This paper was originally written for the Southern California Technical Processing Group, which celebrated its 50th anniversary last year. The paper has evolved more than a little bit since then, but that’s how it started.

When I was asked to come to California speak, it was suggested that since it was their 50th birthday party, something lighthearted was in order, and maybe I could do a look back over the past 50 years. The person I was talking too was momentarily embarrassed and hastened to say that of course *I* hadn’t been in the field for all of those 50 years.

And it’s true, I haven’t been here for 50 years, BUT, I HAVE been here for forty. And even if I can’t personally look back on a whole fifty years, forty years comes close, because, in contrast to today, where the rules could have changed since you left your desk to come to conference, things moved a lot more slowly back then. And what you learned in library school really was pretty much all you had to learn for a long time.

Now, in the time I had allotted to me to talk, I couldn’t possibly be comprehensive, so I decided to do a show and tell, -- partly with real objects, and partly with photographs -- interspersed with some history ….. and not necessarily in chronological order. Carrying the objects with me turned out to be more interesting than I want to repeat (the brass drawer rods look like weapons to TSA people), and so I have pruned the selection of physical objects I've brought with me here. I'm sure you'll understand.

For some of you, my little museum of artifacts will be full of old friends (or some old enemies). But some of you may never have used, or even ever seen these things.

[SLIDE OF THE RED BOOK]
So here we go.

Before we had *The Anglo American Cataloging Rules*, which was known up until its second edition came out as “the blue book”, people cataloged using the green book, and the red book. The green book covered description, and the red book – otherwise known as the *ALA Cataloging Rules for Author and Title Entries*, covered entries. Neither the green book nor the red one, by the way, was much of a departure, philosophically, from what preceded them. Something worth noting about this title page, is that you can see that in 1949, cataloging occupied a division of ALA, not just a section.

[SLIDE: TITLE PAGE OF RED BOOK]

The *Library of Congress Subject Headings* - if you used them instead of the *Sears List of Subject Headings* - still fit into a single volume. The editions of *the Dewey Decimal Classification* had barely made it to two digits - although it had made it to two volumes.

The *Library of Congress Classification*, of course, took up whole shelves, as it had for some time. But that was nothing next to NUC, the *National Union Catalog* which, when it was finally all published, occupied entire stacks. And those volumes were big suckers. There was a point, just before we sent ours to offsite storage at CU, that I had a passing thought that maybe the best use for those volumes would be to glue them together to build somebody an office.

There was no MARC format. There was no ISBD. There was no OCLC. In fact, cataloging practice was fairly insular compared to today, with limited standardization internationally, and not all that much coordination within the United States, either.

[SLIDE OF MY CATALOG]

All of our catalogs were in card form, and we had a whole array of tools we used to create them. Here’s a picture of *MY CARD CATALOG*, which you may notice has been adapted to other uses. After LC’s Geography and Map Division stopped using this little cabinet, and it
fell into the back of my car instead of into the dumpster, it's been a coffee table, an end table, and generally a beautiful little piece of furniture. Right now it houses knitting needles, and the last of my cassette tapes.

The cards that went in these catalogs were varied. Most were beautiful acid-free buff card stock. We personally typed a lot of the cards, which meant that knowing how many spaces to indent something was actually an important part of our education. Jean Weihs, writing in Technicalities, says that she started her career in the 50s handwriting cards - neatly and carefully, practicing that arcane skill called "library hand", but by the time the sixties rolled around, probably most libraries had switched to typewriters.

[SLIDE OF EASEL]

If we were typing the cards ourselves, because of the work involved in doing the whole record, we were likely to type only one complete main entry, and to produce abbreviated entries for all the other access points, using a cunning little device like THIS ADJUSTABLE EASEL to hold the card up so we could see it better to type from.

I should say that as soon as I decided what I was going to do with this talk, I put out a call to my division, asking if people had any quaint artifacts of technical services work tucked away in a corner, and within about 45 minutes I had people bringing me armloads of cool stuff. But this little card easel was just about the neatest item anybody contributed. Clearly this was a widely used and much needed item, since Demco thought it was worthwhile to manufacture.

[SLIDE OF MIMEOGRAPH MACHINE]

Maybe, instead of typing multiple cards, we typed up a master on a purple stencil, and then reproduced it with mimeograph machines. Typing on a stencil was tough (and messy), since typographical errors were hard - often impossible -- to correct.
Or maybe – after 1950 when Xerography was first developed -- we were lucky enough to be able to Xerox the main entry cards, which we copied onto 6-up perforated sheets of catalog cards that we separated after they were copied.

[SLIDE OF CARDS]

After we had the cards, from whatever source, we typed the added entries or the subject headings at the top, and typed the call numbers in the upper left.

By the 1960s we probably got a lot of our cards from the Library of Congress .... Cards that LC produced through typesetting. If you had gone down to the Navy Yard in Washington D.C. to LC's Catalog Card Division, which I toured back in 1970 when I was a Special Recruit at LC, you would have seen an enormous warehouse-sized room crammed with olive drab or government grey metal card catalogs stacked about 10 feet high, in which LC kept its store of printed catalog card sets, from which individual library orders would be extracted.

It was the difficulty of knowing how many of which cards would be needed by libraries, and of maintaining and managing the stock that caused the Library of Congress to look for a way to print cards on demand ..... and that led to the development of the MARC format in the mid-sixties. MARC, the fabulous invention of Henriette Avram, revolutionized the entire field of librarianship, but it was originally aimed at producing cards.

[SLIDE OF HENRIETTE]

Some catalog records get very complex and long, and if the information ran onto multiple cards, we tied them all together through the hole, using linen thread, so they wouldn’t get separated in the catalog, and so, if you had to pull the main entry, you’d be sure to get all of the cards. Some people were especially adept at tying tidy little knots, putting a pencil in the loop so you could tie the cards up JUST tight enough and not too tight, so you could flip through the cards and not tear the hole out. (You might note that when I used the
term “main entry” just now, I used it to mean the entire cataloging record, not just the main entry heading – which is how it has come to be used today).

When we made a mistake, or when a heading changed, or when we used a heading that was different from LC’s – something that we did a lot -- we diligently erased what was there and overtyped what we wanted. We did so much of this that we needed real firepower. Hence, we kept a store of electric erasers. And refills.

[SLIDE OF ELECTRIC ERASERS]

We went through LOTS of eraser refills. Twenty years ago, soon after I arrived at Boulder, we held a division cleanup day, and found a box of about three dozen electric erasers being kept – I guess - just in case they ever came back into vogue. Note here that electric erasers are not altogether passé. These colorful little plastic ones were being sold for $3.99 as stocking stuffers last Christmas, from the Solutions catalog.

The subject cards got special attention. We dipped the tops in red ink so that they would stand out in a dictionary catalog. It could get messy. Especially when the ink pad went dry and you had to load it back up again with fresh ink.

[SLIDE OF RED INK PAD]

Dictionary catalog – there’s a term that’s hardly relevant any more. It was a card catalog in which all entries were filed in one sequence. As opposed to a divided catalog, in which the authors and titles were filed in one sequence, and the subjects in another. With the advent of online catalogs we don’t think in terms of dictionary vs divided any more. It’s all one database that we can search in various different ways.

[SLIDE OF SELECTRIC BALLS]

Fifty years ago electric typewriters were the height of automation. But we didn’t all have them. Lots of us continued to use huge heavy manual typewriters through the 60s, and that’s what I used at first at LC … in 1970. In 1961, IBM introduced what we thought was
a godsend - the Selectric typewriter, on which you could choose what font to use, and you
could even change fonts in mid-document, by taking off one of these little golf ball like
things, and putting on a different one. Would you believe, that although Selectrics have
gone the way of the dodo bird, people at CU still came up with four font balls: Courier,
Elite, Italic, and Cyrillic. - Today I look at these things and consider how they might be
made into holiday ornaments for the divisional tree.

[SLIDE OF TYPEWRITER RIBBONS]

Although, outside of Marking, we only have one typewriter left in Technical Services, we
had five -- count them -- five different kinds of typewriter ribbons taking up space in our
storage cabinets, only one of which fit any of the current typewriters. That one ribbon fit
the typewriter on the next slide.

[SLIDE OF HEBREW TYPEWRITER]

This little manual Hermes Rocket typewriter in my office does Hebrew. I keep it because
it's cute. It measures just 11" on a side. It's a shame it doesn't go with any of the
instruction books that people brought me - instructions for various models of the manual
behemoths that were supplanted by the Selectrics.

[SLIDE OF CARD PLATEN]

But whatever kind of typewriter we had used, we needed to replace the roller - called a
platen - with a special card platen that had a metal strip on it to hold the cards in place as
we typed.

It does seem that we DO occasionally throw something away, because although we had
plenty of ribbons for our non-existent typewriters, nobody could come up with a card
platen, so I have to show you a picture. This one was taken from Heidi Hoerman's Virtual
Museum of Cataloging and Acquisitions Artifacts.

[SLIDE OF VIRTUAL MUSEUM TITLE PAGE]
Of course, once you had cards, you had to file them. - not what you would consider a professional job, but not exactly straightforward, either.

[SLIDE OF CARD SORTER]  
First, you would do a preliminary sort, using a card sorter like this ... trying to make the job interesting by seeing just how quickly you could do it -- kind of like an arcade video game where you see how fast you can kill aliens, or one of those iPhone apps where the object is just to see how fast you can tap the screen. Then, depending on how many cards you were dealing with, you might do another sort on the second or third letter of the filing word.

[SLIDE OF RATHER’S RULES TITLE PAGE]  
BUT WAIT! What about numbers, and punctuation, and dashes, and ampersands, and diacritics? How do they file? If you had a dictionary catalog, you learned some time-honored mantra like, “Nothing before something. People, Places, things, then Subjects.” But although that helped, it wasn’t enough, and people actually wrote whole books of filing rules. This one was one of the last great compilations of filing rules produced for card catalogs, called familiarly “Rather’s Rules”, after its editor, John Rather who worked at LC.

[SLIDE OF PAGES OF RATHER’S RULES]  
In a catalog as large as LC’s, or in some of the largest research libraries, filing could be a full time job. Once machines took over filing, we gave up on many of the complexities that we had been used to implementing, because machines turned out to be a lot less amenable to training than our clerks and student assistants were.

[SLIDE OF DRAWER RODS]  
So, even though you had clerks or student assistants doing most of your filing, they did their filing “above the rod.” Each catalog drawer had a removable rod that ran the length of the drawer, and the filers who had not been approved for independent filing dropped
the cards into place, but didn’t remove the rod. Later, someone with more experience would come along and check the filing for accuracy, and once all was well, they would remove the rod from the drawer, letting the cards drop into place, and then replace the rod, threading it through the holes at the bottom of the cards.

In addition to the public catalog, we also had official catalogs and shelflists. These were the functional equivalent of today’s “staff view” in our integrated library systems. They were complete and separate catalogs housed out of public view, in which cards could be annotated with non-public information. It was here that the authority records were filed, and it was this catalog that served as the final authoritative version of what should be made available to the public. In these catalogs, rods might not be used at all. Picking up a spilled drawer of cards in a semblance of correct order was a valuable skill. I remember being in LC’s Official Catalog and hearing that most dreadful of all sounds - the sound of a drawer being dropped. I peeked around the corner to see a man kneeling on the floor hovering protectively over a pile of cards, carefully reassembling the order of the drawer, while all those around him kept a respectful distance.

Of course, there were other things in catalogs in addition to cards for bibliographic entities. There were cross references, and history cards, and raised guide cards, helping users know where to start looking in the packed drawers. We even put cards in the catalog to tell users that cards weren’t there. I can recall coming across one such card that bravely said “This card has been temporarily removed” that was dated twelve years earlier, and initialed by someone who had been retired for at least ten.

[SLIDE OF CARD TABS/FLAGS]

In official catalogs and shelflists we sometimes had to mark cards for our own mysterious purposes, and would use little metal tabs. When CU did its first great retrospective conversion, for example, different colored tabs denoted different kinds of problems. The black tabs were on the worst problems.
Of course, we sometimes found other things in the public catalogs. Things like popcorn, filed under popcorn, or Alewives (which are tiny little silver fish that washed up dead by the thousands on the shores of Lake Michigan in the spring) filed under fish).

At some point, automation crept into our lives. Circulation was first, using a technology originally developed around the turn of the nineteenth century by Joseph Marie Jacquard, for weaving complex patterns into fabric. It involved using punched cards, where information about which threads needed to be pulled up when was represented by the presence or absence of a hole in a particular place. When this idea was adapted to computer input, the cards came to be called Hollerith cards, after their inventor, Herman Hollerith. After a while, of course, they were simply called punch cards, and you punched the cards with a huge typewriter-like machine. Accurate typing was a boon, since it was impossible to correct a typo, and you just had to start over.

[SLIDE OF PUNCH CARDS]

Personally, I derive some satisfaction from considering that computer technology had its beginnings in the humble - and originally largely female - activity of weaving.

An early somewhat automated circulation system called the McBee system used cards with holes around the edges that represented particular types of information. When a piece of information was established (for example, a due date), that hole would be turned into a notch that went all the way to the edge of the card. Then, you would take your pack of cards and insert a long needle through the hole you wanted, and shake the deck a little, and the cards for books due on that particular date would just fall out.

I used a variety of McBee cards in my mineralogy class in college, to help in mineral identification, but I have to admit that we used to be a little more violent, twirling the pack on the needle, instead of just picking it up, so the cards went everywhichwhere. The possibilities in a circulation department hardly bear thinking of.
During this period, automation was racketing forward at quite a pace, and we had to learn about whatever the newfangled mechanism for inputting data might be. We went from punch cards, or punched paper tape, to reels of magnetic tape, all of which required specialized typing machines for input. And then we moved on to disks and beyond.

9" disks, to 5 and a half inch floppy disks, to 3 and a quarter inch disks, which we continued to call floppy even though they weren’t, to CDs, to flash drives.

Although it’s beyond the scope of what I’m talking about today, those of you who may be interested in what early computing and calculating machines looked like, might like to go to IBM’s virtual antique attic at: http://www-03.ibm.com/ibm/history/exhibits/attic3/attic3_intro.html.

Just so the rest of technical services wouldn’t feel slighted, I have included a few artifacts from acquisitions and preservation.

I don’t have much from acquisitions - other than the typewriters and such that we all used -- but here are some manual purchase order cards. Unfortunately, the dead and dried rubber band that held these cards together crumbled away during transport. Acquisitions used LOTS of paper files of cards and slips, often laid out in rodless trays on the tops of great long tables, or occasionally carried on enormous horizontal carousels.

Because of all the paper they had to riffle through, people in acquisitions often used either a rubber fingertip, or some lovely pink goo called Kwicksort to help them handle the
cards without having to lick their fingers all the time. But the tables of files have long since gone, as have most of the rubber stamps and stamp trees.

[SLIDE OF RUBBER STAMPS]

And people are still searching for ways to use old stamps. This rubber stamp that I brought with me today has the intriguing message “Not responsible for virus.”

Unlike Acquisitions, Preservation not only had, but also continues actively to use lots of fascinating artifacts.

I decided not to bring with me the quart bottle of mucilage. For those of you from the Elmer’s glue generation, who didn’t use mucilage in grade school, mucilage is a sticky plant-derived glue (certain carnivorous plants exude mucilage to trap their prey - I have to assume that by the time that generations of school children were using mucilage, that the glue we had was artificially derived. Otherwise it brings to mind a kind of Harry Potter-like vision of growing carnivorous plants in enormous greenhouses, and feeding the little dears flies). We haven’t used mucilage for years at CU, but we used to use it liberally to glue buckram to boards when we repaired bindings.

[SLIDE OF RED TAPE]

I couldn’t resist bringing the red tape ….. This was - and is -- used to tie up bunches of documents, and is the source of the term “tied up in red tape.” And there’s the little bone folder, that’s used to crease paper. And finally, I brought this wonderful glue brush that makes me feel like the statue of liberty.

Now that brings me to the end of my artifacts, but not quite to the end of my time or reminiscences.

A little more than fifty years ago came the magic year of 1967. The Anglo American Cataloging Rules were published; the draft MARC format was implemented, and OCLC was incorporated. Today, as we see OCLC taking over the world - or at least that part of the
world left over from Google – it bears remembering that OCLC originally stood for the Ohio College Library Center, and was limited in membership to colleges and universities in Ohio.

The possibility of OCLC and Google battling it out for world dominance may be less important to most of us today than is the impending publication of RDA. As we wring our hands in anguish at the thought of implementing RDA, it’s interesting to consider the implementation of the other codes that have come along in the last half century.

The red and green books, published in 1949, essentially codified practice that was already in place, so it hadn’t been necessary to do much in preparation for them. And then along came AACR. Again, nobody thought a lot of preparation was necessary. The chapter on books had been available in advance of the main code, and people had had a chance to get some experience using it. Then, when the code as a whole was published in 1967, the cataloging community just started using it. Arlene Taylor was cataloging at LC at the time, and recalls clearly that they went home one night, having used the red and green books that day, and when they came in the next day, they started using AACR.

Those of you who used the original AACR probably remember that it was written without ISBD punctuation, since the development of the ISBDs was going on at about the same time, but that very soon a “revised chapter 6” to incorporate ISBD punctuation was issued. As a map cataloger at LC at the time, I continued to use pre-ISBD punctuation conventions, because our chapter hadn’t been revised yet.

Compared to the calm implementation of AACR, the implementation of AACR2 was tumultuous and took four years. AACR2 contained two provisions especially that struck fear in people’s hearts. The first was the treatment of microform reproductions, which libraries had typically been handling with dashed on entries. (Raise your hands if you know what a dashed on entry is) --- it’s the practice of representing what today would be called another manifestation by a series of dashes at the bottom of the card which were used as
ditto marks to represent the work described above. Following the dashes there would be some description such as “another edition” or “microfilm”). AACR2, on the other hand, treated microform reproductions as separate entities with separate records. On this matter, LC caved and continued to describe microform reproductions in the same record as the original.

The other big issue wasn’t a difference from AACR at all, but a decision to implement the rules for headings that had been in the blue book, and to stop “superimposing” the heading that had been established prior to its publication.

This was incredibly contentious, because of fears – especially on the part of large libraries – that desuperimposition would bring disaster raining down from the heavens – the implementation of AARC2 was delayed a full year. The panic was influenced in no small part by the fact that most catalogs were still in card form, so desuperimposition would wreak havoc with filing. ARL directors were especially concerned, and tried to exert pressure on LC and other libraries not to desuperimpose headings, and also to continue to catalog microform reproductions in the same record as the original. As I noted, LC caved on the microforms question, but it did not give in on the matter of headings. In the end, thanks in no small way to Arlene Taylor’s doctoral dissertation, which demonstrated that the impact of desuperimposition would be much less than feared, the new code was implemented, on what was known as Day One, but only after workshops on the new rules were given all across the country.

And now here we are anticipating a whole new code. When, whether, how, and by whom it will be implemented have yet to be decided. But if it is implemented, I would be willing to bet that the process will make the sturm und drang of AACR2 implementation pale by comparison.

Believing that there were lessons to be learned from the implementation of the previous code, this Midwinter, the ALISE Technical Services Interest Group hosted a panel
discussion, featuring three survivors of that time: Me, Michael Gorman, and Arlene Taylor. You can watch our three reminiscences at this url

[SLIDE FROM ALISE PRESENTATION]

https://www.ecu.edu/cs-educ/libs/ALISE_2010.cfm

the website also contains photos of the three of us, as well as photos of Arlene displaying her souvenir T-shirt. The front contains the original date of Day One crossed out and replaced with the delayed date. And the back says "No Superimposition." I have my own souvenir T-shirt from several years later when I was on the Joint Steering Committee for the Revision of the Anglo American Cataloging Rules, and hosted a JSC meeting, presenting each member with this T-shirt, which was the color of the original AACR2 (before the brown-covered AACR2 Revised came out), and bearing the motto "AACR2: it’s not just a good idea, it’s the rules."

Before I finish, I’d like to point one other major difference between what we used to do and what we do now.

50 years ago, catalogers and libraries were isolated from each other. Each catalog was stand-alone. No one in other libraries was using your cataloging, and you weren’t using theirs (well, you weren’t using anybody’s but LC’s, or copy you found in the NUC). You could invent all kinds of variations on standard practice with impunity. It didn’t add to your workload or to anybody else’s. And since we didn’t have local automation systems, system migration wasn’t a problem.

With the development of MARC and the growth of bibliographic utilities, however, cataloging was no longer a cottage industry, and your catalog was not private. Variations
from standard practice began to be costly. Costly to you, as you changed catalog records you used, and costly to others, who had to change what you produced.

To some extent this may explain the calm with which the introduction of AACR was met, as opposed to the anguish with which AARC2 was greeted, and the dread with which many look forward to RDA.

But we survived those transitions, and we'll survive the next one as well. We are nothing if not flexible.