

---

# Achieving the Link Between Art Object and Documentation: Experiences in the British Architectural Library

JAN FLORIS VAN DER WATEREN

---

## INTRODUCTION

IN 1983, THE BRITISH ARCHITECTURAL LIBRARY (BAL) initiated an ambitious scheme to automate all of its systems into one integrated database. It was ambitious in the sense that the declared aim was to maintain the specific requirements of the architectural curator who deals with "objects" while introducing the systems and standards already accepted and used by the librarian. In short, marrying two traditions to the satisfaction of both partners. Although fully forewarned by textbooks, it was perhaps fortunate that the complexity and the difficulties which were to be encountered in the process were not clearly acknowledged at the time. Textbook cases are validated only by actual applications. The first phase of the project was completed when the *Architecture Database* went online on DIALOG in 1987, the first online database exclusively devoted to the subject of architecture and to include different types of documents and objects. In its first phase—which is now online—books and periodicals are treated; in its second phase—to be introduced in 1989—drawings, photographs, and architectural books as "objects" will be added (see the discussion in the section dealing with The Printed Book as Object). The third phase will incorporate "realia"—i.e., models, medals, architects' instruments, etc. This article will briefly describe the way in which the BAL went about achieving a link between the object and its documentation.

## THE BAL AND ITS COLLECTIONS

The British Architectural Library is the private library of the Royal Institute of British Architects (RIBA) which was founded in 1834. The library has been accessible to the public since the 1850s, and its policy has been, from the beginning, to make information about its collections available as widely as possible through publications which vary from simple listings to scholarly catalogs and monographs. This is in line with the RIBA's purpose as set out in the first Royal Charter granted in 1837, namely:

the general advancement of Civil Architecture...and promoting and facilitating the acquirement of the knowledge of the various Arts and Sciences connected therewith; it being an art esteemed and encouraged in all enlightened nations, as tending to promote the domestic convenience of citizens, and the public embellishment of towns and cities. (Royal Institute of British Architects 1971, p. 7)

Linking the objects collected by the RIBA to information about them has been formulated as "the collecting, conserving, organising and making available as a *unified and coherent collection* materials relating to the history and practice of architecture for the benefit of users working for the 'general advancement of civil architecture' " (Van der Wateren 1988. In press)

In the field of architecture, the BAL is preeminent. Its collections are of such importance and significance that the BAL is recognized as the de facto British national architectural library. The objects in its five main collections (Books, Periodicals, Drawings, Photographs, and Manuscripts Archives) cover, alongside traditional documents, printed ephemera, drawings, lithographs, engravings, etchings, models, photographs, slides, films, tape recordings, furniture, instruments used by architects, medals, coins, busts, portraits, paintings, etc. In fact, when viewed from the point of view of objects, the BAL could be described as a museum with traditional museum curatorial functions developed in parallel with the documentation functions of a traditional library service. The fact which made the successful linkage of these two functions possible was the advent of automation and placing emphasis on the area of information output which was much neglected in the past and which played a predominant role.

## EARLY ATTEMPTS AT CATALOGING

The research activities of the library resulted in the first publication of a catalog of its holdings in 1838, nearly thirty years before the publication of the *Universal Catalogue of Books on Art*. This was augmented in 1848 by a further book catalog and a third published catalog of printed books and manuscripts appeared in 1865. The growth of the object collections led to the publication of the *Catalogues of the Drawings, Prints and Photographs in the Library of the RIBA* in 1871 and a *Catalogue of Medals, Busts, Casts, Marbles, and Stones in the*

*Collection of the RIBA* in 1874. In 1889, a consolidated catalog, the *Library Catalogue: Printed Books and Manuscripts 1834-1888* appeared. The last comprehensive printed catalog of books and manuscripts appeared in 1937 and 1938 in two volumes as the *Catalogue of the Royal Institute of British Architects' Library*: volume 1 *Author Catalogue of Books and Manuscripts*, and volume 2 *Classified Index and Alphabetical Subject Index*. The first of twenty volumes of catalogs exclusively devoted to the drawings collected since 1834 was published in 1969 (vol. A), and volume *T* through *Z* appeared in 1985. The archives of the RIBA were, for the first time, systematically described in *The Royal Institute of British Architects: A Guide to its Archive and History* in 1986 (Mace 1986). The photographs collection has had a checkered career and a systematic catalog to it is only now underway.

Indexing of periodicals dates back to 1900 with a purely in-house system (now being microfilmed) (*The Grey Book Index*. In press), the first published format appearing as part of the 11 November 1933 issue of the *RIBA Journal* and culminating in the *Architectural Periodicals Index* from 1972 onward. Online access was achieved with the *Architecture Database* in 1987.

## AN INTEGRATED SYSTEM

It will be seen from the previous discussion that the BAL, from its inception, collected a variety of art objects and documentary resources, and that it followed a policy of linking these through various forms of publication. By the 1960s, the massive increase of published documents and a proactive archival collecting policy resulting in the taking in of large numbers of architectural drawings and other objects relating to the practice of architecture promoted the development of differing cataloging systems for the different collections in the absence of a cohesive policy of linkage. Although printed documents benefited from the development of international standards of description (AACR2 was introduced in the BAL in 1972), the lack of similar standards of description for the other objects in the library's collections resulted in an in-house development of a special code for the cataloging of drawings. It was felt that object description should take precedence over bibliographic standards, and when printed documents were referred to in the drawings catalog, the general rules used in the collections of books and periodicals were not applied. For instance, AACR2 was perceived as irrelevant to the construction of name and title entries and separate sets of rules were established for use in the drawings catalog. Subject and geographical descriptions also developed independently from the usage in the book and periodical collections. The task was to demonstrate to the satisfaction of the curatorial side that library standards could satisfy curatorial requirements and that using common standards would enhance the effectiveness of information retrieval.

In fact, the BAL's history shows that the needs of the researcher and user were not yet perceived to include the effectiveness of being able to approach material relating to one subject or architect in at least the same way in all catalogs, if not in one unified catalog. Both staff and users had to become agile in jumping from one set of rules to another within two physically adjacent catalog cabinets and this general development was perpetrated in various other catalogs and indexes in the library. But this was, of course, a situation not unique to the BAL, and different institutions tackled the problems in different ways.

The opportunity to rationalize practices arrived with the development of automation. It was understood that automation alone could not solve the problems, but that cohesive systems could be achieved only through adopting common standards. Great difficulties were expected and encountered through adherence to entrenched traditions; again, this was not unique to the BAL. Similar resistance existed and exists on an international scale, the resolving of which this issue of *Library Trends* addresses.

In the BAL, a contributing factor to resolving this resistance was surely the fact that as those of the older generation who resisted new technology either left or moved to senior managerial posts in collection development fields, the younger generation replacing them as the primary researchers cataloging the holdings brought with them experience of the new technology and a desire to exploit its potential. They displayed a general eagerness to investigate the already established systems developed over a very long period in an effort to prevent attempts to reinvent the wheel (Giral 1987).

Another helpful ingredient in achieving an accommodation was the work of the Architectural Drawings Advisory Group (ADAG) of the Center for Advanced Studies in the Visual Arts at the National Gallery of Art in Washington, D.C. Under the chairmanship of Dean Henry Millon, ADAG became a forum for the practical exchange of views between an international group of documentalists (librarians and archivists) and curators, resulting in great benefits for both communities. Proposed by Angela Giral, Avery Architecture and Fine Arts librarian, Columbia University, ADAG early on adopted AACR2 and U.S. MARC as standards. As the ADAG system for computer cataloging of architectural drawings is developed, a MARC mapping exercise will go on simultaneously.

The third factor assisting the achievement of an internal accommodation between the object and information about it was the capabilities of the automated system specifically developed for the BAL. In 1983, the RIBA purchased a Prime 2655 minicomputer and a free-text software package (STATUS) adapted for use on Prime by the research organization BNF (British Non-Ferrous Metals), originally developed by the United Kingdom Atomic Energy Authority, for use in the BAL. STATUS has powerful retrieval capabilities and one of its strengths is its

ability to cope with a variety of record formats. BNF, employed to do the necessary development work for the BAL, had developed various other software packages for use in conjunction with the STATUS free-text system—STRIDE, a special thesaurus software system; SCREED, a text editor; and SPEED, a data entry system. Another attractive feature of STATUS is its ability to accommodate other databases on it. At present, the text of the *RIBA: Guide to its Archives and History* (referred to earlier) is mounted in the BAL automated information system, and the second edition of Ruth Kamen's (1981) *British and Irish Architectural History: A Bibliography and Guide to Sources of Information* is being developed on the computer as part of the BAL system. It is planned to enhance this multibase in-house system to achieve greater effectiveness in both research and information fields. For instance, it is envisaged that the 1987 text of the *Banister Fletcher History of Architecture*, 19th edition, will be included at a future date (Musgrove 1987).

The incorporation of these three texts into the BAL database system indicates its general outline. It consists of a central integrated database (the IDB) with satellite databases linked on the inner circle of satellites through the release of common data to the IDB, and on the outer circle by being searchable on a word-by-word basis achieved through the free-text application of indexing each word (excluding nominated common words) in STATUS. The satellite databases cater to those fields of object description which are unique to the object described and specifically provide the opportunity for adding free-text essays in which research results can be recorded and retrieved. The research satellite bases presently comprise: drawings, photographs, manuscripts and archives, early imprints catalog, biodata (described later), and the periodicals catalog (in which the histories of the titles held by the BAL are recorded). The early imprints catalog deals with the book as "object" in that the printing, publishing, and ownership histories are fully described in addition to its characteristics as an object (watermarks, binding, etc.).

The management satellites include a special database for periodicals accessions and another acting as an accessions register for all original (object) material acquired. The original materials are predominantly archives from architects' offices, usually comprising drawings, photographs, and correspondence, possibly printed documents, and perhaps equipment, models, and other "realia" or art objects.

The accessions register is the only database in the system not available for access by the public. In the past when collections of original materials were acquired by the BAL, the material was sorted into groups destined for different library departments and then accessioned separately by each. This practice destroyed the potential of viewing the material collectively, not recognizing the dimension of archival history. The implementation of an automated accessions register enabled new practices to be introduced. Now a central accessions

number is allocated to a group of materials and the register contains the following information: title, description, quantity, location, accessibility, type of deposit, price, source, provenance, ownership, copyright, conservation condition, and relevant correspondence. When the accessions register record has been completed, the material is dispersed to the individual "object" departments for detailed research and cataloging. The retention of the central accessions register number as part of the final departmental accessions and location number allows for the possibility to reconstitute the material as a unit when required to do so at a future time. Each accession is individually assessed to decide what information should be released to the IDB.

A further unifying element has been the development of Biodata, a database devoted to (individual and corporate) biographical data. (The BAL project, British Architectural Biography 1834-1914, is sponsored by the Getty Grants Program, one of eight entities of the J. Paul Getty Trust. Research data from this project will be incorporated in the *Architecture Database* on DIALOG as from 1989.) At the first level, this satellite database acts as a names authority file, and on a second level it allows for a central collection point for research done on a person/corporate body in the course of cataloging, whereas, in the past, different departments duplicated their research efforts. The names authority aspect ensures that the same form of name is used throughout by all departments using the STRIDE thesaurus software for automatic verification. AACR2 is used throughout, incorporating, to the general benefit of the researcher, the practice of using the fullest form of the name with the addition of birth and death dates and descriptors for all members of a category of people identified by the BAL as significant. These include all architects of whom original material is held and will eventually also include all members of the RIBA. Presently, it excludes names of more transient journalists and authors, etc., as encountered, for instance, in periodical indexing.

Similar standardization is achieved through the use of standard subject headings; previously different sets of subject headings were used for different materials. Both the name authorities and the subject headings are manipulated by the STRIDE thesaurus software. When entering data, the validity of names/subject headings is checked in STRIDE and the correct forms are transferred to the data entry screen. At present, the system of subject headings used is *Architectural Keywords*, the machine readable form of the BAL's periodical keyword list published in 1983. The Biodata satellite provides the first new application in the BAL to allow experimentation easily with the Art and Architecture Thesaurus (AAT) as the source for standard descriptors.

Although STATUS is a stand-alone system, a BAL requirement was the linkage with other systems internationally. For this purpose MARC was adopted, which provided a further basis for aligning different in-house practices and provided the opportunity to combine a

rigorous structure with the free-text retrieval capabilities of STATUS. A special program was developed by BNF for converting the data created in STATUS to the MARC format as defined by ISO 2709. (The conversion program was built with funding from the Getty Grants Program as part of the BAL Early Imprints Project.) This conversion program makes it possible to release the BAL data to other networks. The next stage will be to develop programs to receive data from other sources. Ultimately the BAL aims to become a participant in the Research Libraries Information Network (RLIN) once RLIN has established a window for users in Europe. After initial resistance and debate, the BAL satellites dealing with nonpublished documents eventually grasped the value of MARC and agreed to follow the structures prescribed. In a sense, the incentive to use STATUS was the free-text searching ability that allows information contained in essay-type notes to be retrieved. Although the MARC application was seen to be a compromise by the nonpublished document satellites, the full-blown system does respect the integrity of each object-collection as well as the recognized standards relating to each type of object (where these exist).

Each relevant satellite releases data required for information needs in the IDB (intended for eventual direct public access). The data are extracted from the satellites by a special program which reformats the data and enlarges it for the IDB. Basic information includes all name, title, and subject entries. The IDB is therefore the center which allows the user to find, in a standardized format, information about different objects and about the documentation relating to them. One enquiry will, for instance, retrieve all the manuscripts, photographs, drawings, books, and periodical articles (and models if any) concerned with Lutyens's Viceroy House in Delhi. However, if the user is interested only in one format, the IDB can be bypassed and the drawings satellite, for instance, directly approached.

U.K. MARC had, by the time the project was being developed, not yet developed standards for all the objects in the BAL's collections, and other MARC standards had to be borrowed or specially developed to augment U.K. MARC. For instance MSS U.S. MARC standards were adopted in the manuscripts and archives database. For periodicals, which are indexed directly and exclusively in the integrated database (requiring no satellite base of its own), the BAL followed the MARC format developed by the Avery Library at Columbia University for its own architecture database on RLIN. The reason for this being the proposed merger between the Avery Index of Periodical articles and the BAL's *Architectural Periodicals Index*.

## THE PRINTED BOOK AS OBJECT

Agreements between the curators and the documentalists were largely based on clarifying definitions. The greatest difficulty encountered was the underlying attitude that documentalists do not have the

experience of treating objects and could therefore not appreciate the special requirements of the curatorial departments. An important role in dispelling this misconception was played by the setting up of a project to produce an automated catalog of the BAL's important collection of imprints published before 1841. The curators were finally persuaded that the librarians not only had a healthy respect for the (book as) "object" but that a cataloging system was possible which could satisfy this need at the same time as dealing with the book in a more traditional bibliographic manner.

The prospect of this linking seeks to address a neglected area of research in establishing the techniques to arrive at the true identity of graphically orientated materials by recording and describing the publishing history and physical makeup of the major titles in the architectural canon. The need for this connection springs from the role that printed visual images have played in the history of art, particularly before the arrival of photography. In order to interpret the influence that such images had on the practice and study of architecture at a given time, one requires the exact identification and description of these images and the documents in which they occur.

Research into the history of various states of a book caused by printing technology, especially during the hand-press period, is well established in the fields of literary texts but has not yet been achieved in the field of books containing graphic information. In architecture, the fact that the same plates could be reused, altered, or copied indefinitely, resulting in different states of the book containing different images, has potentially had an enormous influence on the development of building.

The accurate description of early architectural books is particularly difficult because, in many instances, the text, if it is present at all, has been subordinate to the image, and descriptive techniques capable of recording the transmission of graphic images had only rarely been attempted. The project therefore aims at research into the history of why copies of the same book show confusing variations of plates, and from the concrete historical evidence drawn from the book as object itself and from other sources, to identify the part played by the people whose task it was to implement the author's intentions. The research will aim to establish the "definitive" copy of a document against which other copies can be assessed for correct identification and completeness. The accent on the graphic content of the books will open up unprecedented access to the work of particular artists, engravers, printers, and others working in the field.

In expanding the Eighteenth Century Short Title Cataloging format (ESTC), particular attention was given to graphic images—i.e., the medium and processes involved; their size and distribution in relation to the letterpress pages; the subject matter and manner of representation; the names of those responsible for the drawings; of those making the engravings, etchings, etc. onto plate for printing; of those working

directly on stone or zinc; and the names and addresses of those responsible for printing the images. The notes fields amply provide for full explanation and information concerning the making of the book being described, establishing the author's intentions in publishing, the involvement of patrons, the previous or subsequent appearance of the same images, variant copies, etc. The specific copy cataloged is described in a separate section in relation to its binding, inserted extraneous matter, imperfections, and provenance.

## CONCLUSION

A final innovation which helped the linking of information was to create the data input screens in such a way that they appeared to follow traditionally used formats for "object" cataloging. In the case of drawings, for instance, the name of the architect/designer appears at the head of the entry although its MARC code might be that for an added entry. And this points to the fact that many of the differences encountered between the curator and the librarian could be sorted out with relative ease without compromising standards. The end result has been a much more effective and sophisticated system for information retrieval without sacrificing object-specific or document-specific requirements.

## REFERENCES

- Giral, Angela. 1987. "Architectural Drawings at the Crossroads: Working Documents, Published Records, Objects of Beauty." Paper presented at the American Association of Museums Conference, San Francisco, CA, 10 June 1987.
- The Grey Book Index*. In press. Details available from Microfilm Publications Ltd., 62 Queen's Grove, London NW8 6ER, England.
- Kamen, Ruth H. 1981. *British and Irish Architectural History: A Bibliography and Guide to Sources of Information*, 1st ed. London: The Architectural Press. Second edition proposed for 1990 by Mansell, London.
- Mace, Angela. 1986. *The Royal Institute of British Architects: A Guide to its Archive and History*. London and New York: Mansell Publishing Ltd.
- Musgrove, John, ed. 1987. *Sir Banister Fletcher's A History of Architecture*, 19th ed., edited by John Tarn and Peter Willis. London: Butterworths.
- Royal Institute of British Architects. 1987. *The Charter, Supplemental Charter and Byelaws*. London: RIBA.
- Van der Wateren, J.F. In press. "The Architecture Database: Its Origins and Future." Paper presented at the 25th Anniversary Conference of the Construction Industry Information Group (CIIG), London, England, 2 October 1987. Publication anticipated in the first CIIG *Newsletter* of 1988.