

Preservation Activities at the Library of Congress
Appendix C: Recommendations on the 583 field in MARC 21

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A review of the "Action Note" field in MARC 21, in the context of the process model and information model developed for the Preservation Directorate at the Library Congress, suggests that the field requires some fairly fundamental re-assessment as to its use for recording information relating to preservation activities.

It is proposed that further discussion and analysis within the preservation community be conducted on six key issues:

- the value of the information recorded in the "Action Note" field to external organizations
- the appropriateness of recording "Action Note" information at the bibliographic level
- the level of specificity required for information relating to "action" and "method"
- the potential for deriving "action" information directly from local processing systems
- the intelligibility of the data recorded in the field read simply as a "note"
- the functional requirements for retrieval and processing of data recorded in the "Action Note" field

Value of action information to external organizations

The process model developed for the Library of Congress identifies five processes that we might consider to be at the centre of the preservation activity: housing, binding, treatment, reformatting, and replacement. Those central processes, however, are bracketed, as it were, by another eleven in which preservation information is also recorded that is specific to an item or group of items: assessing, scheduling, preparation, shipping, receiving, quality review, storing, disposition, delivery, routing, and tracking.

Any library managing its own preservation activities obviously requires detailed item-specific information related to all sixteen of those processes. The question to be asked in re-assessing the use of the "Action Note" field in the MARC 21 format, however, is what subset of that information is of value to organizations external to the one that is actually managing the processing of the item. When that question was put to participants in the focus group reviewing the LC model, it appeared that the only one of the central processes in which there is unqualified interest from an external perspective is reformatting. The only other of the five central processes that appeared to be of significant interest is treatment, specifically mass deacidification.

When the participants in the focus session were asked which of the processes that precede or follow the reformatting or treatment processes might be of interest, they indicated that there would be some interest in the scheduling of the reformatting or treatment process, and that they would want to be able to assume, at least, that quality review had been conducted prior to a library reporting that reformatting or treatment had been completed.

Participants in the focus session also noted that they would be interested in having access to information relating to the condition of an item (particularly lacunae) identified as part of a condition assessment. They also indicated that it would be useful to have access to information relating to copyright owners and reproduction rights gathered as part of the *preparation process for reformatting*. In addition, it was noted that information relating to access restrictions placed on a specific copy for preservation purposes would be useful.

Given those responses, it would appear that current and future development of guidelines for the use of the MARC 21 "Action Note" field and standard lists of terminology should be re-focused.

Recommendation:

The task force that has been set up to review the 583 field should endeavour to determine whether the views expressed in the focus session are representative of the broader community. Once a core set of processes of interest to external organizations has been identified, future development of guidelines and standard terminology for use in field 583 should be focussed on those processes.

Applicability of preservation action information

The "Action Note" field has been defined in the MARC 21 formats for both bibliographic and holdings records. From a logical perspective, however, virtually all preservation actions are copy specific (i.e., they apply to an individual copy held by a particular library, not to the "title" as described in the bibliographic record, or to use the terminology of the LC preservation information model, they apply to the "item," not to the "manifestation"). The only process that might be considered to apply to the "title" or "manifestation" is reformatting, but even there the fact remains that what is reformatted or reproduced is a specific copy that may or may not be the same in all details as other copies of the original "title" or "manifestation." The only other case where the information logically applies at the bibliographic level is where the "manifestation" and the "item" are one and the same thing (e.g., in the case of a manuscript, an unpublished photograph, an unprocessed sound recording).

Recommendation

While the practice of recording preservation action at the bibliographic level may serve as an expedient for external communication of that information, it should be recognized that logically preservation action information in most cases applies only to a specific copy and should properly be recorded at the holdings level. Full implementation of the holdings format for communication purposes should be encouraged.

Level of specificity

The lists of "standard terminology" for use in the "Action Note" field that have been in use since 1988 and the proposal for their revision that is currently under consideration cover a wide range of actions and methods, some expressed in very broad terms and others in very specific terms. A comparison of the terms pertaining to the two processes (reformatting and treatment) identified by the focus group reviewing the process model developed for LC reveals significant disparities in the level of specificity with which each of those processes is represented. The proposed list of terms for use in ‡a (action) includes only two terms relevant to reformatting (i.e., "reformatted" and "will reformat"), while it includes several terms for actions relevant to treatment (i.e., "conserved," "fixed," "mass deacidified," "rehoused," "repaired," "will conserve," and "will mass deacidify"). The list of terms proposed for use in ‡i (method) includes five terms, again fairly generic, to be used in association with "reformatted" (i.e., "digitized," "microfilmed," "photocopied," "reproduced analog," and "reproduced digital"). The list of terms for use in ‡i includes five terms to be used in association with "mass deacidified" (i.e., "DEZ," "MgO," "Mg3/MBG," "METE," and "MMMC"), each of which represents the active chemical compound used in a specific mass deacidification process.

Recommendation

The lists of terms proposed for use in ‡a (action) and ‡i (method) should be re-assessed to determine whether the level of specificity is appropriate to the needs of organizations viewing the information from an external perspective. It might be helpful to structure the discussion of the specificity question around the process entities (housing, binding, treatment, reformatting, and replacement) and the "tools" entities (procedure, material, equipment, system, and facility) defined in the information model developed for LC, and the attributes associated with each of those entities (e.g. name of procedure, procedure specifications, type of material, manufacturer, type of equipment, equipment specifications), not for the purpose of matching the level of detail recorded in field 583 with what is reflected in the model, but simply as a means of looking at the candidate information in a more structured way.

Derivation from local processing data

As local systems are developed to support preservation processes and to manage the information associated with those processes, it is feasible that most if not all of the data that is required for the “Action Note” field in the communications format could be derived directly from those systems. The amount of human intervention required to transfer data from local processing systems to bibliographic and/or holdings records for communications purposes will depend on the level of synchronization between the “Action Note” field as defined in the MARC 21 and the corresponding data fields defined in the local processing systems. Although it is impossible to predict in detail the design of local processing systems, a comparison of the structure and terminology proposed for the “Action Note” field in MARC 21 with the information model developed for LC could prove useful as a means of assessing the potential for synchronization, at least at a conceptual or logical level.

Recommendation

Proposals for the “Action Note” field in MARC 21 should be analyzed on a subfield-by-subfield basis to determine how they correspond with the entities and attributes defined in the information model developed for LC. The terminology proposed for ‡a, ‡i, and ‡‡ should be re-assessed to determine whether a different form of wording (e.g., “mass deacidification completed” rather than “mass deacidified”) would serve to facilitate the transfer of data directly from local processing systems to MARC 21.

Intelligibility of the data

The “Action Note” field, as currently defined in MARC 21 is highly structured, incorporating twenty subfields that are discrete but inter-related. When displayed as a “note,” however, the data in the field must be intelligible without the benefit of the semantics embodied in subfield codes and their associated definitions. Reading just the textual content of the examples included in the format specifications and in the proposed guidelines for standard preservation terminology gives a sense of how intelligible data in the field is when read as a simple note. In many cases the sequencing of the data, the nature of the intervening punctuation, and the lack of logical connectors make it difficult to interpret the significance of a particular data string or to determine the relationship between individual segments of data in the field.

Part of the problem also lies in the way subfields are defined and in the guidelines that have been developed for their use. For example, ‡c is defined as time/date of action, but at least one of the examples in the format— ‡aQueued for preservation; ‡c19861010—could be interpreted either as the date the action represented in ‡a (i.e., the queuing) was taken or as the date at which a subsequent action (i.e., the preserving) is projected to take place.

Recommendation

The content of individual subfields within the “Action Note” field should be defined and used so as to minimize as far as possible any ambiguity of meaning. Consideration should also be given to using punctuation or logical connectors to express more directly the relationship between individual data elements in the field.

Retrieval and processing of the data

Underlying the high degree of structuring within the “Action Note” field and the standardization of terminology for use within specific subfields there appears to be an assumption that the data recorded in the field will be used to support specialized information retrieval and perhaps other forms of automated processing as well. If that is the case, the functions the data is intended to support need to be clearly articulated and the standardization of terms used in the field needs to be consistent with the functional requirements defined for the field.

Recommendation

The purpose of the “Action Note” field should be clearly articulated and the field’s structure, the definition of subfields, and the standardization of terminology should all be re-assessed in the context of an agreed statement of functionality. An appropriate balance needs to be struck between the field’s use as a means of conveying useful information in an intelligible form to an external audience and its use as a control field to support local processing transactions.