

CHAPTER I. CULTURAL REPOSITORIES

A. COMMONALITIES - THE LIFE-CYCLE OF CULTURAL OBJECTS²

Despite the differences implied by organizations variously naming themselves libraries, museums, archives, botanical gardens, aquaria and zoos, the management of collections is more similar from one cultural repository to another than it is different. The management of collections implies their rational acquisition, conservation, use and disposition. Cultural repositories are accountable, and are increasingly being held liable, for the care and use of objects entrusted to their custody. This means that cultural institutions need to know why they acquired an object and what rights they have in it (including whether and how its title was transferred). They need to know where it is at any time, what they have done to preserve it and to bring it to public attention. And they must know whether they can copy it, loan it, exhibit it, or even dispose of it. Finally, they must do so in accordance with their own procedures and applicable laws, and maintain records showing that they have acted responsibly.

How do cultural repositories acquire this obligation? Indeed, how do objects, some of which may be natural, or even alive, become "cultural property"? The societal answer is that they assume these obligations willingly in exchange for rights associated with the status of "cultural repository". In establishing themselves as public, or not-for-profit organizations dedicated to enriching our understanding of the world around us, both man-made and natural, cultural repositories put themselves in a position to acquire their holdings with subsidy, whether directly or indirectly, from the public purse. As such, they become accountable for the care and disposition of the objects they have, in this subsidized fashion, acquired. They also make implicit and explicit guarantees to donors of culturally valued objects which are entrusted to their care, and these assurances have, increasingly, been protected by the courts.³

² Central to the definition of information systems requirements in the remainder of this document is a definition of "object" which is somewhat at variance with common usage. In this document, an "object", or "collected object" may be a group of items, an item, a component of an item or a piece of an item or component.

³ Marie Malero, *A Legal Primer on Managing Museum Collections*, Washington, DC, Smithsonian Institution Press, 1985 is the best handbook on legal requirements.

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Because cultural repositories serve the public and its needs to know, they do not simply acquire anything, but rather seek specific items which will serve their broader educational and scientific purposes. To understand this is to grasp the essential problem of the collections management information system; objects are rationally acquired to collectively reflect, interpret or symbolize our world. Such purposes are conceived in advance, and objects are sought which serve them, and which serve them in conjunction with other holdings, including those yet to be acquired. Meteorite fragments and dinosaur skeletons are no less cultural objects than are paintings or locomotives, though they are naturally occurring, for we collect them to place them in a cultural context, and manage them so they can serve a cultural purpose.

The management of cultural objects is, therefore, similar from one institution to the next, without regard to the kinds of objects each holds. Objects are Considered, Acquired, Accessioned, Managed, Conserved, Documented, Studied, Interpreted, and Deaccessioned. These stages in the life-cycle of a cultural object are independent of the stages in the life-cycle of the same objects as a living thing, geological form or artifact; i.e., whatever it was prior to being appropriated as an object of collecting. Each stage in the life-cycle of the collectible presents its own informational requirements and results in the addition of new information which must be made available in subsequent stages. The problem of the collections management information system is to preserve for future use everything that was once explicitly known about a cultural object, in order to reduce redundant effort and improve the quality of decision making vis-a-vis the collection.

1. Considered

Anything might potentially become an object in a cultural repository. All repositories therefore have formal or de facto "Collecting Policies" which establish the scope of their potential holdings and define the universe of items in which they have a collecting interest. If these collecting policies are carefully crafted, they can be employed in the collections management information system to validate solicitation and acquisition decisions. All cultural repositories have a need to identify objects which might in fact be considered for acquisition, or sources which have the kinds of objects of interest, and to track such objects and their sources as long as they are under consideration for acquisition. Therefore, whether systematic or not, all such repositories maintain lists of target acquisitions and monitor potential donors or sources of materials. Many cultural repositories actively participate in the discovery, collation, or even the "making" of potential holdings, through expeditions and archeological research, records

management or collection advisement, and oral or photographic documentation, sponsoring an "artist in residence" or breeding their living collections. In these cases, more elaborate guidelines are developed and adhered to in order to assure that appropriate objects are considered for the collection. Archivists create records schedules; oral and photographic documentalists create research protocols; and archeologists develop guidelines for each dig. The collections management system needs not only to store such procedural information, but also to use it in assessing the potential interests of objects.

2. Acquired

Acquiring legal title to desired holdings may be a direct process resulting from purchase or outright gift, the rights of discovery or of creation, or it may be an indirect process resulting from legal obligation of the creating agent to deposit the material, or the realization of a bequest. While transfer of ownership normally occurs at one time, legal title can be acquired through a series of partial gifts. It is important in information systems to reflect the fact that physical and legal custody are totally distinct and may, or may not, be transferred together. In addition, rights in objects, such as copyright or performance right, are not transferred simply through acquisition of title. In addition, the transfer of title (and the assumption of physical custody) is often accompanied by the attachment of other obligations or restrictions by the source. Therefore, the process of acquiring objects in a cultural repository must be carefully managed to assure that the desired result is achieved and so that the actual status of an object may be known for all future uses. Ideally, the information system would manage restrictions data, not only by bringing it to the attention of staff when applicable during the life of the object, but also by calculating impacts and costs of restrictions prior to acquisition.

3. Accessioned

The physical intake of materials into a cultural repository is accompanied by a process which records their receipt as accountable holdings. Terminology and organizational policy differ in whether all materials entering an institution are considered accessioned by this process of recording or if objects may pass through the doors of a cultural repository without being considered "accessioned" (as when they are "on deposit", "on loan", "under review", or acquired as part of a "research" or "study" collection) but for the purposes of defining information requirements, cultural repositories consider at least all items in their custody as the focus of collections management, and "accessioning" as the initial recording of such materials. The accessioning process necessarily assigns the objects in the accession to the inventory control processes. Often the accession is a larger

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aggregate of materials than are managed subsequently, so accessioning includes recording a minimum of information required to uniquely identify objects and link them to the accession and assigning organizational responsibility for its subsequent management. Significantly, responsibility for steps in the accessioning process is often divided between registrars and curators, records managers and archivists, acquisitions departments and catalogers, so information systems are designed to uniquely identify objects and iteratively bring them under a minimal level of control.

4. Managed

Management must keep track of the physical locations of all holdings, the use to which they are currently being put, and the physical, legal and administrative responsibility for them. Regardless of how it defines its holdings, management must likewise maintain control over all materials in its legal and/or physical custody. Most importantly, it records all actions taken on holdings during their life as cultural objects, including actions which result in acquisition or relinquishing of physical custody (loans and borrowings), and keeps track of steps within loan cycles (requests, contracts, due dates, renewals, condition reports, re-shelving), but also such actions as preservation, exhibition and interpretation. In Western democracies, libraries do not maintain records linking users of cultural holdings with uses after the users relinquish physical custody, in order to protect privacy. But museums and archives do retain this information, as well as fairly elaborate sets of records about the uses (bibliographies, exhibition catalogues and histories) because use is itself relevant to subsequent interpretation.

5. Conserved

The cultural repository conserves its holdings both through keeping them in appropriate environments (which may be temperature, humidity and insect controlled, outdoor sculpture gardens or pseudo-Pacific Coral reefs), and through active intervention by preservation and restoration activity. Information management modules which support conservation of holdings must support records of the environments of storage and display spaces, including facilities in borrowing repositories, the material composition of objects, the ideal conditions for particular materials and the known effects of altering these, and of available treatments, in addition to simply keeping records of what conservation actions are performed. Active manipulation of the library of conservation reports to plan actions for other holdings requires sophisticated information handling facilities.

6. Documented

Cultural repositories document their holdings to provide access to them and to further their use by others. Sometimes the activity takes place only once, and shortly after the object is accessioned, as is usually the case with library cataloging. But in most cultural repositories, documentation takes place over the life time of the object. There may be definable stages, established in the procedures of the organization, and identified by what data will be recorded in documents (such as preliminary inventories, item lists or catalogs). To some extent, most documentation activity also involves documenting things other than objects - creators, communities of creators, peoples or periods of cultural history, places or events. This documentation of contexts of creation or cultural use is not incidental. In archives and museums, contexts are central to documentation of the holdings, while "description" per se (recording objective characteristics of the object), plays a secondary role.

7. Studied

Nearly all cultural repositories invite research use of both their holdings and information about their holdings by outsiders and encourages such uses by staff. These users or "patrons" must be kept track of by the collections management system along with their uses of the holdings (if only temporarily, during the period of such use). Access to holdings is provided to users principally through the documentation created by staff, such as "catalogs" and indexes, and to a lesser extent by surrogates such as abstracts. Objects are usually studied in themselves, but may be studied through other surrogates such as transcriptions, models, and reproductions (still and motion images). Except in libraries, access is rarely provided by patron browsing. Some repositories have designed information systems which add to the information about an object as a result of researchers' views based on their use of objects.

8. Interpreted (Exhibited and Published)

The purpose of the cultural repository is to interpret its holdings, to explain the world we inhabit. A strategy which is central to most cultural repositories (with the exception of libraries and some archives which emphasize individual rather than collective education) is to display, publish and discuss their holdings, using both their own and borrowed facilities. Staff of the repository are, therefore, continually culling the holdings to find objects which can be employed for educational purposes and to determine how best to present them to the institutions' "public". Management would, therefore, like to have information about audiences, their visiting habits and learning objectives, but most collection information systems are extremely weak in capturing and using this information. Management of interpretation

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also requires facilities which support the authoring of exhibits and publications, the marshalling of appropriate objects and texts, and their presentation. While traditional lines between exhibits, publications and interpretative programs are still generally valid, we see an increasing integration of these elements in media such as interactive videodisc.

9. Deaccessioned/Destroyed

Tastes change, acquisition mistakes are made, organizational missions shift, better examples are acquired, and objects eventually become impossible to conserve at an acceptable cost, therefore cultural repositories dispose of their holdings, just as they acquire them. Ideally the information systems which support acquisition and accessioning would always be used to de-accession and transfer ownership and if the objects are merely being transferred to another cultural repository, information pertaining to the items' life as a collected object would be transferred along with the object (as the International Species Inventory System enables zoo's to do). It is central to their role as accountable cultural agencies that cultural repositories retain information about objects previously held and the reasons for their destruction or disposition.

B. DIFFERENCES - HOLDINGS & CONSTITUENCIES

Although cultural repositories share a common mission, they differ in two respects which have significance for their functional requirements for collections management information systems: holdings and constituencies. These in turn result in differences in structure.

1. Holdings

a) Size

Zoos and botanical gardens have relatively few objects in their collections, but each requires intensive care. The largest of zoos and gardens will have fewer than 5,000, and usually fewer than one thousand, specimens. Art museums, though their objects are not alive, also provide intensive care for a relatively few objects, rarely own collections numbering more than 50,000 items. Libraries and cultural history museums manage collections which range in size from 20,000 objects to a million or more for the largest research collections. Archives and natural history museums have collections which routinely number more than 1 million items and may be 100 million or more. It is obvious on the surface that the same methods will not be used for management of collections in each of these kinds of institutions,

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especially when we learn that the size of professional staffs is roughly equivalent, with the smallest organizations in each category having fewer than 5 professional staff and the largest rarely exceeding 500. Significantly, the largest staffs will serve the largest organizations in each category, not those with the equivalent size of collections. Thus the staff ratio to holdings is a reflection of the kinds of repository with the greatest attention paid to objects in repositories with living collections and fine arts and the least attention per object required in archives and natural history museums.

b) Items and collectivities:

Where the number of items and staff ratios permit (in zoos, botanical gardens and art museums), professional standards dictate not only that items will be individually described, but that substantial research on each item will be conducted as part of its management. In libraries and cultural history museums, item level cataloging is the norm (although collective levels are sometimes acceptable as in library serials and the documentation of previously collected collections in cultural museums), but there is little additional item research. In archives and natural history museums, objects are documented at collective levels, typically based on provenance which brings together the records of a particular organization over a period of years or the specimens collected by a particular expedition, or in a specific deep ocean "drag" by a fishing vessel.

c) Copies, unique items and representative items:

The holdings of a cultural repository may be copies, unique items or representative items and their collection management requirements will reflect these characteristics. Many cultural repositories hold one of a kind objects. Archives and art museums hold largely unique objects (each collects some prints and publications too). Libraries hold largely copies of mass produced objects. Other cultural repositories hold largely representative objects, acquired to illustrate a type and prized for how perfectly they represent that type. Unique objects are rarely loaned for study, although they may be loaned for exhibit. Representative objects may be loaned for study, although if studies will take a substantial amount of time, as is often the case, or benefit from comparison of the objects of study with the larger collection from which they are derived, the scholar will typically come to the repository to work for an extended time. Copies, and representations made in house, are loaned by most cultural institutions with few restrictions, since they can be replaced, even if the cost is sometimes substantial.

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2. Constituencies

a) Openness:

All cultural repositories make some distinction between the general public and specialist constituencies. Some serve one more than the other. Libraries are generally the most democratic. Archives are traditionally open but somewhat less accessible. Museums usually have public exhibits but restrict access to objects and documentation for more detailed study to those with substantial interest. Zoos and botanical garden usually restrict non-exhibit access to those with expertise. These differences have substantial impact on the design of collections management systems both because increasing access increases the requirement for formal controls and because specialists and generalists employ different query strategies in seeking items of interest to their research.

Perhaps the most dramatic reflection of differences in openness to constituents is whether users have direct access to the collections information system (or a subset of that system limited by their need to know) or can only access the collections through the knowledge of intermediaries who have access to catalogs. This difference has significant functional implications, not just implications for the physical implementation of the system as is so often thought.

b) Outreach:

A second dimension which does not precisely follow that of openness, is whether the repository reaches out to potential users through activities other than exhibits. Such user "events" could be the publication of its catalogs and finding tools, or could involve conducting study workshops and holding lectures, constructing study storage and circulating study collections, or running entire programs of education for school teachers, docents and others. Increasingly repositories have the option of using mass media for outreach purposes and collections management information systems could well be designed to enable generalized interactive teaching shells to be integrated with the primary collections data source.

Differences in constituencies indirectly reflect different institutional purposes. Among the purposes served by museum and archival collections are entertainment, education and scientific or sociological research. While collections management systems are not designed to directly support these purposes, the kinds of information recorded and the functions supported with that information, will differ based on the requirements presented by these different purposes.