

FUNCTIONAL REQUIREMENTS

Exhibit 2

THE DATA OF ACTIONS⁵

Action name:

The generic name of an action, such as Borrow, Catalog etc. These and other generic actions are discussed in the next section.

Action identification:

A number of code assigned to an instance of an action, such as accession 87-901, or loan agreement NYU-46329, or insurance certificate 932-76-504.

Object specified:

The unique identifier or description of the object to which the action applies.⁶

Extent:

A number, associated with unit of measure, which defines the quantity or size of the object acted upon, as in 500 (baskets) or 13.2 (cm.).

Unit of measure:

The name of the unit of measure associated with extent, as in (500) baskets or (13.2) cm.

Time of Action:

The year (yyyy), month (mm), day (dd), hour (hh), minute (mm) and subsequent units (ss.sssss) of time expressing when the action took place or is scheduled to take place

Action Interval:

The period which is to elapse between occurrences of a regularly scheduled action, as in audit every six months, observe every two hours, or appraise every twenty-five years.

Contingency for Action:

The prior action (usually expressed as a new status) which serves as the occasion for a procedurally required but unschedulable action, as in inspect upon receipt, label when inventoried, etc.

⁵ This data structure is largely reflected in the MARC formats for bibliographic data, field 583 where it was advocated by the author as Director of the SAA National Information Systems Task Force in 1982/3. The structure has been implemented in the Research Libraries Information Network (RLIN) where it operates much as envisioned in this document.

⁶ Note, as has been previously discussed, that for action systems to work, lower level objects must inherit actions taken on all larger groups of objects to which they belong.

COLLECTIONS MANAGEMENT

Authorization:

The name of the person, office or function that approved or ordered an action.

Jurisdiction:

The law, regulation or policy that dictated an action, a method or a status.

Method of action:

Many actions can be accomplished by a number of techniques and it may be important to indicate what method was employed - shipped by UPS, disposed of by incineration, conserved by mounting.

Action Agent:

The action agent is the individual or unit that takes the action.

Status:

Every action has some consequence; status is the term given to describe the state of the objects subsequent to the action. Usually statuses are derived from the name of the action (appraised, insured, labelled) or the method of action (deacidified, framed, weighed, exchanged) or take a specific value like bldg 6, rm. 204, range 11, unit 3, shelf 1, or \$30,000.

State:

An action may be recorded in an information system as occupying one of five primitive states or their negations. approve (disapprove); propose (retract); schedule (unschedule); take action (cancel action); verify or acknowledge (deny). In a fully implemented action management sub-system, each of these states would invoke a system function. Approve would validate actions which required external authorization and record the authorization, while disapprove would prevent the action from taking place while recording disapproval. Propose would launch internal messages about an action which is suggested in the abstract rather than for a particular time; retract would simply withdraw the proposal. Schedule would permit future actions to be established and invoke ticklers notifying affected persons when the time came. Take action is the usual state, which cancel would negate. Verify/acknowledge would send an external notification indicating the scheduling of an action, while deny would send a notice indicating its disapproval, retraction, or cancellation. In this way, a request to borrow objects is recorded as a loan with the state proposed. If authorized (returned with the state approved), the request is acknowledged and the loan is scheduled. When the date arrives, the loan action is taken and the object status is changed to on loan.

FUNCTIONAL REQUIREMENTS

B. ACTIONS - A DICTIONARY

A large number of discrete actions taken in cultural repositories generate information which must be recorded for subsequent actions, either within the same sequences or simply later in the life-cycle of the object. From one institution to the next, the definition of what information must be recorded for each of these actions, who may take them and under what conditions, and how management directs or monitors actions, will differ, but the underlying generic actions are similar. The following actions, listed in alphabetical order, have been identified.⁷

Accession/deaccession

Accessioning and deaccessioning are formal documentation processes taken to record a change in physical custody. Accessioning need not necessarily imply legal custody and may be confined to certain classes of objects by institutional policy. Accessions are somewhat artificial, for while all objects within a single accession share a provenance and arrived at the repository together, they may have little else in common. Therefore, accessions, as an object grouping are typically abandoned for subsequent documentation purposes. Even deaccessioning usually takes place on objects or object groupings established later in the life cycle, unless it immediately follows accessioning.

Acquire

To acquire an object is to come into possession of a legal title to it. Acquisition changes ownership status in the documentation. Prior ownership could be indicated by recording a number of acquisition actions but is more typically recorded in a less manipulable "note" field. Because acquisition often takes place through the signing of legal agreements, such additional

⁷ Many of these actions were first described in Request for Comment, Smithsonian Institution Collections Information System: A Plan for the Acquisition of an Integrated, Generalized, Collections Management Information System, April 1984 (Washington Dc, Smithsonian OIRM, 1984) which was drafted by the author. Others were suggested by Andrew Roberts, Planning the Documentation of Museum Collections (Cambridge, Museum Documentation Association, 1985)

For the purposes of this document, I have excluded actions taken only with respect to live-specimen collections, such as breed, feed, vaccinate etc.

COLLECTIONS MANAGEMENT

documentation must be linked to acquisition and terms which are agreed to in such documents must be recorded in appropriate contexts within a collections management information system.

Analyze composition

Analyze composition is to subject an object to a detailed study of its material constituents. It may be physical (dissection, layer by layer removal of wallpaper, etc.), chemical (assay or carbon dating) or non-obtrusive (sonogram, x-ray etc.). The resulting information becomes part of the object documentation; it may be used in condition reporting on individual objects. In the aggregate it is a source of information on treatments and results.

Appraise

Appraise is to evaluate of the quality or significance of an object, usually in considering its acquisition. Although many of the criteria employed in appraisal are institution specific, libraries and archives, are sharing information concerning appraisals in the hope of developing cooperative collecting strategies.

Attribute

Attribute is to identify an object as belonging to a specific association (person, place, time, style etc.). While attribution is an intellectual action, it can change the status of objects as much as more physical actions and recommends itself for treatment in the action structure because the agent responsible for the attribution must be retained in order to accommodate multiple conflicting attributions.

Borrow

Borrow is to agree to temporarily transfer physical custody from a person or institution to the cultural repository with definite terms both for the time the agreement begins and expires and the purposes to which the objects may be put. Functionally, borrowing materials for exhibit, research or consideration for acquisition imposes identical records keeping requirements although the kinds of terms imposed in these different circumstances will differ (the terms are complied with).

FUNCTIONAL REQUIREMENTS

Catalog

Catalog is to describe objects or events in themselves, typically with respect to pre-defined attributes. While virtually any information recorded about objects may be incorporated into a "catalog", a level of information is normally established by a repository to distinguish cataloged, partially or preliminary cataloged, and uncataloged.

Conserve

Conserve is to protect from biological or chemical deterioration by methods intended to retain an object in its unaltered condition (mounting, proper storage, deacidification etc.) or by restoring it to a previous state (cleaning, reconstructing, etc.). It should be noted that within the universe of cultural repositories, some use the term conserve for passive and others for active intervention, and vice versa. Here the term is being used to incorporate both senses. Further, while conservation will typically impact only on the conservation status, restoration activity and other intervention techniques may result in new description of the object.

Deposit

Deposit is to leave an object with a cultural repository, usually for appraisal or selection, with the intention of returning to repossess it. Deposits are made without prior loan agreements. Since many items are deposited but not repossessed, cultural repositories must track them until they are disposed, but cannot consider themselves to have acquired them. Typically, such objects are not accessioned, and therefore need not be deaccessioned.

Describe

Describe is to record such information about an object which goes beyond the information contained in a catalog, either in its breadth or in the depth to which items are described. Unlike cataloging, the purpose of which is to uniquely identify an object from the description without recourse to inventory tags or other artificial markers, description is intended to provide users of the information system with a mental image of the object, before they have seen it..

COLLECTIONS MANAGEMENT

Dispose

Dispose is to physically remove an object from holdings, whether by discarding it as rubbish or actually breaking it, shredding it or physically smashing it. While most cultural repositories dispose of objects (if only deaccessioning them and transferring title to another organization), archives frequently schedule objects to be disposed of which might be of interest to others but are protected for privacy, secrecy or other reasons. In these cases, a certificate of destruction may be required.

Exhibit

Exhibit is to display for public viewing. Objects are exhibited as part of events in which other objects take part, so cultural repositories will maintain information about both the action "exhibit" as it applies to an object, and the event "exhibit" to which it applies. Seen from the view of the object, exhibit is simply another use, as usual, requiring retrieval, loan and (re)shelving.

Inspect

Inspect is to examine an object for the purpose of establishing a baseline of its condition, or comparing its condition to a baseline. Museums usually inspect objects before and after their loan, while other cultural repositories may do so on a regular basis, or only for a specific purpose. The purpose of inspection is recorded in documentation along with the determination of status.

Insure

Insure is to arrange for guarantee of reimbursement for specified loss or damage. Objects are typically not insured individually, but as objects of actions - exhibits, shipments etc. Therefore, the duration of insurance is frequently defined as the period of the action.

Inventory

Inventory is to verify the existence of objects. Systematic inventories (often called retrospective inventories) are typically conducted to verify or create accessioning or cataloguing records and/or to validate holdings data recording object location and/or physical condition. Random inventory processes are undertaken to validate or audit records keeping practices.

FUNCTIONAL REQUIREMENTS

Label

Label is to associate (usually affix) information with the physical object or to mark that information on the object. The reasons for labelling include security (labels which set off alarms), rapid identification or unique identification when it would otherwise be nearly impossible, as in banding birds, and for automated data acquisition, as in barcodes and machine readable labels. [This action is not that associated with making signs for exhibits, which is a reporting capability driven by the action "script".]

Loan

Loan is to agree to temporarily transfer physical custody to a person or institution from the cultural repository with definite terms both for the time the agreement begins and expires and the purposes to which the objects may be put. Records must be kept to assure the terms are complied with.

Move

Move is to transport an object to a destination. Its resulting status is a new location; see also ship.

Observe

Observe is to watch a living specimen and systematically record its behavior. Resulting observation records are usually maintained in research databases linked to the collections management system, rather than as part of the "catalog" except in the case of medical records in a zoo.

Obtain (custody)

Obtain custody is to physically get an object and the associated curatorial responsibility. Physical custody should always require identification of a responsible organizational unit.

Order

Order is to request to purchase or obtain an object through a vendor/supplier.

Prepare

Prepare is to take physical measures, such as framing, mounting, packing etc. to ready an object for a purpose such as shipping, exhibiting, or storage.

COLLECTIONS MANAGEMENT

Methods of preparation, like methods of conservation, are varied and should be defined in advance with clear instructions.

Publish

Publish is to disseminate information in print or visual media in a format which can be acquired by others. The action identifier in publish is likely to be an ISBN or ISSN⁸ pointing to a bibliographic record in the database.

Reproduce

Reproduce is to make a copy of an image (photographically, digitally, electrostatically etc.) or create of model or replica. The result is another object record with its own catalog description, unless the object is disposed of to fulfill a patron request.

Retrieve

Retrieve is to get an object from storage in order to examine it. Usually retrieve is the result of seeking information in a catalog or finding tools; typically it results either in (re)shelving or a loan.

Schedule

Schedule is to arrange to acquire, or dispose of, an object under records management authority.

Script

Script is to create a plan for an exhibit or event and write the description of its components. Script is an action which can take place only against an event, although parts of the script may be descriptions of individual items in an exhibit or paragraphs in a talk with audiovisuals which will be used. In other words, to script is to author, at whatever level of detail, and the tools associated with the action should support authoring.

Shelve

Shelve is to place an object in its assigned storage location. Note that to assign a storage location to an object, whether it is there or not, is to "store".

⁸ An International Standard Book Number or International Standard Serial Number

FUNCTIONAL REQUIREMENTS

Ship

Ship is to employ an agent to transport an object to a specified destination. The resulting status is "shipped"; see also move.

Solicit

Solicit is to petition the legal owner of an object to transfer title and/or custody to the repository. Together with purchase and schedule it represents one of the three ways selected holdings might be acquired.

Store

Store is to assign an object to a storage location, defined with whatever precision the repository requires (typically building, room, range, unit, shelf or drawer, position within shelf or drawer). This action should be assisted by functional capabilities of the information system to match conservation requirements and space requirements of objects to available space and calculate optimal storage.

Study

Study is to read or examine objects for research purposes, in a facility set aside for the purpose (reading room, laboratory), where objects are retrieved and may be studied without being "on loan".

Survey

Survey is to review potential holdings, usually in situ, as a preliminary step in their acquisition. Surveyed objects are differentiated from other potential holdings by having been appraised in a preliminary fashion (as in the archival surveying of the records of a county, or the preliminary review of an intake of archeological finds for selection of objects to be accessioned).

Value

Value is to determine the financial worth of an object, usually for making a purchasing decision, insurance purposes, or tax purposes. Appraisal actions are usually allowed only to certain experts and the resulting data are normally closely held. Market values change in unpredictable ways, so value setting actions may be scheduled at intervals or on contingency basis and the date and method of valuation is critical.