key Stages 1 and 2. Led by Michelle Holloway, the Museum has built on a particular relationship with St. Philips and St. James' Church of England primary school supporting a whole term project focussing on literacy skills. Over several visits to the Museum, students met with museum staff whilst researching their chosen topics. They subsequently devised trails and became tour leaders on a celebration day at the Museum to which parents and family members were invited.

The secondary schools' programme also built on its previous year's performance with a record number of over 3,200 secondary school students participating in facilitated workshops and special study days. As well as supporting local secondary schools with curriculum enrichment opportunities, the secondary programme supports the University's Widening Participation programme by hosting academic workshops for groups of students in Years 10, 11 and 12 visiting colleges to discover more about university study.

This year, special events included the continuation of astronomy study days in partnership with the Department of Physics, and a repeat of the new 'Medicine and Materials' study day for Key Stage 3 in partnership with the University's Botanic Garden and the Department of Chemistry. The latter attracted over 120 students from 6 different secondary schools from as far away as Milton Keynes.

Engagement with Higher Education included a research day with a group of MA jewellery design students from the Royal College of Art, and a continuation of the partnership exhibition programme with Oxford Brookes' Art and Design Foundation students. The latter culminated in a joint exhibition of students' work at the Pitt Rivers Museum and the Museum of History of Science with a student private view evening which took place in early February.

The ongoing relationship with Brookes University has been a key feature of the Oxford University Museums and Collections' education programmes, most significantly in its contribution to the primary PGCE teacher training course. This year, the Museum provided introductory sessions in museum learning for 140 PGCE students from Oxford Brookes, and 45 PGCE students specialising in secondary education from Oxford University's Department of Educational Studies.

2012-13 was a bumper year for grant funded special projects. The Renaissance Globe project, in association with the special exhibition 'Renaissance of Astronomy', continued over the summer of 2012 with a programme of over 20 family events across the partner institutions culminating in October in an exhibition at the Museum of the History of Science of giant handcrafted globes created by members of the public assisted by community volunteers, three in the top gallery and 2 from the Museum of Oxford hanging in the stairwell.

Following on from the completion of the events programme for the Globe Project, a new special project was launched in December 2012 in partnership with the Department of Engineering Sciences. This project was funded by the Royal Academy of Engineering's public engagement grants programme, Ingenious. The aims of the project were to provide experience and training in public engagement for postgraduate engineers and, in combination with interpretation of the Museum's collection, to engage schools and members of the public in engineering and design.

The project began with the selection of a team of 16 young engineers who were then taken through a series of six 2 hour training sessions provided by the Museum's education team in

partnership with the University Museums' Volunteers' Service. These sessions introduced aspects of learning through objects and working with different audiences. The engineers planned and delivered activities inspired by a range of research interests and the Museum's collections at a family theme day 'Objects of Invention' in March, followed by a pilot schools' study day in March and two further study days for Key Stage 4 students in June 2013. The family day attracted over 2,000 visitors with activities ranging from demonstrations of Brunel's atmospheric railway and levitation caused by supercooled magnets, to Lego clockwork and bridge-building competitions. The schools' study days attracted over 150 GCSE students from a range of mainly local secondary schools.

The Museum's education programme has continued to host trainee education officers on the HLF 'Skills for the Future' programme run by the University Museums and Collections. During his 6 month placement, Scott Billings chose to pursue his final project with the Museum delivering an animation film project with secondary schools students from two local schools. Building on a previous pilot project at the Museum, Scott guided students in creating a series of short digital stop-frame animation films on the theme of voyages and exploration linked to the Renaissance Globe Project.

The Museum's education programme has continued to provide a wealth of opportunities for community and students volunteers across a range of events for schools and families with over 100 individual instances such that the Museum has benefitted from well over 250 hours of volunteer time managed jointly by the Museum's education officers and the Joint Museums' Volunteers Service. The feedback from those volunteers involved in special projects has been particularly positive with the additional benefits of sustained participation and opportunities to learn from each other.

Finally, in keeping with the Arts Council's agenda to see innovation and leadership from its Major Partner Museums, the Museum's education officers have continued to play an active role in museum conferences: In November, Christopher Parkin gave a presentation at the Science Museum's 'Talk Science' event; In July 2013, Michelle Holloway travelled to Glasgow to present a session on working with primary school students on literacy; In September 2013, Christopher Parkin and Antonia Harland-Lang (Museum of Oxford) led a workshop examining co-production and co-creation in museum education at the annual Group for Education in Museums (GEM) conference in Leeds.

### **Audience numbers:**

|  |       |
|--|-------|
| Number of students in facilitated primary school sessions:           | 1,840 |
| Number of students in facilitated secondary school sessions:         | 3,238 |
| Total number of school students in facilitated sessions:             | 5,078 |
| Number of children participating in family activities at the Museum: | 2,839 |

Number of adults independently and with children in family events: 4,024

Number of student teachers (PGCE) in sessions at the Museum: 185

## 3. Collections

The Museum was invited to reapply for Arts Council England Accreditation. This was submitted in April for assessment and decision later in the year. While previous versions of the national standard have been closely focused on governance and collections management, the new standard places greater emphasis on public access and interpretation. The submission process therefore drew on expertise across the whole Museum.

### 3.1 Object Collections

#### 3.1.1 Acquisitions:

During the year the Museum acquired the following items:

Watch-Type Voltmeter, by Brayley, London, Early 20th Century

Box for Bryant & May Lifeboat Matches (Empty), 20th Century

Cardboard Box for 'Lab Snacks', Issued by Thorlabs, New Jersey, USA, Early 21st Century

Printed Map (Engraving, Coloured) Entitled 'Meteorological Map of the World showing the Distribution of the Temperature of the Air', by August Petermann, Engraved by John Dower, London, Mid 19th Century

Print (Engraving, Colour-Printed) Containing Seven Maps and Hemispheres Entitled 'Terrestrial Magnetism', by Edward Sabine, Engraved and Printed by W. and A. K. Johnston, Edinburgh, 1854

'Sylvac System' Plotting or Linear Measuring Instrument, by Sylvac SA, Switzerland, c.1980

Printed Booklet 'Children of Other Countries', Containing Two-Colour Three-Dimensional or Stereoscopic 'Wonder Pictures' and Viewing Spectacles, Published by W. Walker & Sons (Associated) Ltd., London, ?c.1940

Algué-Type Barocyclonometer (Combined Typhoon Barometer and Cyclonometer), by Schmidt & Ziegler, Remscheid, Germany, c. 1929

Pocket Nephoscope, England?, Early 20th Century

Fluid Prism Demonstration Instrument, by Deleuil, Paris, c. 1825

Papier Mache Model of a Tooth, by Dr Auzoux, French, ?Mid 19th Century

Herbert Smith-Type Refractometer, by J.H. Steward, London, c. 1910

Interference Phase-Contrast Microscope, by C. Baker, London, c.1955

'Magscale' Linear Measuring Scale Reading to 0.1 Millimetre, by Graticules Limited, Tonbridge, c.1980

Snuffbox with Printed Scheme of Gall's Organology, French, c. 1800

Scale for the Dial of an Industrial Pyrometer, by Electroflo Meters Company Ltd., London, Probably 1960s

Medallion Commemorating a 150th Anniversary Connected with Mendeleev, Russian, Late 20th Century

Metal Label from a Recording Flow Meter Measuring Steam, by Electroflo Meters Company Ltd., London, 1961

Metal Label from a Servo Actuator (an Industrial Process Control Instrument), by Elliott Process Automation Ltd., London, 1968

### **3.1.2 De-accessions**

Inventory No. 91568 - Floating air compass type 5/17 was deaccessioned and destroyed due to its poor condition and potentially leaking radioactive fluid.

### **3.1.3 Management and Care of the Collections**

#### **Key projects**

Arts Council England Accreditation Museum-wide review and renewal

Significant input and management of review across the Museum, gathering and revision of required documentation and support for visit by Accreditation Assessor

Feasibility study for joint research and storage facility for University museum collections

Provision of space and anticipated growth data, and specialist information on museum storage standards and requirements provided.

*Making Prints Public* project funded by Designation Development Fund

Setting up of work space, provision of tools, specialist preservation and collections advice, assistance with off-site digitising and preparation for digitising, assistance with in house exhibition

Preparation of bid to Designation Development Fund for improvement of off-site collections storage and access

#### **Project support**

The following projects were supported by providing access to significant or specific areas of the collection:

Exploration of commercial opportunities offered by the collections - Katherine Woodward, Cross-museums Commercial Operations Study, ASUC

Public Catalogue Foundation cataloguing and photography of all paintings held by the University of Oxford. Cataloguing, provenance checks and provision of access for

photography. All the museum's oil paintings (about 50) are now on the BBC Your Paintings website.

University of Oxford Museums Education Trainee scheme funded by Heritage Lottery Fund. Provision of handling training, assistance with projects, eg object trails.

Education Globe project. Listing of globes in the collections, enabling photography of key items and support of filming project.

### **Additional core collections functions and collections project management provided**

Care of library collections following temporary loss of post of Librarian

Move of library and archive collections to enable remedial building work at Broad Street site. The relocation of library collection and part of archive collection to Plant Sciences including the reading room and research space provision.

Interview and selection of new Librarian.

Interview and selection of *Making Prints Public* research and collections staff

### **Emergency Planning and Response:**

Liaison with Fire Brigade to support the engagement with their nationwide heritage collections initiative.

### **3.1.4 Use of the Collections**

#### **Enquiries**

The majority of enquiries were by email with use of the [museum@mhs.ox.ac.uk](mailto:museum@mhs.ox.ac.uk) address predominating. Email 83; telephone 6; in person 12.

#### **Researchers**

The following object research visits occurred during the year:

Dawn Correia, University of Lincoln – kaleidoscope collection

Matthew Read, West Dean College – Shelton clocks

Sue Ann Prince, American Philosophical Society – Varley material

Francoise Collanges, West Dean College – Electric clocks

Jamie Woodward, University of Manchester – William Buckland

Jean-Michel Piguet, Musée international d'horlogerie, Switzerland – Janvier astronomical clock

Mike Edmunds, University of Cardiff – Geared astrolabe

Jed Foland, University of Oxford – Cuff, Adams and Leeuwenhoek microscopes

Roger Smith, private researcher – scioptic balls

### **Object analysis**

Support for University of Oxford Chemistry undergraduate research project (Part II) on Robert Robinson material

### **Intern support**

Provision of objects and assistance with projects for Fanny Marcon, University of Padua – pre-cinema collections

### **Education sessions**

Objects, books and partial or full invigilation by the Collections Manager were provided for a range of education sessions.

### **Filming/photography**

On-going programme of routine photography of objects in the collection continued in order to improve database entries.

Provision of access to objects in the collections, handling and monitoring was provided for a number of visits by television and film companies.

### **Internal Exhibitions**

Assistance with moving and installation/deinstallation of objects, the preparation of framed prints and book supports (when required), and the mounting of supporting information on the online database, was provided for the exhibition programme.

## **3.2 Loans**

### **3.2.1 Short-term loans**

#### **Outgoing**

The following loans were negotiated and installed during the period:

#### **National Maritime Museum**

“The Royal River” ; 27 April – 9 September 2012

Inv 35086 George III Microscope, by George Adams, London, c. 1763

Inv 10700 Compound Microscope by Ross. London. c. 1853.

#### **Science Museum**

‘Alan Turing’s Life and Legacy’ (provisional title)

20 June 2012 to 20 June 2013

Inv. 18230 Stanley Jevons Logic Machine

### **BOZAR, Centre for Fine Arts, Brussels**

'The Ottoman Orient in Renaissance Art'

27 September 2012 to 20 January 2013 then postponed to 2015

Inv. 48659 Schissler geometrical quadrant (on long-term loan from the Bodleian Library)

Inv 78766 Diptych Dial, Nuremberg, c.1600

### **Bowes Museum, Co. Durham**

'Jeremiah Dixon (1733-1779) and the Mason-Dixon Line' Exhibition to mark the 250<sup>th</sup> anniversary of the line.

20 April 2013 – 13 October 2013

Inv 29413 - Wall-Mounted Mercury Thermometer, by J. Bird, London, c. 1760

Inv 36455 - Split Wedge Helioscope, by Dollond, London, c. 1800?

Inv 69221 - Gregorian Reflecting Telescope, by James Short, London, c. 1761

Inv 70250 - Print (Mezzotint, Engraving) of John Bird, by N. Green, after Lewis, published London, 1776

Inv 81555 - Pillar-Mounted Astronomical Quadrant, by John Bird, London, c. 1760

### **Bodleian Libraries**

'Magical Books: From the Middle- Ages to Middle-earth'

23 May – 27 October 2013

Inv 15449 - Copy of John Dee's Holy Table of 1582, English, Late 17th Century

Inv 46378 - Magical Sigil, Found in Devil's Dyke, English, 16th Century

Oversight of the transport of loans from the Ashmolean Museum was provided on one occasion.

## **3.2.2 Long term loans**

### **Outgoing**

#### ***Continuation of the following long term loans:***

#### **The Castle Heritage Centre and Gallery, Bude; Gurney Gallery display,**

Inv 17012 - Goldsworthy Gurney's oxy-hydrogen blowpipe, by Newman, London, c.1830

#### **Museum of Oxford, Oxfordshire Museums Service**

9 items relating to the history of the city of Oxford

#### **National Maritime Museum, London**

Inventory No. 74296 – Observing stool, c.1800, Unsigned

Inventory No. 49294 – Observing chair, c. 1780, Unsigned

Inventory No. 16244 – Y bearings for a transit instrument, Unsigned

**Museum of Science & Industry, Manchester**

Inventory No. 43695 - Qibla Indicator, 18th or 19th Century

Inventory No. 40716 - Celestial Globe, Unsigned, Indo-Persian, Undated

Inventory No. 42486 - Pillar Clock, Maker Unknown, Japan, 19th Century

**Jenner Museum, Gloucester**

Inventory No. 17096 - Chair and cushion associated with Dr Edward Jenner, Early 19th century

**Science Museum, London**

30 items from the Marconi Collection

**Hunterian Museum, Royal College of Surgeons, London**

Inventory No. 93847 - Anatomical Preparation of Testis and Epididymis Injected with Mercury

Inventory No. 88532 - Anatomical Dry Preparation of a Hand

Inventory No. 79029 - Anatomical Preparation of Penis Dry Mounted and Injected Red and Brown

**Sheldonian Theatre, University of Oxford**

Inventory No. 24719 - Model of the Sheldonian Theatre, Oxford

**Examination Schools, University of Oxford**

Inventory No. 46135 - Portrait of Mrs Dorothy Graham, by Sir Peter Lely, c.1690

**3.2.3 Short term loans**

**Incoming**

Negotiation of and arrangements for incoming loans (transport, insurance, loan contracts) for the following internal exhibitions

*Entrance Gallery (minor exhibition)*

Patented!

*Special Exhibition Gallery (major exhibitions)*

Renaissance in Astronomy

Atmospheres

Natural Histories

**3.2.4 Long term Loans**

## Incoming

A number of established long-term loans in, partly collections on long-term deposit, partly formal on-going formal loans, from private individuals, University Departments, Colleges and other institutions continued unchanged. Please refer to 2003 survey for details.

### Other activities

Training/CPD:

1 day Radiation Supervisors conference organised by University of Oxford Safety Office

1 day 'Sound in Collections' conference organised by Pitt Rivers Museum

Security Liaison Officer training provided by University Security Services

Springboard Women's Programme provided by the University Training Institute

## 3.3 Conservation

The conservator undertook the thorough cleaning of the insides of all the display cases in the top, middle and Beeson room galleries, including shelving and the quarterly cleaning of open mesh fronted bookcases and objects on open display.

Discussions over the condition and possible conservation options for the Pointer collection with the Librarian from New College.

Conserved objects requested for loan out to the Bowes Museum (4 objects); The Bodleian Library (2 objects); Museum of London (3 objects) including detailed condition reports and packing for transit.

Preliminary work toward the *Natural Histories* exhibition including writing condition reports and some conservation work on 7 glass models of sea anemones (OUMNH objects for Natural Histories) at Malgosia Nowak-Kemp's request.

Ten objects were conserved for other purposes (photography/care of collections etc.).

Preparation for the removal of the contents of the Archive Room to Plant Sciences: assessment of packing requirements/time/staff required. Also preparing the Plant Sciences Library ready to receive the books.

Assessing Robert Robinson material for student chemistry research project.

The Woodmansterne fine art conservation fund application from the previous year was successful, so negotiations with selected Conservator, Ruth Bubb, regarding time scale of the work, were undertaken and the painting transported to her studio.

Obtained licence to buy Denatured Alcohol (the formerly used Industrial Methylated Spirit did not require one).

Sealing of Radioactive material on specimen slides at the request of the Radiation officers from the Safety Office. A suitable, effective, and non-evasive method, was used to enclose the individual slides in order to meet with regulations.

Wrote report on the conservation aspects of MHS for the re-application for Museum accreditation.

### **Exhibitions**

De-installation of the primary school exhibition and clean out cases and work towards the *Natural Histories, Atmospheres, Fancy Names and Fun Toys, Let's Get Physical, and Patented!* exhibitions. Working on a total of 17 objects selected for these. Also contributed to the de-installation of *Renaissance in Astronomy*.

### **Environmental**

Enhancements to environmental monitoring system were introduced such as the installation of a Hanwell Repeater, which strengthens the signal from the archive room to the control unit. Regular procedures were continued: servicing of humidifiers; insect pest monitoring throughout the museum, including pheromone lures, every three months; continuation of mould checks at our stores, every four months, and treating any affect objects found.

### **Other Conservation Activities**

Attended a one day conservation course at the British Museum – ICON Back to Basics workshop on wet cleaning, Dr. Anita Quye.

Visit from Matthew Read (West Dean Course leader for the Horological Conservation/Restoration course), with a student, to view the Shelton Regulator.

Attending Staff, Exhibitions, Collections, Conservators, building works meetings.

Drew up a list of all conservation equipment and created a spreadsheet for all of the four museums conservation departments as well as the Bate Collection. Each of the others (except for the Ashmolean) have done the same, which have been added to the spreadsheet. This is so that other conservation departments can make requests to borrow equipment, instead of having to buy them new.

Oversaw the PAT testing of all electrical equipment within the museum, Clarendon building and off site stores.

Joint visit to offsite stores with conservators from PRM and OUMNH to discuss storage spaces and the environmental conditions.

### 3.4 Library and Archives

After the previously-reported loss of the Librarian's post it was possible to reinstate this as a fixed-term, half-time post. Jennifer Howard was successfully recruited and joined when preparations were underway to move the book and archive stock out of Broad Street to the former Plant Sciences Library. This temporary measure was to permit long-awaited remedial building work to deal with water ingress to the rooms under the cobbles. She was immediately closely involved in the recruitment and supervision of a team to carry out the move of books. This project meant that the Library remained largely inaccessible to readers during the year, though both the Archivist and Collections Manager were able to provide some interim service and researchers were able to begin consulting books once the move was successfully completed.

Acquisitions for the Library and Archives included:

- A volume on astronomy by R. S. Ball which had belonged to the Oxford University Observatory (most of whose historic library is held by the Museum), presented by Alison Bickmore
- Papers and other items relating to Electroflo and other companies of the Elliott group (supplementary to the Museum's Elliott archive); presented by Vincent O'Brien, a former employee
- Printed broadsheet price list of the scientific instrument maker Joseph Long, c.1830; purchased
- Manuscript Ordnance Office warrant relating to surveying instruments, signed by Jonas Moore and others, 1671; purchased
- A number of books were given by Green-Templeton College, chiefly books (selected by Librarian & Archivist) which the college had received from the widow of A. D. Thackeray, a previous Radcliffe Observer, plus a few related archival items
- Latimer Clark's pamphlet on the transit instrument; purchased
- Catalogue of the 1960s instrument maker Graticules Ltd; presented by Rogers Turner Ltd
- Several stereoscopic photographs; purchased
- Watercolour of Donati's comet; purchased

The Archivist responded to some 60 substantial research and collection-related enquiries, nearly all via e mail. A notable collaboration was the assistance given to Simon Hopf in writing a centenary biography of former Curator C. H. Josten for the yearbook of his home town of Neuss, in Germany. Among research visits on manuscript, archival, or photographic collections curated by the Archivist were:

Priya Vaughan: Acland photos  
Kristen Frederick-Frost: manuscripts including those of Moseley and Sidgwick  
Lydia Underdown: Dyson Perrins Laboratory photos  
Anna-Sophie Heinemann: Jevons papers  
Stephen Irish: Brodie papers  
Tim Marshall: John Nethercott and Oxfordshire clocks  
Tom Walker: Underhill microscopical drawings  
Kathleen Davis: Dollond papers  
Clare Morgan: manuscript by Henry Baker  
Fiona Rose-Greenland: Penny Cyclopaedia  
Shannon Delorme: the archives of the Royal Microscopical Society re W. B. Carpenter  
Tim Fulford: Humphry Davy manuscript  
Jamie Woodward: Buckland and the history of Oxford museums  
Janine Freeston: historical photograph collections  
Jennie Feldman: John Russell letter  
Sarah Hanks: R. T. Gunther papers  
Chelsey Lovell-Smith: Lewis Evans papers and catalogue  
Jane Furse: material on 18th-century instrument making and instrument prices  
Mark Davies: Hope collection of ballooning prints and material re James Sadler  
Giles Hudson: colour photographs  
Thomas Galifot: early women photographers  
Agnes Taiti: stereoscopic photographs of East Africa

#### 4. Information and Communication Technology

An experiment with Kindle has been initiated. The exhibition catalogue *The Garden, the Ark, the Tower, the Temple*, which has been out-of-print for some time has been put online on Amazon's Kindle platform, with the approval of the Bodleian Library which had provided images for the print version.

Developments in both infrastructure and web design continued through the year.

An upgrade of the Museum's external network connection from 100Mb to 1Gb was successfully implemented. Planning and development work has been undertaken for a new server infrastructure with increased resilience and storage capacity. Discussions are underway on the provisions necessary to offer wi-fi access to visitors within the public spaces of the building.

Websites for a number of exhibitions were created, including both *Atmospheres* and *Natural Histories*. Incremental changes have been made to the website, such as improved menus,

and a new, more responsive theme put in place to make the main pages display better on mobile phones and tablets.

Major software upgrades and innovations have also been delivered. The Museum has moved directly to Microsoft Office 2013 (from 2003), and increased the use of Outlook for calendaring and meeting scheduling. Use of a cloud-based project management system (Basecamp) was begun to improve planning within the Museum; this has been particularly useful for the *Natural Histories* exhibition project as it also enables much readier collaboration outside the Museum's own network.

The Oxford University Museums have each been provided with a visitor feedback terminal through the ASPIRE programme. This kiosk will enable enhanced information from visitors and more direct comparison across the University museums. The same principle of consistency across the University museums has also been adopted in the Museum shop. A new till and stock control system has been installed and, as this is the same solution already adopted elsewhere, we were able to benefit from advice and training from museum colleagues.

The collaboration with the Dresden Hochschule für Technik und Wirtschaft has continued. Martin Wolff, who developed a sundial animation for the *Atmospheres* exhibition arrived in March to begin an animation project on the x-ray spectra apparatus of Henry Moseley.

## 5. Teaching, Research and the Discipline

Teaching continued to be offered within the History Faculty at both graduate and undergraduate level. Dr Johnston offered two advanced options in the MSc/MPhil course in History of Science, Medicine and Technology and contributed lectures to the 'Nature and Art in the Renaissance' undergraduate optional subject. Visits to the Museum for course work within the University came from science undergraduates studying the history of science and first year historians of art, as well as students from Geography in connection with the *Atmospheres* exhibition. Teaching visits to the Museum came from a number of British universities such as Oxford Brookes, Cranfield University, Birmingham University and the University of Buckingham.

Dr Johnston continued as co-investigator on the AHRC 'Hebrew Astrolabes' project and took up the same role on the AHRC 'Innovating in Combat' project led by professor Graeme Gooday at the University of Leeds.

Dr Johnston was a concluding panellist for 'Science Museums in a Changing World', a meeting of the AHRC Research Network 'Museums and the Public History of Science, Technology, Engineering and Medicine: Prospects and Issues', at the Dana Centre, Science Museum, 13 April. He also continued membership of the British Society for the History of

Mathematics publication committee and the editorial board of the Brill series *Scientific Instruments and Collections*.

Visiting researcher Inga Söderlund (The Royal Swedish Academy of Sciences/The Observatory Museum, Stockholm) continued her project on 'Scientific Instruments in 18th century Europe - Display, Visual Effect and Aesthetical Experience?'

The Museum's collaboration with the Hochschule für Technik und Wirtschaft, Dresden was continued through the creation of a computer animation of a weather vane on a 17th-century sundial by student Martin Wolff for *Atmospheres* exhibition.

Dr Johnston's publications were:

'John Dee on geometry: Texts, teaching and the Euclidean tradition', *Studies In History and Philosophy of Science Part A*, 43/3 (2012), 470-479

'*The Castle of Knowledge: astronomy and the sphere*', in Gareth Roberts and Fenny Smith (eds), *Robert Recorde: The Life and Times of a Tudor Mathematician* (Cardiff: University of Wales Press, 2012), 73-92

Dr Bennett gave a lecture:

'The Ryther Dial and the Historiography of Astronomy in 16th-Century England', *Astronomy in 16th-Century England*, Museum of the History of Science, Oxford, 25 August 2012

Dr Johnston delivered the following lectures and seminars:

'Robert Recorde: Astronomy and the Sphere', *Astronomy in 16th-Century England*, Museum of the History of Science, Oxford, 25 August 2012

'The Renaissance Go-Between: Mathematical gifts, mercantile exchange and global diplomacy', Oxford, 29 November 2012

'All You Wanted To Know About The Astrolabe (But Never Dared to Ask)', with Josefina Rodriguez Arribas, Society for the History of Medieval Technology and Science, Oxford, 8 December 2012

'Undermining Innovation: Archaeology and the History of Science', keynote at Graduate Archaeology Oxford conference, 22-23 March

'The Black Drop and the Transit of Venus', Modern Art Oxford, 11 July 2013

'The Universal and the Particular in the History of the Medieval Astrolabe', 16th World Congress of Jewish Studies, Jerusalem, 28 July – 1 August 2013

## 6. Museum Staff

After the retirement of Dr Bennett and pending recruitment of a new Director, some backfilling was carried out to ease both the delivery of the public programme and the Museum's administrative work. Scott Billings, who had been on the Heritage Lottery Fund Skills for the Future programme, joined the Museum as a fixed-term Exhibitions Assistant. The hours of Nicole Shih as Administrative Assistant were also increased, until her departure at the end of June.

### *Staff in post at the end of 2012-13*

Stephen Johnston, Acting Director  
Deborah Woodhouse, Museum Administrator  
Lucy Blaxland, Collections Manager  
Cheryl Wolfe, Conservation Officer  
Keiko Ikeuchi, Photography and Design Technician  
Owen Shaw, Technician (0.5)  
Spiro Vranjes, IT Assistant (0.5)  
Anthony Simcock, Archivist (0.4)  
Jennifer Howard, Librarian (0.5)  
Christopher Parkin, Education Officer (0.6)  
Michelle Holloway, Education Officer (0.4)  
Laura Ashby, Audience Development Officer (0.5)  
Jane Dilkes, Web Officer (0.5)  
Scott Billings, Exhibitions Assistant (0.5)  
Nicholas Wicker, Janitor (0.4)  
Mariella Guida, Senior Gallery Assistant and Supervisor (0.4)  
Anthony Lummis, Gallery Assistant (0.7)  
Frances Turner, Gallery Assistant (0.3)  
Elizabeth Montgomerie, Gallery Assistant (0.3)  
Robert Ellis, Gallery Assistant (0.4)  
Manfred Driver, Gallery Assistant (0.4)  
Gavino Pinna, Gallery Assistant (0.5)  
Jude Owens, Gallery Assistant (0.1)  
Silvia Pinna, Gallery Assistant (0.1)

### *Casual Staff (Gallery Assistants)*

Chris Dadds  
Robert Thomson

James Harrison

*Museum Visitors*

Professor Pietro Corsi, History Faculty (Chair)

Dr Robert Anderson, co-opted Visitor

Professor Frances Ashcroft, Physiology Anatomy and Genetics Department

Professor Laurence Brockliss, History Faculty

Professor Harvey Brown, Philosophy Faculty

Professor Roger Davies, Physics Department

Mr Howard Dawes, co-opted Visitor

Professor Mark Harrison, Wellcome Unit

Dr Mike O'Hanlon, Pitt Rivers Museum

Dr Luke Treadwell, Oriental Institute

Professor Ian Walmsley, Pro-Vice-Chancellor, Research and ASUC

One of the Proctors or the Assessor