The New Binding Processes

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I feel honoured to be asked to address UKSG at its Conference. I knew in the audience there would be many academic and special librarians. I knew there would be publishers; also some competitors. But I know the latter are all gentlemen. So when I divulge my trade secrets I just know they will cover their ears!

I am not a librarian. I am certainly not a publisher. I have now to confess I am not a trained and skilled library bookbinder either. So I am not going to present you with technical details about my announcement. I am going to explain my announcement as a businessman.

If my announcement of the "New Binding Processes" is the climax, then in good theatrical style there should be a build-up. My build-up will be to show that the serials binding style prevailing today - WAS THE RESULT of users' needs modified by librarians' needs. The principle is: the needs of users and the needs of librarians determine the new binding processes. I shall then apply that principle to the needs of the users and librarians - AS THEY ARE CHANGING TODAY - to lead us to the new binding processes of tomorrow. I make two initial assumptions:

(1) That what matters is the information content. I am not denigrating conservation of the written heritage which is essential to civilised society. And, by the way, The Dunn & Wilson Group of Companies provide a conservation service, and they sponsor with NPO a competition worth £2,000. However, in the academic and special library context what matters is the information content, which happens to be packaged in the book. So assumption one is that the book is not an end in itself;

(2) We are all links in a chain; the hard-copy chain:  
Author -- Publisher -- Printer -- Distributor  
-- Librarian -- Library-Binder -- User

The time to passage an article along the chain is a point I shall refer to later.

The build-up begins with the evolution of the present Serials Binding Style. We go back to 1850. Books then were objects of importance. The user acquired them to retain. His need was for permanent packaging. In response, the binding process was the traditional method of lacing-in boards, which were then covered in leather. That style traces right back to the Codex form of the 4th century. By the late 19th century universities were few and small. Some public libraries had opened and the 1872 Education Act was encouraging demand for literature and information. Yet there were few books around. So the need of the librarian was permanent retention. The publishers responded to the need for more books by adopting case binding. Case binding means the book block and cover being made separately. They are held together effectively by glue. This was a big step for publishers to take around 1900. They had already adopted cloth as a covering material. The combination of case binding and cloth made possible production by machine of books in larger numbers. Books became CHEAPER. But the publisher binding did not meet the public library need for permanent retention. The birth of the library binding industry met that need. The "New Binding Process" of the library binding industry borrowed from Stationery Binding: The traditional lacing-in was supported by cloth jointed endpapers for extra strength.

In the run up to the 1930's the information and literature needs of users grew. More public libraries opened. The need of librarians was still to acquire and retain permanently. The publishers responded with more books, but not with permanence. The library binders did that. They built up their techniques to re-bind greater numbers of books permanently - still treating each book as different from the next. They
introduced machine sewing - the 'Oversewer'. My grandfather introduced the 'Dunn Decorator' so that lettering could be quicker yet consistent, and they adopted cloth. Note that all these developments were for the changing needs of users and librarians in the public library sector up to the 1930's.

Universities were growing too. But they were small. In 1920 my wife's grandfather took chemistry at Swansea. There were three people in the department! At Sheffield University in the 1930's there were 650 students! Clearly the university libraries were tiny; presumably serial holdings were few. So far as I can find out the library binders responded in the traditional, way. Permanent binding covered in 1/4 leather.

By the 1970's, however, special libraries and academic institutions of all types had mushroomed. There were 500,000 students by 1970. The range of subjects had also mushroomed in both the humanities and sciences. The number of serial publications had grown hugely. The user need was to find relevant information. With so much material the period to the 70's for librarians was very much the developing services period: the catalogues, bibliographies, classification systems, circulation systems. These were library responses to the user need to find information. The librarian's need was still for permanent retention. This was challenged by the Atkinson Committee Steady State Concept in 1976. But the view prevailed that, in the academic context, permanent retention was the need.

The library binders responded to the academic need by borrowing from the public library binding processes. They could do so because these had been designed (a) for permanence and (b) to cope with a great number of different items.

They added on what was relevant to serials. Riley's introduced the guaranteed two months turnround. Later it became four weeks. Storing rubs spared the inconvenience of sending previously bound volumes as patterns. And there was open-ability as the users need to photocopy emerged in the 1960's. Thus the new binding process for serials emerged; top specification for some libraries included - sprinkled edges, leather title piece, gold bands, gold stamp, head bands. The information was solidly, permanently bound with nice traditional decorations. It was a work of art!

And so through the 70's to the 80's. What have we seen? Even greater numbers of academics and 700,000 students; even greater numbers of subjects, publications and serials; an intense need by the user to find relevant information; an intense need by the librarian to keep pace. But the librarian has had the strait-jacket of financial constraint. In response the new binding process of the 80's has been to cut out the frills. Serial binding of today is clean edged, lettering direct to the cloth. But it still incorporates features that qualify it as a permanent packaging of information, namely sewing, rounding, backing, skill and best materials.

Tracing the development of today's binding style for serials shows it dates back through the time of permanent public library binding to the era when books were few and valuable. They were bought for keeps - therefore they were bound forever. The underlying principle is: that it is the need of the user for information and the need of the librarian to provide it, now and in the future, that has determined the binding process.

That is the build-up. If we apply that principle to the changing needs of the user and the librarian now before the 90's then it will be time for my announcement of the new binding processes. The starting point is that the user (academic and student) is faced with an exploding quantity of information. Note the assumption that he needs the information - not the serial or monograph intrinsically. He needs some means of searching the huge body of information. He needs quick interpretation of information for relevance to his particular search. He needs something more fast and effective than browsing. Isn't the success rate from browsing alleged to be only 40-60%? In other words, there is a user need to make searching achieve more. Simultaneously, the user needs up-to-dateness; information changes fast. The need is to have the current status. The passage time to get information through the chain from author to user is notoriously slow. There is a need to speed up this time - perhaps by shortening the chain. And there is a need for cost control. The user does not have access to unlimited amounts of money. Nor does the librarian. He has to control cost as well. Doesn't he also need to increase productivity to offset increasing salary costs? Doesn't he need to keep on improving the service by providing faster and more effective searching? Serials are increasing fast. Doesn't the librarian need to keep pace by subscribing to those in current demand? Isn't the librarian doing just that? Consider the following figures which are courtesy of Dr. Peter Mann and LISU:
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The New Binding Processes

Universities total recurrent expenditure +36% (between 1982 and 1986)
University expenditure on books + 36%
Blackwell's International Serials Price Index +72%
University expenditure on serials +59%
University expenditure on binding - 8%

The figures show that librarians are trying to keep pace with acquisition by taking funds from binding but are failing to keep pace.

Having reviewed the needs of users and librarians, as they are changing now before the 90's, the analysis is this. The intensifying need of the user to achieve more with his searching - is being met less and less well by the format of the book. The intensifying need of the academic librarian to keep pace, via the format of the printed book and serial - and retain them permanently - is increasingly beyond the reach of his resources. In summary, a supplement to the book is becoming essential. What will it be?

Publishers already produce a huge proportion of material from computer typesetting. They are already experimenting with knowledge warehouses - the vast computer store of information. They are already experimenting with on-line and CD-ROM databases. They have the opportunity to go beyond the format of the book - to achieve more by including sound and moving pictures for example, not just to produce the periodical in different form. Will it happen? It has already started; and research will encourage the development. Examples include research to communicate with the machine in everyday language. Users will love that friendliness.

Research is on-going for artificial intelligence ie the ability to sift through huge amounts of information whilst interpreting it for relevance.

It seems obvious that technology will give greater play to the user's curiosity and initiative as he frames and then amends his search criteria. As Murray Laver expressed it, "The framework will change, not just the picture in the frame". The supplement to the book conjures up the picture of the user sitting at his P.C. He will confirm his search, switch on his local printer and derive - no doubt with the help of systems such as ADONIS - packages of information/created, customised, personalised to his specific search. This seems to suggest the first of the new binding processes will be instant binding e.g. comb and spiral for the user's personal library. In all of this the user will have achieved much more from his searching; and the librarian will have improved his service. It will alter the traditional library in the process though! However, it won't happen next week. There are problems to resolve. Artificial intelligence does not work yet! And there is cost. Some institutions are already investing, not because it is the cheaper option, but despite its expense - because they believe that eventually computer methods will meet the needs of their users better. I remember well the first handheld calculator I had ever seen; about 1971. It cost £100 retail. Nowadays the same can be bought for less than £5. So I am inclined to think the problems, including cost, will be resolved.

We are all, of course, in a transitional stage. Therefore the detail of the pattern that will emerge is not at all clear. In principle, however, I believe the changing needs of users and of librarians tell us that one day information will be packaged, sometimes on computer disk, and sometimes on printed copy. Printed copy will remain useful and cost effective for some material. Which brings us to the question - what will be the new binding processes for the printed copy that does remain?

To answer that question, I make two further assumptions:-
1) that financial constraint will continue;
2) that resources remain focused upon acquisition and automation.

It follows from these assumptions that the new serial binding style will be technically very basic. The new style will not build in permanence; it will "hold parts together" for a short life-span.

The title I was asked to address, seems to imply some radical change in bookbinding processes. There is none. With improving glues, binding styles are not much changed from the codexed form of the 4th century. I have shown by historical example that the needs of users and librarians determine new bookbinding processes. I contend those needs are extending beyond the ability of both resources and the printed page to deliver, in every instance. The book was a marvellous invention. For most information however it is a means of packaging. Computer packaging will allow users' needs to be met for many disciplines in ways more satisfactory than the traditional. I am obliged to conclude that the requirements for binding will reduce. Which seems confirmed by the chain:- The paper, automated chain: Author, Publisher, Distributor, User. As users work more directly with distributors, what happens to the library binding industry? It becomes less relevant. It seems there will be implications too, for the role of the librarian! But that is a question well beyond my brief.