INTRODUCTION

When the Cellulose Acetate Microfilm forum was set up just over two years ago one of its first activities was to carry out in-depth surveys of the condition of microfilm in the collections of the libraries involved. To a greater or lesser degree the libraries found evidence of deterioration in their stocks of acetate film. Many libraries, especially those which had collections dating from more recent decades, had no significant problems with the condition of the microfilm stock in their care. But for almost all of the libraries there was a secondary aftershock, as it were, after the first earthquake. This shock came to those who are responsible for listing and cataloguing the materials, and showed up considerable gaps in the recording of details of the surrogate microfilms in the library collections. In this paper I will describe the extent of the problem, suggest the causes and possible solutions, and conclude with a look towards some strategic possibilities for coping in the future.

SUMMARY OF THE COMMENTS FROM THE SURVEYS CARRIED IN THE LIBRARIES

There was widespread concern about gaps in bibliographic control; these gaps included lack of information about what was held on microfilm, lack of information on dates when microfilms were produced, lack of information about what base they were filmed on, and lack of information about where master microfilms were held, especially when the master was not held by the institution but by a commercial supplier. Some institutions had found when surveying their collections that some microfilm had never been catalogued in the first place, and some listed in catalogues were wrongly catalogued or missing. Additional comments identified particular concerns with serials and newspapers, and, over and over, respondents emphasised the need for item-level bibliographic control; many films were not described at item level detail in catalogues.

The need for good bibliographic control in the context of the digital environment was also a concern, and comments were made about the strong need for advocacy.

In other words, those who had been carrying out the surveys had turned to the repositories of all knowledge about the libraries... collections, that is to say the libraries... catalogues, and had found them deficient. This begs the question whether the library catalogue is the appropriate place to record and seek information about our preservation microfilms, and I will return to that question at the end of this paper after examining some of the possible reasons for the problems I have just described.

Judging from the variety of bibliographical problems described, the possible reasons for these are, potentially, quite diverse. They might include: lack of standards; or a failure to account for entire life cycle costs of preservation surrogates; or complexity arising from professionals approaching the task of description from a variety of different professional standpoints; or complexity created by having the same intellectual entity available in multiple formats. Let’s look at each of those possibilities in turn.

First of all, standards. The standards in place for cataloguing microfilms have been evolved over many decades and are now well recognised. In the early days of filming there was quite a lot of duplication of filming activity, because people did not have standardised ways of listing what they were doing. However the national and international registers of microform masters built up during the second half of the 20th century went a good way towards solving that problem, and the solution was further helped along by the standardisation of bibliographic information for microforms provided by AACR2 and by MARC-standards which were then adopted for the national registers and by local cataloguers.

Far from a lack of standards being the underlying problem, almost the opposite would appear to be the case; we seem to be awash with professional standards for the production, storage and description of microfilm. Looking, for example at the European Register of Microform Masters (EROMM), we find detailed instructions on material to be reproduced, production of microforms for preservation, adherence to and interpretation of standards, international standards for storage, boxing, storage conditions, production of digital surrogates, recording of surrogates, and more. And importantly, the cataloguing standards do not deal just with bibliographic description but contain fields for the control of preservation.
Looking more closely at MARC 21 for example, the notes fields for reproduction information (field 533) and for preservation and digitisation actions (field 583) are of primary interest to preservation experts and are used to varying degrees in larger catalogues and databases.

The field 583 is of particular interest to us today, as work on this field represents perhaps the most recent attempt to address preservation issues for cataloguing purposes within the MARC 21 context. In November 2004 a joint grouping of RLG, ARL, and the Library of Congress issued a document entitled *Preservation & Digitization Actions: Terminology for Marc 21 Field 583*, It is particularly interesting because it attempts to do something quite unusual for a static catalogue record - as well as recording details of the item, it tries to include the possibility of future action to be taken on the item. The introduction to the document says that the field “defines standardized terminology for preservation and digitization actions and allows institutions to record these actions, including those which may take place in the future (commonly referred to as prospective cataloging or queuing)”. Information in the field 583 is used to inform preservation decisions, and shows to what extent an item or collection may have been preserved or digitised. Because of this, institutions using the field to record prospective preservation and digitization actions must commit to either completing the actions or to updating the record should the action not take place for whatever reason.

Although the field 583 has up until now had fairly patchy usage, for example sometimes being applied only in the area of antiquarian or special collections material, there is certainly a case for the more widespread adoption of these revised guidelines and standardised vocabulary. It is also worth noting the adoption in 2004 of a privacy indicator governing the use of the field so other people need not see what you are saying about the condition of your collections and what you are, or are not, doing about it.

Three items of the standardised vocabulary for the field 583 are:

- condition reviewed
- will reformat
- will conserve

Some (fictitious) sample records:

Example:

583 0# $a condition reviewed $c 2004 $l mutilated

$l do not treat $2 pda $5 MiEM

Some more cheerful examples:

583 0# $a stabilized $c 2004 $l cleaned $2 pda $5 MdU

583 0# $a transferred to optimal storage $c 2004 $2 pda $5 MdU

So the reliable and internationally accepted bank of cataloguing standards which we have evolved in the second half of the twentieth century is still, at the start of the 21st, being developed to take account of the way preservation specialists work with their collections.

If we have no shortage of standards for the description of items in our care is then the problem rather one of resourcing: a simple failure to adhere locally (or even on a national scale) to those standards, through a lack of cataloguing capacity? If so, from a management standpoint this can be viewed, overall, as a failure to account for the entire life cycle costs of the production of preservation surrogates. In our professional concern to rescue large tranches of our collections from deterioration we have sometimes embarked on large-scale surrogacy programmes without taking account of the fact that, in inventory terms, we are doubling or trebling the cataloguing requirements of those sections of our stock. While we may not have to produce an entire new catalogue record for the surrogate we do need to record the existence of a new form of the item, and record where it is stored and when it was created. The result is that for some large collections of surrogates the records of the individual items do not exist in the library catalogues at all, but rather are kept elsewhere, either in separate handlists in the local library or in larger national or international listings like the registers of microfilm masters. Even where high quality records exist, as in the case for example of some of the excellent collections produced by publishers, these are not always transferred into the local catalogues of the libraries in question. At best, for some of these collections, a collection level description
rather than an item-by-item description may appear in the library...s catalogue. At the moment, even in our largest national libraries, it is not always apparent for a library user approaching the library through its online catalogue that these surrogates exist. It is still too often the case that the library user needs to come upon their existence through the use of specialist bibliographies, through word of mouth, or through the advice of a library professional. This is a failure in our service to our library users, it represents a possible danger to print copies through unnecessary handling, and it is a failure to recoup the full return on the large sums of money we have invested in the production or purchase of these surrogates.

Now one of the attractive things about preservation specialists is that they have a very long viewpoint – typically they are thinking in terms of ensuring materials last for the next five hundred years or so – (at least!) – so it makes sense that at the outset of any preservation programme they should factor in the costs of initial production of records; and the ongoing costs of preservation should include the ongoing costs of preserving the records too. Without records of what you have preserved is wasted effort. An entire life-cycle model of a physical surrogate such as microfilm is likely to show that the greatest initial and ongoing costs are associated with the housing of the item; the acquisition of the item has medium initial costs and zero ongoing costs; and the recording of the item has medium initial costs but low ongoing costs. In an increasingly complex environment our preservation responsibility extends to preserving the original, the surrogates, and the records themselves. But the main point here is that the lowest year-on-year cost is probably the maintenance of the individual catalogue record itself and wherever possible, library managers and preservation specialists should be taking the long-term view on the costs of catalogue record production. Over the next five hundred years, the initial investment in creating a decent catalogue record will be more than rewarded and will be an essential component in the survival of your surrogate and its original.

This brings me to another possible cause of the problem we are facing, that is to say, library professionals approaching the problem from different standpoints, leading to an overall lack of coherence. On the one hand cataloguers are seeking to describe the intellectual content of collections, while preservation specialists are approaching the task from the viewpoint of safeguarding the manifestation of that content in the individual physical item, in order that the intellectual content can be preserved and made available. Each set of professionals adheres to its own professional standards, but maybe they are moving on parallel lines. We need to join up the thinking. But using traditional cataloguing formats to meet the needs of both groups of professionals does not always achieve the required result, as evidenced by the comments from those who carried out the condition surveys of films in our library collections.

As already mentioned the problem is not a lack of standards; there are plenty of them. So what is interesting and helpful here is the movement towards an intellectual streamlining of standards in the cataloguing field. This is exemplified by the work done in the 1990s by the IFLA Study Group on Functional Requirements for Bibliographic Records - commonly known as FRBR.

FRBR examined the flat, one-dimensional catalogue record created in AACR2 which focuses on the manifestation of a work as tied to its ISBN, and which has led in some catalogues to the creation of multiple records for items with identical content. The IFLA Study Group developed a new model of the different elements we use to describe bibliographic items, a model which was designed to be independent of any specific cataloguing code. It analysed these elements of description and sorted them into four basic abstract components: the work, the expression, the manifestation, and the item. Having resources brought together as "works" puts the intellectual creation in context and brings together all of its expressions and manifestations, clearly an advantage in a landscape which might include original, microfilm and various digital versions of the same work. By doing this the FRBR work was also able to analyse the different tasks which catalogue users are hoping to perform using the catalogue, and listed these as: to find, identify, select, and obtain. But, importantly for us, Barbara Tillett has noted in her OCLC FRBR report “and we could add other tasks relevant to specific users, such as tasks for rights management or preservation communities.” (Tillett, 2004). I think this is an important acknowledgement that in an increasingly complex environment preservation specialists will require our library catalogues to do more for them than they do at present. As well as bringing together the different forms of a work we should be able to use catalogue records for preservation requirements additional to simply telling us that we have the surrogate in our collections, and the FRBR work acknowledges that this should be the case, regardless of what cataloguing system or rules we are using.

So we have complexity in our systems that is a result of different professionals approaching description requirements from different directions. But in addition we are facing an unprecedented complexity in the information environment itself, brought about by the digital revolution, and some of the solutions which are being evolved to cope with that digital environment may assist us with the legacy problems of our paper and microfilm description. We have noted that in some areas catalogue records do not hold the required information, and that what has tended to happen instead is that a range of alternative databases of information has been built up in order to assist us with preservation management of our collections. In the
future we will be seeking system solutions which will more effectively cross-search these different resources while linking to local collections.

In this context we have plenty to learn from colleagues in the digital preservation field, who readily acknowledge the supreme importance of metadata as an essential component in the preservation of digital materials. Work on metadata extraction using harvesting tools is aiming to get material to self-describe so that it won’t self-destruct, and great emphasis is being placed on the need for good metadata, both technical and bibliographical. Just as with microfilm surrogates, a Registry of Digital Masters is being used to record which paper-based monographs and serials have been converted to digital form. Where registries of different surrogate formats exist, along with catalogues of originals and some surrogates too, the need for effective cross-searching becomes ever more essential, and although these registries adhere to existing MARC-based formats, in this context it is worth recording that the digital cross-searching future is not likely to be MARC-based. As more and more materials come into existence carrying descriptors which have been produced in non-library environments, our need will be for standards which can be readily cross-searched and which can translate easily to and from MARC. XML (Extensible Markup Language) is widely accepted in the IT industry outside the library world as a means to encode and transfer information.

XML has a number of advantages over MARC. MARC is complex for non-library professionals and too inflexible to describe volatile digital and Web resources. In the new information environment XML has the advantages of being open and extensible, and interoperable. Records can be interchanged between XML and MARC without any loss of data, and can be converted from MARC to XML and back. So records of traditional resources such as books and microfilms can easily be integrated with non-MARC-based records of digital texts, databases, and metadata records. This is one answer to our problems of searching non-standard listings of microfilms. Listings which are hard to find, or in unexpected places, or which are partly but not wholly described in our catalogues, or which are held in the database registries of microforms, or on publishers... or library websites in list form, should be far more easily cross searchable. And of course such cross-searching can include searching controlled vocabulary fields such as 583, if we have used them to describe past or future preservation activity. While we should not underestimate the costs of converting records to new formats, we are in a good position to take advantage of international moves towards integration which have been sparked by the digital revolution but which provide an opportunity for those of us who are concerned about non-digital surrogates as well.

So is the library catalogue the right place to record and seek information about preservation microfilms? Yes, it is still our first port of call, especially if standards have been adhered to and records of multiple formats of the same work have been brought together. But in a complex information landscape the catalogue is set to become one resource among many in a cross-searchable environment.

CONCLUSION

It is worth re-iterating that the library, preservation and publishing communities have over the years aimed for excellence in drawing up standards to deal with the control of the materials in their care. But we must, at local level, ensure that we apply them. We need to make sure that our preservation and cataloguing specialists are talking to each other, and to library managers, in order to see the whole picture. We should be arguing that the costs of description are a significant but not a major part of the costs of lifetime care of these items, and we should all be relating more closely the significance of the bibliographical and intellect descriptions of the “work” to the description at item level to ensure that our investment in creating collections and surrogates is not dissipated.

Nationally and internationally we should use the opportunities that are being created by research into metadata for digital preservation. At the same time we need to ensure that the people who are drawing up international cataloguing standards for the future take account of the evolving needs of the preservation community and that these include the preservation needs of traditional materials.

In an age of free-for-all information it is more important than ever to ensure that the information we own is correctly described so that we can preserve and retrieve the items in our care.
FOR FURTHER READING


REFERENCES


WEB SITES REFERRED TO IN THE TEXT
