



## Collections Development Policy

**Governing body:** The Visitors of the Museum of the History of Science, University of Oxford

**Date approved by governing body:** April 2017

**Policy review procedure:** This policy will be published and reviewed from time to time, at least once every five years. Next review due before April 2022.

Arts Council England will be notified of any changes to the collections development policy, and the implications of any such changes for the future of collections.

### 1. Relationship to other relevant policies/plans of the organisation

1.1 The Museum's statement of purpose is:

The purpose of the Museum shall be to assemble, preserve, and exhibit objects illustrating the History of Science, especially early scientific instruments, together with related books and manuscripts, to assist in relevant teaching and research within the University, and to facilitate, assist, and promote scholarly and public knowledge of the History of Science.

(Regulation made by the Council of the University of Oxford on 16 October 2003)

1.2 The governing body will ensure that both acquisition and disposal are carried out openly and with transparency.

1.3 By definition, the Museum has a long-term purpose and holds collections in trust for the benefit of the public in relation to its stated objectives. The governing body therefore accepts the principle that sound curatorial reasons must be established before consideration is given to any acquisition to the collection, or the disposal of any items in the Museum's collection.

1.4 Acquisitions outside the current stated policy will only be made in exceptional circumstances.

1.5 The Museum recognises its responsibility, when acquiring additions to its collections, to ensure that care of collections, documentation arrangements and use of collections will meet the requirements of the Museum Accreditation Standard. This includes using SPECTRUM primary procedures for collections management. It will take into account limitations on collecting imposed by such factors as staffing, storage and care of collection arrangements.

1.6 The Museum will undertake due diligence and make every effort not to acquire, whether by purchase, gift, or bequest, any object or specimen unless the governing body or responsible officer is satisfied that the Museum can acquire a valid title to the item in question.

1.7 The Museum will not undertake disposal motivated principally by financial reasons.

## **2. History of the collections**

The Museum was founded in 1924 after Lewis Evans (1853 – 1930) donated his collection of early scientific instruments – chiefly early sundials, astrolabes and mathematical devices – and rare books to the University of Oxford. This ‘core’ collection has been added to over the years, from the time of the Museum’s first curator, R.T. Gunther, to the present day.

Additions to the collections have taken various forms over the years. Donations, bequests and purchases are all been represented. Beyond its own collections, the Museum holds material on long-term loan from colleges, schools, libraries and other museums of the University of Oxford, as well as various learned societies such as the Royal Microscopic Society and Royal Astronomical Society. Such material currently represents less than 5% of the Museum’s total holdings, and is currently under review.

## **3. An overview of current collections**

The collections of the Museum of the History of Science have been Designated as of national importance, and are indeed of international standing. The Museum houses the world’s largest and finest collection of early scientific instruments. This includes mathematical instruments up to the end of the 17th Century, and comprises objects related to astronomy, navigation, surveying, dialling, gunnery, architecture and geometry. The Museum has the world’s largest collection of Eastern and Western astrolabes; comprising, amongst others, the only complete spherical astrolabe, an astrolabe belonging to Elizabeth I, and a Persian astrolabe from the early 13th Century with a geared calendar movement which is the earliest known complete set of gearwheels. The armillary spheres, globes and orreries are an outstanding collection and include a rare Indian *bhugola* from 1571. The 30 early horary quadrants, 40 nocturnals and some 750 sundials represent the world’s largest and finest collections. A dial of circa 1520 bears the arms of Cardinal Wolsey and one made in 1542 by Nicholas Oursian, clockmaker to Henry VIII, is the earliest known signed and dated English dial. The best collections in the country of early surveying instruments and artillery instruments are in the Museum, and the surveying instruments include both the earliest known Irish instrument of any type, and the earliest English theodolite, made in 1586. The large range of calculating and drawing instruments includes an example of the earliest form of logarithmic slide rule, c.1634, and Samuel Morland’s adding machine of 1666. The navigation instruments include such rarities as a mariner’s astrolabe and a wooden traverse board, as well as backstaves, compasses, octants and sextants. In astronomy, the Museum displays the earliest extant English observatory instruments, predating the foundation of the Royal Observatory at Greenwich.

The microscopes form a collection of international importance: generally acknowledged to be the finest and most representative over the history of the light microscope, it incorporates the collection of the Royal Microscopical Society. The collection begins in the seventeenth century, and include four microscopes by John Marshall and over a dozen by Edmund Culpeper, while the 18th-century models include the large and extravagant silver microscope made by George Adams for George III in about 1763. There is also a fine collection of early telescopes, again going back to English makers of the 17th Century, and including the most complete range of the work of the specialist in reflecting telescopes, James Short, together with a 7-ft Newtonian reflector by William Herschel. The lunar work of John Russell, R.A, Painter to George III, is preserved here, alongside a fine collection of 18th-century astronomical instruments from the Radcliffe Observatory. The collection of the Royal Astronomical Society, also here, is strong in 19th-century instruments. The Museum displays the earliest surviving English 'cabinet' of instruments for natural philosophy, assembled by Charles Boyle, 4th Earl of Orrery, who died in 1731: 68 pieces in all, a quarter of them signed by the London instrument maker John Rowley (the best collection of this important craftsman's work). The Museum also has a fine collection of lodestones; comprising some twenty-two items, it is the only collection of such a size in Europe. Physics, chemistry and medicine from the 19th century are well represented.

The collection of clocks has important examples dating back to the 16th Century and the Museum contains examples of the work of such figures as Tompion, Graham, Quare, Knibb and Shelton, as well as one of the earliest longcase clocks by Fromanteel from the 1660s. There is an important collection of early turret clocks and the most extensive collection of clocks made in Oxfordshire.

There are around 800 items of photographic equipment, including the wet collodion photography outfit of the Reverend Dodgson (Lewis Carroll), and the archaeological camera made in 1910 for T.E. Lawrence. The collection of early photographs is of outstanding importance. Among the very earliest material are about 50 daguerreotypes, a similar number of calotypes and about 700 experimental photographs by John Herschel, dating from between 1839 and 1843. Among other early photographers represented are Antoine Claudet, John Ruskin and William Henry Fox Talbot. There are also about 1,000 images on glass using early colour processes (1890s-1930s). These photographs are both a unique visual archive and primary material for the study of the history of photographic science.

A special characteristic of the Museum's collection is its very strong representation of the scientific artefacts of Asian and North African cultures, and especially of the Islamic world. No other science museum or public collection of scientific instruments in the United Kingdom has strengths of this kind. The importance of the astrolabes, quadrants, and globes from India and the Islamic world is unrivalled; the sundial collection embraces examples from the Islamic World and East Asia, while the compass collection contains various examples of *qibla* indicators and Chinese geomantic compasses, together with Japanese clocks, Russian lodestones, Batak and Balinese calendars, 17th-century Chinese prints depicting instruments and instrument making, Japanese *netsuke* modelling biological and

medical themes, a North African horary disk, and a Persian astrolabe maker's kit of tools and templates.

More recent science is covered through selected acquisitions from University science departments. This includes material related to the physicist H.G.J Moseley and material related to the development of penicillin at Oxford in the 1940s. The Museum has also acquired objects from external sources, such as the Marconi Collection, an internationally important group of artefacts from the early decades of the science-based technology of wireless communication.

In addition to the artefacts, the library and manuscript collections have been an integral part of the Museum since its foundation. The Museum library holdings number approximately 20,000. In addition to its main theme of scientific instruments, the library also has strong antiquarian holdings in those sciences most involved with instrumentation, particularly astronomy, geometry, optics, chemistry, and physics (natural or experimental philosophy). It also has unexpected strengths in some other fields, such as zoology, botany, and the medical sciences. Its rarer books – many of them belonging to the library of the founding donor Lewis Evans – include several incunabula, significant bindings, and numerous association copies and is particularly strong in the early literature of sundials. Lewis Evans also provided the core of the manuscript collection, which is also particularly strong in sundials and related mathematical instruments. The collection has expanded to contain papers of a number of important scientists, scientific tradesmen, and scientific amateurs, as well as several historians, collectors, and curators associated with the Museum, notably Lewis Evans, R. T. Gunther, G. H. Gabb, F. Sherwood Taylor, H. E. Stapleton and, most recently, Professor Margaret Gowing.

There is also a significant collection of prints and ephemera. The latter includes trade literature – such as price lists, instruction leaflets, advertisements, and trade cards; educational ephemera – like syllabuses, lecture notices, and examination papers; documents issued by institutions and societies – their brochures, menus, membership cards, and circular letters; and any of the other printed by-products of historical activity. Unmounted printed-paper instruments, and 'broadsheet' publications (single large sheets, popular in the 18th century, typically describing astronomical events or new inventions) include unique survivals in a genre often poorly preserved.

#### **4. Themes and priorities for future collecting**

The Museum acquires scientific instruments and apparatus generally, more especially items which augment its existing strengths in the period up to the late 19th century. Collecting is not confined to western science but includes all countries and cultures. While the distinction between science and technology can be difficult to make, the focus is on the history of science rather than technology. In the 20th and 21st Centuries, collecting is usually confined to certain existing specialisms, such as material associated with Oxford, and modern microscopes, but the Museum will also respond, where possible, to the need to preserve research collections of importance to scholars in the history of science.

There are no formal restrictions in the period of time, and the existing collections extend from Roman antiquity into the 21st Century. There are no restrictions in geographical area, and the existing collections include material from the Islamic world, Southern and Eastern Asia, as well as European and American instruments.

There is no area of the collection closed to further acquisition, although certain discrete, named and finite collections may be considered 'closed' where their unifying features are their relation to a specific founder, donor or event. The existence of such collections does not preclude the Museum from acquiring material related to those collections.

Although the Museum maintains friendly relations with other institutions such as University of Oxford colleges and departments, Oxford schools and various learned societies, it should not, however, be considered as a repository for unwanted items originating from these bodies, and the Museum will submit to no obligations in this regard. Any potential acquisition from such sources will be carefully considered on a case-by-case basis.

## **5. Themes and priorities for rationalisation and disposal**

5.1 The Museum recognises that the principles on which priorities for rationalisation and disposal are determined will be through a formal review process that identifies which collections are included and excluded from the review. The outcome of review and any subsequent rationalisation will not reduce the quality or significance of the collection and will result in a more useable, well managed collection.

5.2 The procedures used will meet professional standards. The process will be documented, open and transparent. There will be clear communication with key stakeholders about the outcomes and the process.

5.3 The Museum's collections management operates under a presumption against disposal. Disposals will only be undertaken for legal, health and safety or conservation reasons.

Where an item is judged to be suitable for disposal (for reasons other than legal ones), priority will be given to the transfer to another accredited museum or institution of the University of Oxford above any other form of disposal.

5.4 The Museum has largely collected in a coherent and responsible manner since its foundation in 1924, and for this reason there is at present no systematic programme of reviewing items for disposal against their suitability for the collection.

Where an object causes concern due to any legal, health and safety or conservation reasons, this will be flagged up and reported to the Museum's Collections Committee for consideration.

5.5 The Museum is seeking to rationalise historic loans-in. Objects will be assessed according to their suitability to remain at the Museum, with priority for retention given to those on permanent or regular display, or where their presence at the Museum provides

them with a valuable context amongst similar or associated objects, or where their presence at the Museum enhances their accessibility to researchers.

Where possible, the owners of lent objects will be contacted and the object be either returned to them or retained by the Museum, with an updated and renewable short-term loan agreement negotiated.

## **6. Legal and ethical framework for acquisition and disposal of items**

6.1 The Museum recognises its responsibility to work within the parameters of the Museum Association *Code of Ethics* when considering acquisition and disposal.

## **7. Collecting policies of other museums**

7.1 The Museum will take account of the collecting policies of other museums and other organisations collecting in the same or related areas or subject fields. It will consult with these organisations where conflicts of interest may arise or to define areas of specialism, in order to avoid unnecessary duplication and waste of resources.

7.2 Specific reference is made to the following UK museums:

The British Museum

The National Maritime Museum

The Science Museum

The Whipple Museum of the History of Science, University of Cambridge

Additionally, the Museum will consider other relevant UK and international museums.

## **8. Archival holdings**

The Museum has always collected across the whole range of source materials in illustration of its theme (history of science with special reference to scientific instruments), and many objects or collections acquired over the years have been accompanied by books or archival-type material. The founding benefactor Lewis Evans included a library of rare books, a collection of manuscripts, and even a small group of printed ephemera with his original gift in 1924, hoping to create a comprehensive resource for the display and study of historic scientific instruments. The Museum built upon this idea, resulting in a rich and varied collection of bibliographic and paper-based materials.

The core library collection – printed books, pamphlets, and periodicals – now numbers some 20,000 items, dating from 1476 to the present. Details can be found in the online library catalogue, and the books are also catalogued on Oxford University's union catalogue SOLO. The rarer books include several incunabula, some interesting bindings, and numerous association copies.

Although the Museum has acquired archival-type holdings in the course of its existence, it is not to be considered as an archive of the history of science more generally. The archival material that the Museum holds relates almost exclusively to the institution itself, the people associated with it and its collection. The Museum does not plan to acquire any material in future which does not relate to these criteria.

Material which in some contexts may be considered archival in nature, such as 2-D artworks, photographs and paper-based scientific instruments, has always been treated as part of the 3-D object collection at the Museum. The archival holdings at the Museum therefore constitute only a small proportion of the Museum's total collection.

Supporting documentation is generally not catalogued, but is appropriately labelled and kept in a rational format that makes this material searchable and retrievable. Relevant support documentation will be added to the Museum's collections management system.

Documents and files created as part of the day-to-day operation of the Museum are treated in accordance with the University of Oxford's Records Management Policy (2011), and will not form part of the Museum's collections.

## **9. Acquisitions**

9.1 The policy for agreeing acquisition is:

Potential acquisitions are considered by the Museum's Collections Committee, which comprises the Director and Assistant Keeper, curatorial, collections management and conservation staff members. In addition, the Museum's governing body (The Visitors of the Museum of the History of Science, University of Oxford) may be consulted for further guidance.

The Museum will exercise due diligence and make every effort not to acquire, whether by purchase, gift, bequest or transfer, any object or specimen unless the Collections Committee or governing body are satisfied that the Museum can acquire a valid title to the item in question.

All other acquisition procedures, as outlined in the Museum's Documentation Procedural Manual, must be followed in full.

9.2 The Museum will not acquire any object or specimen unless it is satisfied that the object or specimen has not been acquired in, or exported from, its country of origin (or any intermediate country in which it may have been legally owned) in violation of that country's laws. (For the purposes of this paragraph 'country of origin' includes the United Kingdom).

9.3 In accordance with the provisions of the UNESCO 1970 Convention on the Means of Prohibiting and Preventing the Illicit Import, Export and Transfer of Ownership of Cultural Property, which the UK ratified with effect from November 1 2002, and the Dealing in Cultural Objects (Offences) Act 2003, the Museum will reject any items that have been illicitly traded. The governing body will be guided by the national guidance on the responsible acquisition of cultural property issued by the Department for Culture, Media and Sport in 2005.

## **10. Human remains**

10.1 As the Museum holds or intends to acquire human remains from any period, it will follow the procedures in the "Guidance for the care of human remains in museums" issued by DCMS in 2005.

In addition, the Museum will follow the “Policy on Human Remains held by the University of Oxford’s Museums” (Oxford University Gazette, Supplement (2) to No. 4787, 15 November 2006), which is based on the DCMS document. This is a University-specific procedural document produced in addition to and in line with the DCMS guidance and Human Tissue Act, neither of which it supersedes or contradicts.

## **11 Biological and geological material**

11.1 So far as biological and geological material is concerned, the Museum will not acquire by any direct or indirect means any specimen that has been collected, sold or otherwise transferred in contravention of any national or international wildlife protection or natural history conservation law or treaty of the United Kingdom or any other country, except with the express consent of an appropriate outside authority.

## **12 Archaeological material**

12.1 The Museum will not acquire archaeological material (including excavated ceramics) in any case where the governing body or responsible officer has any suspicion that the circumstances of their recovery involved a failure to follow the appropriate legal procedures.

12.2 In England, Wales and Northern Ireland the procedures include reporting finds to the landowner or occupier of the land and to the proper authorities in the case of possible treasure (i.e. the Coroner for Treasure) as set out in the Treasure Act 1996 (as amended by the Coroners & Justice Act 2009).

12.3 In Scotland, under the laws of bona vacantia including Treasure Trove, the Crown has title to all ownerless objects including antiquities, although such material as human remains and environmental samples are not covered by the law of bona vacantia. Scottish material of chance finds and excavation assemblages are offered to Museums through the treasure trove process and cannot therefore be legally acquired by means other than by allocation to the Museum of the History of Science by the Crown. However where the Crown has chosen to forego its title to a portable antiquity or excavation assemblage, a Curator or other responsible person acting on behalf of the Visitors of the Museum of the History of Science, can establish that valid title to the item in question has been acquired by ensuring that a certificate of ‘No Claim’ has been issued on behalf of the Crown.

## **13 Exceptions**

13.1 Any exceptions to the above clauses will only be because the Museum is:

- acting as an externally approved repository of last resort for material of local (UK) origin
- acting with the permission of authorities with the requisite jurisdiction in the country of origin



In these cases the Museum will be open and transparent in the way it makes decisions and will act only with the express consent of an appropriate outside authority. The Museum will document when these exceptions occur.

## **14 Spoliation**

14.1 The Museum will use the statement of principles 'Spoliation of Works of Art during the Nazi, Holocaust and World War II period', issued for non-national museums in 1999 by the Museums and Galleries Commission.

## **15 The repatriation and restitution of objects and human remains**

15.1 The Museum's governing body, acting on the advice of the Museum's professional staff, if any, may take a decision to return human remains (unless covered by the 'Guidance for the care of human remains in museums' issued by DCMS in 2005), objects or specimens to a country or people of origin. The Museum will take such decisions on a case by case basis; within its legal position and taking into account all ethical implications and available guidance. This will mean that the procedures described in 16.1-5 will be followed but the remaining procedures are not appropriate.

15.2 The disposal of human remains from museums in England, Northern Ireland and Wales will follow the procedures in the 'Guidance for the care of human remains in museums'.

## **16 Disposal procedures**

16.1 All disposals will be undertaken with reference to the SPECTRUM Primary Procedures on disposal.

16.2 The governing body will confirm that it is legally free to dispose of an item. Agreements on disposal made with donors will also be taken into account.

16.3 When disposal of a Museum object is being considered, the Museum will establish if it was acquired with the aid of an external funding organisation. In such cases, any conditions attached to the original grant will be followed. This may include repayment of the original grant and a proportion of the proceeds if the item is disposed of by sale.

16.4 When disposal is motivated by curatorial reasons the procedures outlined below will be followed and the method of disposal may be by gift, sale, or as a last resort - destruction.

16.5 The decision to dispose of material from the collections will be taken by the governing body only after full consideration of the reasons for disposal. Other factors including public benefit, the implications for the Museum's collections and collections held by museums and other organisations collecting the same material or in related fields will be considered. Expert advice will be obtained and the views of stakeholders such as donors, researchers, local and source communities and others served by the Museum will also be sought.

16.6 A decision to dispose of a specimen or object, whether by gift, sale or destruction (in the case of an item too badly damaged or deteriorated to be of any use for the purposes of the collections or for reasons of health and safety), will be the responsibility of the

governing body of the Museum acting on the advice of professional curatorial staff, if any, and not of the curator or manager of the collection acting alone.

16.7 Once a decision to dispose of material in the collection has been taken, priority will be given to retaining it within the public domain. It will therefore be offered in the first instance, by gift or sale, directly to other Accredited Museums likely to be interested in its acquisition.

16.8 If the material is not acquired by any Accredited museum to which it was offered as a gift or for sale, then the museum community at large will be advised of the intention to dispose of the material normally through a notice on the MA's Find an Object web listing service, an announcement in the Museums Association's Museums Journal or in other specialist publications and websites (if appropriate).

16.9 The announcement relating to gift or sale will indicate the number and nature of specimens or objects involved, and the basis on which the material will be transferred to another institution. Preference will be given to expressions of interest from other Accredited Museums. A period of at least two months will be allowed for an interest in acquiring the material to be expressed. At the end of this period, if no expressions of interest have been received, the Museum may consider disposing of the material to other interested individuals and organisations giving priority to organisations in the public domain.

16.10 Any monies received by the Museum's governing body from the disposal of items will be applied solely and directly for the benefit of the collections. This normally means the purchase of further acquisitions. In exceptional cases, improvements relating to the care of collections in order to meet or exceed Accreditation requirements relating to the risk of damage to and deterioration of the collections may be justifiable. Any monies received in compensation for the damage, loss or destruction of items will be applied in the same way. Advice on those cases where the monies are intended to be used for the care of collections will be sought from the Arts Council England.

16.11 The proceeds of a sale will be allocated so it can be demonstrated that they are spent in a manner compatible with the requirements of the Accreditation standard. Money must be restricted to the long-term sustainability, use and development of the collection.

16.12 Full records will be kept of all decisions on disposals and the items involved and proper arrangements made for the preservation and/or transfer, as appropriate, of the documentation relating to the items concerned, including photographic records where practicable in accordance with SPECTRUM Procedure on deaccession and disposal.

16.13 The Museum will not dispose of items by exchange.

16.14 If it is not possible to dispose of an object through transfer or sale, the governing body may decide to destroy it.

16.15 It is acceptable to destroy material of low intrinsic significance (duplicate mass-produced articles or common specimens which lack significant provenance) where no alternative method of disposal can be found.

16.16 Destruction is also an acceptable method of disposal in cases where an object is in extremely poor condition, has high associated health and safety risks or is part of an approved destructive testing request identified in an organisation's research policy.

16.17 Where necessary, specialist advice will be sought to establish the appropriate method of destruction. Health and safety risk assessments will be carried out by trained staff where required.

16.18 The destruction of objects should be witnessed by an appropriate member of the Museum workforce. In circumstances where this is not possible, eg the destruction of controlled substances, a police certificate should be obtained and kept in the relevant object history file.

Lucy Blaxland (Collections Manager) and Tom Hopkins (Collections Management Assistant), March 2017