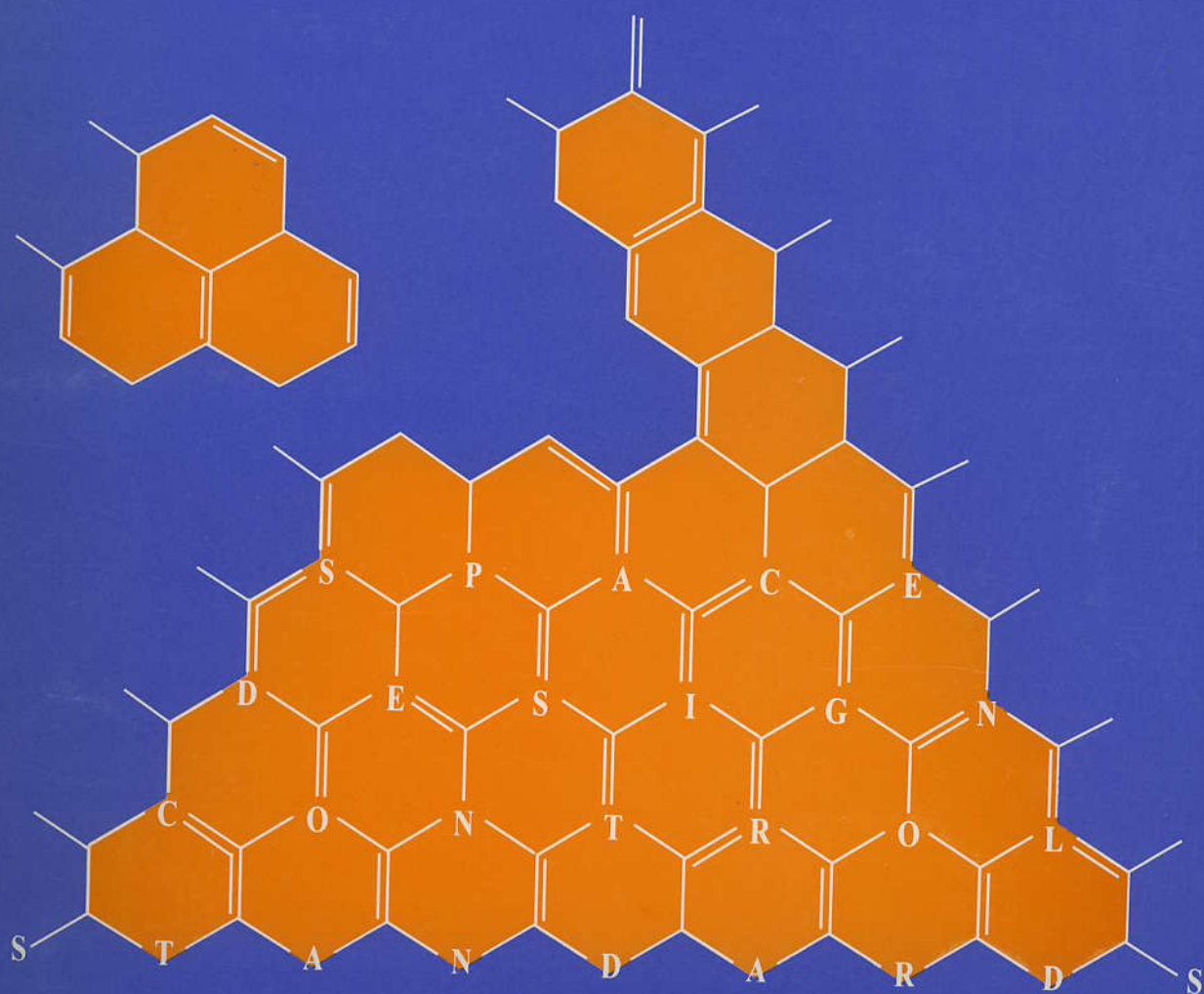


MANAGING CONSERVATION



United Kingdom Institute for Conservation of Historic and Artistic Works
Edited by Suzanne Keene

Managing Conservation

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USING STANDARDS

May Cassar and Suzanne Keene

"Every man of the children of Israel shall pitch by his own standard, with the ensign of their father's house" (Numbers 2:2)

There are several definitions of "standard"¹. The sort of standard we are considering here is measurable or describable in sufficient detail to make comparison possible. It is agreed and recognized by all, at least generally; it is a fixed reference point to use in comparisons. Some standards are legally enforceable; many are internationally recognized, or are international standards themselves. For standards to survive in use they should meet certain general criteria: predictability, measureability, relevance, technical and economical feasibility, enforceability, and social/cultural/academic acceptability². Without exception, these criteria can be applied to the use of standards in conservation, the subject of this paper.

Using standards

Much time and public money goes into developing standards and encouraging their adoption. Why is this? How can we use this investment to help in managing conservation? Table 1 illustrates the role of standards in museums. Most organized workplaces, from offices and schools to the leisure industry, are subject to constraints from internally or externally imposed standards. The work of standardisation in industry today is carried out at four levels of organization:

INTERNATIONAL: e.g. International Standards Organisation; International Federation for the Application of Standards

NATIONAL: e.g. the British Standards Institution Educational standards; the National Council for Vocational Qualifications, etc.

SOCIETY OR INDUSTRY: e.g. the Museums Association, UKIC, the Museums and Galleries Commission, the Museums Training Institute

COMPANY OR ORGANISATION: e.g. Individual museums or private conservation: businesses

At company or organisation level, companies often have Standards Departments. Their purpose, described in Standards and Building³, is: "to assist management to control the quality of the company's produces and processes by means of standard specifications". What does this work consist of? (taken from ³, [our insertions]):

1. To be familiar with the working conditions and methods of payment for the operations performed in the [museum] and to identify those operations in its activities that require quality control'.
2. To propose, prepare and produce [museum] standards specifications].
3. To ensure that the [museum] standard specifications agree, as far as possible, with the relevant statutory regulations or legal conditions ...'.
4. To distribute, to the personnel concerned ... the [museum] standard specifications, to ensure that they are kept consistent and up-to-date and in accord with the [corporate plan of the museum], and to ensure that [staff] are familiar with new [procedures] as they are introduced'.
5. To define and control the method of application of the standard specification ... in order to ensure a degree of conformity of [procedures] ... to the required standard of quality'.
6. To take part in, and to contribute to, national standardisation by being represented on ... associations ... preparing Standards relating to the [profession]'.

Could conservation in the private and public sectors benefit from the existence, formally or informally, of a mechanism for standards application such as that operated in industry?

Accepted and recognized standards make costing and pricing easier, and competition fairer, in both public and private conservation practice. They are the fixed goal posts in what often seems to be a muddy field. Schemes of recognition or registration, founded on specified standards and backed by conditions for grant aid, give power to the proposition that it is pointless having public collections if they are not in fact maintained and preserved. In private practice, they make competition fairer, promote improved working practice, and engender confidence in the profession among the public and clients.

Standards can save time and argument. If a new library or archive store is being planned, then a specific British Standard sets out the specification for it. The well-informed conservator can provide a reference to British Standard 5454: 1989⁴. The architect is familiar with the application of British Standard recommendations. The funding body knows that the specification is from a nationally recognized body. If it is decided that the British Standard is not affordable, then at least there is a point of departure for a compromise specification, or for raising a grant for complementary funding. When the work is complete, any supposed defects can be assessed against the detailed specification which has been used. Instead of a distinctly amateurish approach taking days or at best hours, the conservator can make a quick, unambiguous, authoritative, truly professional contribution. Would that this were possible for more areas of our work!

There are widely accepted standards in the area of preventive conservation^{5,6}, yet display and exhibition often cause dispute between conservators and curators. It is much more efficient for an institution to adopt a policy to adhere to these standards. Thus the ground rules are laid, and discussions over conditions for individual objects have a good chance of being resolved more easily. Standards and guidelines are one of the best possible ways of focusing and utilising the results of fundamental research. Few conservators will have time to digest detailed publications setting out the sort of damage objects can suffer under particular display conditions; for example⁷, reporting research on fading due to atmospheric pollutants. What we need in this instance is a regularly updated standard setting out the maximum levels of pollutants, which takes into account all the current research in the field. A detailed knowledge of standards ought to be an important part of any training scheme for museum professionals. Anyone who has been involved with the Museums Diploma for curators must have had reservations when asked to give tutorials on suitable treatments for objects, which is what seemed to be required. How much more useful if curators, and conservators too, for that matter, understood that there are standards for the storage and display of objects, that they are important and unable to be changed by individual whim, only disregarded.

This brings us to perhaps the most important use we can make of standards: to build them into policies in our own working environment. This is something everyone can do, since policies can apply as well to one's own working practices as to those of an institution, large or small. Taking PD 3542, The operation of standards in a company⁸, as our starting point, Table 1 summarises the ways in which standards can apply in conservation.

Published standards should serve as a guide. They must be interpreted correctly and applied intelligently to specific situations. For example, it can be the policy of an institution to adhere to recognized and generally accepted light levels. In practice, it is exposure expressed in lux-hours over a set period (say, one year) that should be measured. This allows for greater flexibility in

Table 1

SUMMARY OF THE USE OF STANDARDS IN CONSERVATION

(adapted from ⁸).

Area of application	Method	Purpose	Benefits
Management control	Directives, procedures, codes of practice	To communicate rules from management	Improved communication, reduced overheads, better staff relations
Environment	Codes of practice, guidelines	Health and safety standards, improved collection care	Improved quality of life for staff, objects and visitors
Plant and equipment	Specifications, standards, codes of practice	Identify and control plant, equipment, its maintenance, and use of spares	Control costs of maintaining plant, equipment, reduce stocks of spares
Design	Materials, components, design guidelines	Maintain optimum design possibilities under controlled (minimum) variety conditions	Cost savings, stability, improved communication and improving quality and reliability
Material control	Identification coding, handling codes of practice	Quality assurance	Improved material management, reduced stock investment, improved availability of parts, reduced obsolescence, better specification
Purchasing	Specifications, coding	Meaningful and standard specifications, stock control, establish price, agreed description, improve sources	Reduced chance of misunderstanding, best item for the purpose at lowest cost, satisfying form, fit and function
Treatments	Specifications, codes of practice	Improve direct and indirect production, control variety of tools and equipment, assist in laboratory layout and provide the basis for quality assessment	Improved output, quality, health and safety, staff and client relations
Packing and transport	Codes of practice, coding	Lender/borrower requirements, distribution	Reduced variety and cost, improved quality, economy, and reliability
Accounting	Procedures	Reduce documentation, improve communication and cost control	Economy, efficiency

applying the standard without risk to the objects. This means that exposure beyond the recommended level for a measured period of time during the year is balanced by complete protection from light at other times when the object is not on display.

General standards

We come into daily contact with some standards. Standard procedures within individual organisations give cohesion and purpose to a whole range of activities, including collections care. For example, the National Trust Manual of Housekeeping⁹ started as a working manual for house staff throughout the Trust's properties. The manual together with a set of practical demonstration videos, 'Keeping House'¹⁰, form the National Trust's standard methodology of collection care, applied in all its houses. Within the museum world, professional standards are being formulated by the Museums and Galleries Commission, the Museums Association, the Museums Documentation Association, and the United Kingdom

Institute for Conservation. Health and safety Beyond the standards specific to our own profession, there is a wide range of general standards, guidelines and regulations. We should be aware of some of them. For example, the COSHH (Control of Substances Harmful to Health) regulations¹¹ specify standard procedures to do with safe working practices, which are enforceable by law. These in turn draw on other standards, such as TLV (threshold limit values), etc. against which exposure to harmful substances can be measured. Building and construction Building regulations issued by the Department of the Environment specify detailed standards for building construction¹² and are enforced by inspections and the issue of certificates by building inspectors. Good practice is covered in construction, in health and safety, and more recently energy efficiency in buildings. CIBSE (the Chartered Institution of Building Services Engineers, and its counterpart in the United States, ASHRAE (the American Society of Heating, Refrigeration and Air-conditioning Engineers), issue guidelines recommending good practice in building services engineering. The Lighting Division of CIBSE has just started the revision of its 'Lighting Guide: Museums and Galleries'¹³.

The British Standards Institution

The British Standards Institution prepares national standards and codes of good practice by agreement among all the interests concerned, and promotes their adoption. Unlike the building regulations, British Standards are non-enforceable guidelines. It should be noted that while non-compliance with a British Standard is not punishable by law, claiming to do so but failing to comply, is

British Standards are geared to the needs of industry, with an important exception: BS 5454.

BS 5454 was prepared by a panel of archivists, scientists and technical experts on building and equipment. It specifies in detail such things as materials for shelving, space for access, and environmental parameters for relative humidity, temperature and pollutants. It has been the guiding force behind the design of new archive repositories and the upgrading of old ones. It is used as a yardstick in official inspection and approval of record depositories¹⁴.

A second British Standard has conservation uses: BS 1006, the blue wool standard fading test. Standard samples of blue wool fabric are provided in it, which fade at known rates on exposure to light. These samples can be used to illustrate graphically the rate of fading of displayed objects exposed to light¹⁵.

The development of standards for museums and galleries

Standards for museums got off to a hesitant start, with the Museums Association's Accreditation Scheme¹⁶. During the late '70s the M.A. developed and published several Codes of Practice, including those for Museum Authorities, Museum Curators, Museum Committee Members, Trustees and Members of Governing Bodies¹⁷. This began the work which the Museums and Galleries Commission (MGC) was ideally placed to develop.

The MGC's remit from government enables it to recommend standards to museums and galleries. The MGC declared its commitment to a coherent and comprehensive programme of standards development in its Corporate Plan of 1988-89 to 1992-93. Since then the MGC has embarked on a programme of standards development, supported financially by the Office of Arts and Libraries, notably through the Area Museums Councils.

The Museums Registration Scheme¹⁸

This national standards scheme employs criteria that reflect a set of minimum standards, in order to ensure that large numbers of small independent museums would not be excluded. It was in this sector that the need for guidance and improvement was felt to be most acute¹⁶. Once registration has been carried out within an Area Museum Council, it becomes the basic criterion for eligibility for capital grants.

Registration criteria have been restricted to essential basic museum functions and responsibilities: conformity with the Museums Association's definition of a museum; an acceptable constitution and financial basis; compliance with all relevant legal, safety and planning requirements; a written acquisition and disposal policy; a minimum documentation record; public access and facilities appropriate to the museum; and access to professional and curatorial advice. The guidelines also require that 'all reasonable steps should be taken to preserve the collections'. It seems likely that minimum standards for conservation, especially preventive conservation, environmental monitoring and control will form an element of the scheme in the future¹⁶.

Standards for collections care

A three-year programme is under way to establish standards for collections care. The aim is to define the optimum standards that every museum should seek to achieve. These include documentation and the museum environment. Detailed collections-based standards are also being developed or revised where they already exist. The first four of these will be for archaeological, biological, geological and industrial collections. They build on the Eligibility Criteria for Grant-Aided Storage of Excavation Archives (1986)¹⁹, the findings of the Museums Association's Report on Biological Collections (1987)²⁰, and the Storer Report on Industrial Collections (1989)²¹. For documentation, the ground work has already been laid.

Grants, funding and performance

The Cost of Collecting

The development and application of standards development has significant financial implications for museums. The Cost of Collecting report (1989)²², which proposes a formula for calculating the cost of acquiring an object, can be used by museums to calculate the true cost of properly housing and curating an object or a collection, and thus to control an important area of their operations. The rate of acquisition has very significant implications for the care of existing collections.

Area Museum Council grants

Specific grants have been earmarked by the Area Museums Councils for regional projects to facilitate the adoption of collections care standards.

The Capital Grants Scheme

This scheme aims to help English non-national museums meet the costs of the construction work required to create additional or improved accommodation for museum collections and/or related conservation facilities²³. The creation of the post of Environmental Adviser to prepare guidelines on environmental monitoring and control has helped focus attention on the environmental implications for objects of construction work. Applicants are asked to demonstrate an awareness of current environmental conditions, the potential of the building work for effecting improvement, and to show how environmental conditions will be monitored and controlled on completion of the work.

Performance measures

Museums and galleries should find these standards useful benchmarks against which to measure their performance. Simple performance indicators may include the availability of environmental monitoring equipment. A Working Party of the MGC, chaired by Prof. John Last, will be reporting on local authority museums early next year. Performance measurement in museums and galleries is one of the areas being considered. This work coincides with the current review of local authority spending by the Audit Commission, including spending in the leisure industry. Their report is due to be published early in 1991.

The Museums Registration Scheme and the programme of standards development by the MGC complement each other. Entry to the Commission's Register represents achievement of a baseline in standards, and the gateway to funding and assistance aimed at raising them¹⁶. On the other hand, the Standards for Collections Care will recommend optimum conditions. Grants will be available to help museums achieve these higher standards.

Standards for training and qualifications

UKIC's own Training Committee has been established for many years. It has done important work in developing a Core Curriculum: areas of knowledge which should be held in common by all conservators, on which further more specialised training can build. The Museums Training Institute (MTI)²⁴ was set up as a result of the the MGC's Hale Report (1987)²⁵. It fits into the broader standards-setting framework for education, promoted by the Training Agency²⁶ and the National Council for Vocational Qualifications²⁷. Several specialist panels are currently working to define the training requirements of the various branches of the profession. The conservation training panel has been convened jointly by the MTI and the Conservation Unit, to analyse training needs in conservation and to set standards for conservation training within the profession.

Standards for conservation

Environment

By far the commonest conservation standards are those for the environment of objects. Guidelines on good practice in the museum environment are embodied in Garry Thomson's work⁵. They are invaluable because they provide measurable, attainable goals. However, they raise many other questions. For example, how important is it to keep relative humidity within strict parameters? We do not know in detail what damage occurs, nor how fast it will occur, if we do not. This gives rise to a multiplicity of environmental standards. In the latest UKIC Guidelines, for the Preparation of Excavation Archives²⁸, no fewer than nine different specifications for relative humidity are specified for the different archival materials alone. Still, one only has to imagine a world without Garry Thomson's standards, with every individual conservator guessing at what parameters are necessary, to see how useful these pragmatic standards are.

Environment standards and the MGC

The MGC will be considering introducing guidelines for environmental monitoring and control. In preparation for these, the MGC's various existing schemes are assessing the effect that such standards would have on their work. Schemes include the Capital Grants Scheme, the Government Indemnity Scheme, and the Registration Scheme.

Specific standards may also be developed. For example the MGC and the Victoria & Albert Museum are engaged on a joint project to devise a way of testing museum display cases for air tightness on site. Such a method would enable the museum and the manufacturer to agree to a specification in the knowledge that this can be verified to the satisfaction of both parties. The findings of this project will be used to canvas opinions on whether a British Standard for museum display cases may be required or would be useful. The conservator often has little or no say in the choice of display cases; such a standard would provide a useful tool for specifying the environmental performance of a proposed purchase.

Conservation treatment

This, the activity on which most conservation time is spent, is covered to a degree in the various professional bodies' Codes of Practice, such as UKIC's Guidance for Conservation Practice²⁹. Two important aspects are always specified: the need to strive for reversible treatments, and the need to keep proper records.

Professional and working practice

Standards are being developed by the Conservation Unit in its Register of Conservators³⁰, and very significantly by UKIC in the nascent Accreditation Scheme. Both are supported by the MGC.

The various codes of practice being developed by professional groups and organisations, such as BAFRA and the Archaeology Section, are extremely important to the development of the profession.

As well as recommendations on professional practice, there are general employment laws and regulations, as well as many health and safety standards and regulations, which have been comprehensively documented elsewhere³¹.

How do standards affect our work?

There is strong circumstantial evidence that standards can raise quality. For example, the Eligibility Criteria for Grant-Aided Storage of Excavation Archives were published by the MGC in 1986¹⁹. The grants the Criteria refer to are in themselves not large. However, the existence of the standard prompted the Museums and Galleries Commission to offer capital grants towards meeting them. Museums which did not meet the standard had a powerful lever to use in arguing for improving their facilities. Only two/three years after their introduction, the recent research undertaken for the "Cost of Collecting" study²² found that archaeological storage was measurably better than that for other types of object.

The approach being adopted in the U.S.A. has been described elsewhere³². Instead of using standards, fixed goal posts, it uses the approach of assessments to result in plans for improvement as criteria for grant aid. This is a different approach, and we would argue a less straightforward one, to a common aim, central to conservators the world over, that of raising the standard of care of historic and artistic works.

Standards make it easier to treat conservation as an integral part of a museum's corporate plan. Collections care standards should be a major consideration when collecting policies are being drawn up. Conservation standards raise the wider question as to whether acquiring objects is justified when their are insufficient resources for their preservation.

Conclusion

Professionals are employed or hired as much for their knowledge of and expertise in applying standards as for the special skills they possess. Standardisation provides the basis for easy communication and facilitates the exchange of ideas, products and services, promoting development and consolidating achievement. In conclusion, consider PD 3542:1988, 'The operation of standards in a company',⁸ to summarise how we see the aims of standard-setting in conservation:

1. Overall economy: for example, standardisation of the range of equipment used for environmental monitoring and control would promote interchangeability of equipment and facilitate the interpretation of data.
2. Improved communication through reference to codes of practice and standard specifications.
3. Improving collections care through common agreed standards for display, storage and transport of objects.
4. The promotion of healthy and safe working practices for all conservators, through supporting and implementing the Health and Safety at Work Act, COSHH and other regulations and, we would add:
5. Higher professional standards for all conservators, since codes of practice ensure fair competition and offer a valuable tool in negotiations with employers and clients.

In conclusion, we want to re-emphasize the importance of heeding the general criteria which standards should meet, listed at the beginning of this paper. All standard setting bodies should employ these criteria if they are to avoid pitfalls such as an unrealistic variety of parameters, which may make the standard unrealistic or too difficult to meet in practice.

UKIC has an increasingly important role in developing standards. We have already seen its work on standards for the storage of excavated finds adopted by the MGC in its "Eligibility Criteria". If it follows good practice in standard setting, we can look forward to a strengthening of our professional position and a valuable aid to increased efficiency by this avenue.

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