RDA

Beecher Wiggins:
Good morning, everyone. Welcome to the first in a series of presentations by Barbara Tillett on RDA [Resource Description and Access], its background, FRBR -- Functional Requirements of Bibliographic Records, and the road to RDA. There will be a repeat session on May 27 at the same time, 10 to 11:30, in the same venue here in the Mumford Room. This morning's presentation is being filmed so that we can this more broadly both within LC [the Library of Congress] and with our colleagues and constituents outside of LC.

RDA, as you know, is the cataloging tool that will replace AAACR [Anglo-American Cataloguing Rules], the tool that so many of us fondly love and embrace [laughter]. There've been a few blips along the way in getting to -- excuse me -- RDA, but we think we are on track to have a cataloging tool that will be ready for the world by 2009. Barbara will go into great detail -- detail, give you background and will be able to answer questions in more detail.

One of the intervening blips along the way was the creation of the LC Working Group on the Future of Bibliographic Control (Working Group). Not that the creation of the group itself was a blip [laughter], it's that it had a set of recommendations and one of those recommendations that turned out to be the most controversial was to suspend work on RDA. There have been concerns raised about RDA, how easily it will be able to be used, is it really needed for the 21st century, and with those concerns, the Working Group as well as the Joint Steering Committee [for Development of RDA] of which Barbara is a part, and the Committee of Principles on which I serve that serves as the oversight body for RDA, are very mindful of the concerns being raised and the Working Group, in its recommendation, was trying to address that.

The Library of Congress had promised that it would respond in a formal way to all of the recommendations in the Working Group report by June, specifically to have it ready before ALA Annual that will convene this year in Anaheim. But Deanna Marcum, associate librarian for Library Services, and I recognized that a decision on RDA needs to be made much sooner than that so that one, we could keep the development process on track and that the community would know where the Library of Congress stood as one of the key players in the oversight and the creation of RDA.

Our sister national libraries, the National Agricultural Library and the National Library of Medicine, had long voiced concerns about RDA and their [coughs]-- excuse me -- willingness to adopt the new code. So one of the things that we wanted was to certainly have them on board with what the Library of Congress did. So we convened a group of the technical services directors of NAL, NLM, Library of Congress, Deanna Marcum, Barbara Tillett and I, about a month or so ago, to begin sorting out what concerns were and how we could address those. The results of that set – well not set -- that meeting was that we developed a joint statement that has now been issued that says that the Library of Congress, the National Agricultural Library and the National Library of Medicine would jointly work to have a test phase of RDA before there was a formal adoption. We are looking now at 2009, specifically a six-month range between April and October of 2009, to have a test environment of RDA.

Now, I can't tell you today what the test will actually embrace. What we want to get out of it is: one, how the application of RDA versus the application of AACR compare; we want to get a sense of how easy is it to use RDA by using a set of seasoned staff who have been working with AACR and then looking at RDA; we want to be sure that the records created according to RDA can be exchanged, distributed and accepted by external systems. So we'll be working the three national libraries, OCLC [Online Computer Library Center] and our own CDS [Cataloging Distribution Service] as part of the distribution of the records we create during this period. And hopefully we'll also be engaging vendors, in particular, Ex Libris, who happens to be the vendor for LC's ILS [Integrated Library System] Voyager as well as the other two national libraries -- that's true -- and we want to engage BTLS who has -- both of these particular vendors have indicated that they have products now that one, have incorporated FRBR as a conceptual model in their products so that should set a good stage for us.

So, stay tuned for the details for how that will work. But I wanted to set the stage for you today for this series of presentations and that we need to stay on track to have our staff ready and poised and understanding of what lies ahead and what the timeline appears to be. And we will be sending out, both from the Library Services Office and from my level within Acquisitions and Bibliographic Access, information as we move along this path.

So with that, I will introduce -- more like present -- Barbara Tillett since almost all of us know her and she often and always reports back on what's going on with RDA. So she will begin today with the first of several sessions on an overview

background on RDA, the development process and how we got to where we are today. So with that, Dr. Barbara Tillett.

[applause]

Barbara Tillett:
Thank you, Beecher. As Beecher mentioned, this is the first in a series of presentations about RDA -- Resource Description and Access -- to prepare you for its debut in 2009. We're starting with the things that have led us to this point and influenced the development of RDA. The background overview today will cover a brief history of cataloging codes, the development of cataloging principles and basic concepts. The next presentation that will be in a few weeks will go into more detail about cataloging principles. Then in September, we'll have a workshop on FRBR and FRAD [Functional Requirements for Authority Data] which are conceptual models. And later in the year, I think it's in December, we'll have a more in-depth presentation including a demonstration of the RDA online tool which a Web tool.

At the end of your handout is a list of all of the initialisms and the acronyms that I'm using in the presentation today along with some links to some relevant Web sites that I think you might like to know about. I've based today's presentation on several of my earlier presentations, so if you've heard me cover this before, hearing it again from a different perspective may allow you to have different connections about what I'm talking about.

RDA is a new cataloging code designed for the digital environment. As with other catalog codes before it, RDA reflects both the technology of the time and the types of materials that we're organizing, describing and making available to our users. **The goals of RDA are directly targeted to improve how we catalog and to take better advantage of today's digital environment. Over the past two centuries, we've moved from book catalogs to card catalogs to OPACs [online public access catalogs], and we're now ready for the next generation of systems that use machines to search and display the rich metadata that we provide.**

Our metadata is our cataloging information. RDA also recognizes that this cataloging information has value beyond an individual library and, in fact, can reach an international audience. In the future presentations, I'll talk about the big changes from AACR2, but one of the most significant is the move in RDA from AACR2's class of materials concepts and areas of description to identifying the

elements that are needed to describe things and how they all interrelate. RDA offers more specific controlled vocabularies for some of the elements to prepare us to use machines to manipulate the data more than ever before.

We continue to have an expanding universe of information resources that we organize and make available to our users. This bibliographic universe is not just books, but rather, many galaxies and worlds of content that's packaged in various information carriers. For example, the content of a visual image can be captured on an information carrier like film or it can be placed on a YouTube moving image viewable online. Another content type is sound that can be recorded as notation in printed scores or captured as an MP3 file that carries content to play on an iPod. Or we have an ever-changing mix of content that we find on Web pages.

The cataloging rules and the systems of the past are very outdated for today's **information seeking behaviors.** So we're now **developing guidelines for describing all of the things in our bibliographic universe in a way that makes our descriptions more usable in the digital environment.**

Today we'll focus our attentions on the foundations for RDA, resource, description and access. We'll talk about how it's preparing us for the future generations of information search and discovery systems. The guidelines that are now under development are built on a rich tradition of cataloging that includes internationally shared cataloging principles, international standards like the ISBDs, International Standard for Bibliographic Description, and more recently on the conceptual models of the Functional Requirements for Bibliographic Records and the Functional Requirements for Authority Data known as FRBR and FRAD.

RDA arose from a recognition of the increasing need to describe digital materials and to use the Internet as a means of reaching our users. It's involved collaborations with other metadata communities beyond libraries and has greatly benefited from worldwide comments during the developmental stages. I'll touch on each of these influences briefly today, and so let's start then with the Anglo-American cataloging tradition.

It goes back at least to the 91 rules that were printed in volume I of the British Museum's catalog in 1841. These were written by Antonio Panizzi who was then the keeper of the books. Printed book catalogs were typical at that time. The British Museum's catalog was what Antonio Panizzi called "a full and accurate

catalog" rather than just an inventory list that was also common at the time. It had some features that are important to us today in online displays, namely that it grouped things together or co-located information, for example, all of the works of an author, and it also provided visual clues to the user of variant names to authorized names. I'll come back to this example in a minute.

On the other side of the ocean, Charles Ammi Cutter completed his study of cataloging practices in the United States and issued his rules in 1876 that gave guidance about the objectives of cataloging, finding and co-locating in particular. These objectives still hold today and were reflected in the British Museum's rules. Cutter's rules were the basis for the British and the American attempts to collaboratively create a set of rules for card catalogs of their time. Unfortunately, those initial attempts at collaboration didn't work out and the American Library Association and the Library Association of the United Kingdom ended up issuing separate rules in 1902 and again in 1908.

The Library of Congress was very much involved with ALA work on cataloging rules at the time. LC had its own rules and later issued supplementary rules to augment the ALA rules. The British and American library associations along with the Library of Congress continued to work together to develop the rules. By 1941, the American Library Association decided to publish its own updated code. Then in 1949, the ALA rules for author and title entries were accompanied by the Library of Congress rules for descriptive cataloging. Many of the differences about rules were specific rules for case law that reflected past practices.

During the 1950s, there were cries for more principle-based rules rather than case law to show commonalities across all types of resources. So in the 1950s, Seymour Lubetzky, who was then working at the Library of Congress, was commissioned to study the rules. As part of that study, he developed some basic principles and he took those principles to IFLA -- the International Federation of Library Associations and Institutions. They held a famous conference in 1961, which was a meeting of cataloging experts. The resulting Paris Principles, as we know them today, became the foundation of nearly all of the major cataloging codes that are used worldwide. This was an incredible step towards global harmonization of cataloging practices that's still a worthy goal.

After the Paris Principles in 1961, attempts were once again made to create a unified Anglo-American cataloging code. However, again, there were enough disagreements that two texts were published in 1967, one the British text and another, a North American text. One reason behind the need for separate texts

was the desire of large libraries in the United States not to change their practices for entry of some corporate names under place. The North American libraries retained their case law practices and superimposed them on headings that were made under the new rules. That is, they continued to follow their old practices and, in fact, the AACR North American edition has specific quotes of why they did this. It was for names of local churches, educational institutions, libraries, airports and things like that, that had always in the past been under the name of the city where they were located. AACR2 specifically has a footnote that I'll quote here:
"It had these exceptions because they were required, primarily by the economic circumstances obtaining in many American research libraries. The cost of adapting very large, existing catalogs to the provisions of the general rules for corporate bodies without such exceptions is considered to be insupportable." The British took a more principled approach in their edition of the rules.

At the end of the 1960s, IFLA held another meeting of experts to develop the ISBDs -- International Standard Bibliographic Description. ISBD's descriptive rules for various types of resources are used worldwide and are basic to cataloging codes everywhere. In some countries, they are used in place of cataloging rules for building the descriptive portion of cataloging records. The ISBDs provide basic descriptive elements arranged in a prescribed order with prescribed punctuation. There's now a consolidated edition of ISBD and the makers of RDA are watching the work of IFLA and sharing information with them to harmonize ISBD and RDA.

Following agreements on ISBDs, the English-speaking countries again decided to work together to agree on rules and, by 1978, AACR2 was issued. It was actually a very traumatic time. It was a huge change for libraries that were following the North American text. This was the move of de-superimposition, when libraries changed from the old rules that entered corporate names under place to enter them directly under their names when they have distinctive names. De-superimposition finally changed headings to a more principled approach that was closer to the Paris Principles agreement. This was a very expensive prospect for libraries in the United States at the time that had card catalogs, but the libraries did it. So it resulted in split or closed card catalogs, but it also gave a big push to the creation of online catalogs that used the MARC [MAchine Readable Catalog] format that was then only ten years old.

That second edition of AACR, known as AACR2, was the first time that both sides of the Atlantic -- the United States and Canada on one side and the United

Kingdom on the other, finally shared the same rules. However, even then there were some differences in choices regarding options in the rules. AACR2 incorporated the ISBDs and came closer to the Paris Principles making it even closer to other cataloging codes used throughout the world.

We then saw revisions to AACR2 in 1988, 1998 and 2002, but they all basically followed the same structure as AACR2 with revised rules to reflect some changes in our cataloging environments such as a new perspective on electronic resources and expanded coverage of serials and integrating resources. Part One of AACR2 is on description by class of materials, and it's based on ISBD. Part Two is on the choice and form of entry. Over the past 30 years, we've adjusted AACR2 and our systems have moved from card catalogs to online catalogs, but it's now time for another change.

During the 1990s, IFLA again took the lead in bibliographic control to develop a conceptual model known as FRBR, Functional Requirements for Bibliographic Records. It was finally published in 1998, and FRBR reinforces the objectives of catalogs and the importance of relationships. It helps users to fulfill basic tasks with respect to the catalog, enabling people to find, identify, select and obtain information they want. These are known as the FRBR user tasks.

FRBR also offers us a structure to meet those basic user tasks. It includes an entity relationship model, which is a conceptual model of how the bibliographic universe operates. It identifies all of the things in that universe and how they're related. It allows us to group together the things that share the same intellectual and artistic content. It gives us a new way of looking at our bibliographic universe. It's like putting on a new pair of glasses to see the universe in a new way.

It also includes a set of data elements or attributes that are mandatory for a national-level bibliographic record. Those elements in FRBR translate directly in RDA as the basic data elements or core elements for bibliographic description and access. RDA combines the FRBR conceptual model with cataloging principles to give us the intellectual foundations to build catalogers' judgment and better systems for the future. FRBR is not, itself, a cataloging code. Nor is it a data model for designing systems; however, applications of FRBR have demonstrated how users can benefit from well-structured systems designed around FRBR's entities and relationships.

It's been recognized worldwide as a very useful model for bibliographic information. IFLA has extensive Webliography that identifies FRBR implementation; the URL's given at the end of your handout. Some examples are OCLC's WorldCat, AustLit and other research products coming from Australia and several projects in European countries and experiments at the company VTLS with their system called Virtua. FRBR has recently been used as the foundation for the Dublin Core abstract model. We can expect more experimentation and systems designs that will take advantage of FRBR's groupings of bibliographic data for all of the manifestations under expressions of named works, which are back to Cutter's co-locations ideas that I mentioned earlier.

We'll have a workshop later this year to go into FRBR in more detail but for now, let me just review some of the basics. An entity-relationship model was chosen for FRBR as it was a well-accepted modeling technique at the time. It's a conceptual model, which means it's a very high level theoretical model. It's not a data model to be used by a system designer to build an application but it would guide such a data model.

In the FRBR conceptual model, the bibliographic universe consists of entities that are related to each other and can be described through data elements or attributes. The entities themselves are sorted into three groups. **The Group 1 entities are the products of artistic and intellectual endeavor that are named or described in bibliographic records**. These are work, expression, manifestation, and item. The Group 1 entities are related as shown here. A work is realized through an expression. That's a relationship. An expression is embodied in a manifestation. That's a relationship. A manifestation is exemplified by an item. That's a relationship. These entities are all present when we hold an item in our hand. The item is one copy of a manifestation that embodies, captures or records an expression of a work. In RDA, this hierarchy of relationships between the Group 1 entities is referred to as the primary relationship. These are inherent among these entities.

The vocabulary is really important. Let me give you an analogy from Patrick LeBoeuf who was formerly the chair of the IFLA-FRBR Review Group. When we say book, what we have in mind may be a distinct physical object that consists of paper and a binding and can sometimes serve to prop open a door or hold up a table leg [laughter]. FRBR calls that an item. When we say book we could also mean a publication as when we go to a bookstore to ask for a book identified by an ISBN. The particular copy doesn't usually matter to us provided it has the

content that we want in the form that we want and maybe isn't missing any pages or has gotten messed up in shipping or whatever. FRBR calls that a manifestation.

When we say book as in who translated that book, we may have a specific text in mind with a specific language or a translation. FRBR calls that an expression. When we say book as in who wrote that book, we could also mean an even higher level of abstraction, the conceptual, intellectual or artistic content that underlies all of the linguistic versions. In other words, the basic story behind the book, the ideas in the person's head for the book and FRBR calls that a work. We want our language to be more precise so that we can help future catalogers and future systems designers to speak the same language.

Moving on to the attributes in FRBR or the elements, here are some of the essential attributes or elements that we associate with each of the Group 1 entities. For a work, you'll notice the main elements are a title, maybe a date and possibly its identifier, if it has one, for rights management or copyright purposes. What's missing here? Author. Right. You'll notice we don't have author as an attribute for a work or an expression because that information is treated in this model as a relationship between the work or the expression and a person or a corporate body. Yet you'll see at the manifestation level that there is a statement of responsibility as found in the item that's being cataloged. That's because that information is unique to the manifestation and is transcribed information. For our purposes, the activity of recording an expression turns that entity into something of interest to a library, something we would add to a library collection and catalog, something we would provide bibliographic control for -- description and access. In other words, when we catalog, we're focusing on a manifestation.

FRBR's Group 2 entities are the entities responsible for the intellectual or artistic content, the physical production and dissemination or the custodianship of these products. These are the person and corporate body. IFLA recently added family from the new conceptual model called FRAD, Functional Requirements for Authority Data. This was added in particular for the needs of the archival community.

Let me now move on to the relationships for the Group 2 entities -- person, family and corporate body. You see the relationships with the Group 1 entities in this picture. A work is created by a person, family or corporate body, following that bottom line across. An expression is realized by a person, family or corporate body. That's the connection there. A manifestation is produced by a person,

family or corporate body, and an item is owned by a person, family or corporate body. The names of these Group 2 entities are controlled when they're used as access points in bibliographic records.

I'll skip that one.

Group 3 are the entities that serve as the subjects of intellectual or artistic endeavor. Group 3 includes any of the Group 1 or the Group 2 entities plus concept, object, event and place. Here we see the subject relationships between a work and all the other entities because you can have a work that is about another work or a work that is about a person and so on.

Remember earlier when describing the cataloging rules I mentioned the British Museum's printed book catalog that co-located the works of an author. Let's look at that entry in the book catalog again but this time from an IFLA perspective wearing our FRBR glasses. Notice here that we have two works of the author Christoval Acosta. These are all of the works brought together for the user of this catalog in this display. The title proper from the original work is used to name the work. The first work, the tract on "Drugs and Medicines in the East Indies" appeared in two manifestations, one from 1578 and the other from 1585. The British Museum entry displayed the place, the date and the size, which they felt were key elements to identify the manifestations.

For the first manifestation we have two copies, one is implied by the presence of the first description and the second is specifically indicated by the words "another copy." These are the FRBR items. Then we see the second manifestation is actually a new expression in Italian. It was published in 1585 in Venice. That's the manifestation information. And it also has two copies, item information. By the way, you may be interested to know that that little crown to the left indicated it was from the royal collection. This was the collection that King George IV gave to the British nation. That's an attribute of that particular copy; it is item level information. So we're displaying for the user some of the attributes of the work, the expression, the manifestation and the item for these four copies that are held by the British Museum at that time.

Then there's a second work that's displayed with its manifestation information and the existence of an item is implied. The point is we have co-location on the name of a person, the various works and all of their expressions -- manifestations and items reflecting what we can find at the British Museum. This information was in their book catalog in 1841, which you either had to use at the British

Museum or purchase for yourself or borrow from someone. Think about how that differs from the Internet today.

In fact, there was an interim step, so let's put on our FRBR glasses again to look at the online catalogs. LC uses the Voyager integrated library system and if we take a look at our displays for Shakespeare's "Hamlet" you'll see here for one record that our OPAC display actually includes all of our FRBR Group 1 entities. In a sense, it's already FRBR-ized. Let's walk through this one to see the Group 1 entities from the FRBR perspective. When we browse under Shakespeare in the online catalog, we should be grouping the various works of Shakespeare and let the user select which one they want. Next, we should be grouping the various expressions that we have for each of the works, sort of what we have provided in a uniform title. With AACR2, we provide a uniform title that included the name of the creator of the work, a preferred title for the work and sometimes additional information. We also include expression-level information in the uniform title to indicate that this particular description is for a French translation of "Hamlet." The OPAC display also shows us the specific manifestation information in terms of the body of the bibliographic description and also the individual items that we hold in our collections with location information.

So you see, FRBR is not so very different from what we do now. The point of using this FRBR model is to help clarify the concepts that have been very muddy in our rules in the past and to clarify things we typically ended up learning through experience or just gained through intuition by seeing that wonderful little crown on the left-hand side. Using FRBR language in the rules and identifying the specific elements or attributes of each entity should make the concepts clearer to the next generation of catalogers and the next generation of computer systems.

For several years now, work has been underway to extend the FRBR model into the realm of authority data. The Functional Requirements for Authority Data, known as FRAD, has been available in drafts for a couple of years now, but it continues to evolve. The Joint Steering Committee has included FRAD's basic concepts in RDA and we expect FRAD to be finalized later this year. The fundamental basis for conceptual model for authority data in FRAD is very simple. Entities in the bibliographic universe, such as those identified in FRBR, are known by names or identifiers or both. In the cataloging process, those names and identifiers are used as the basis for constructing controlled access points.

This is a much more detailed view of that diagram, the top half of it, showing the bibliographic entities and notice these are the FRBR Group 1 entities that are in the middle there -- work, expression, manifestation and item -- the Group 2 entities of person, family and corporate body and the Group 3 entities that are all of these. These are all linked then to their name that they are known by or the identifier that was assigned for them. And then we see that the names and identifiers are related to the controlled access points that are linked to the rules and the agency making the controlled access points.

So we have these two models from IFLA -- FRBR and FRAD. They give us a picture of how we might design systems in the future, and we're using them as the concepts behind RDA, the new cataloging code. We've now seen how RDA builds on the rich history of past cataloging codes, the Paris Principles of 1961, the ISBDs, AACR2, FRBR and FRAD. But another major influence on RDA is the changing technology.

The evolution of technologies took a major turn with the creation of the Internet. Catalogs are no longer just stand alone. They're no longer end points in isolation, like book catalogs were or card catalogs or even the stand alone early OPACs of the past. Catalogs, and especially bibliographic data, can now be integrated into the wider Internet environment. New kinds of links can be made and new displays can be generated for users from the data that can be packaged in new ways, all of it on a global scale. We now have the technology to provide global connection anywhere that computers can operate and that includes the digital connections of cell phones with Internet connections. Our catalogs can be on an iPhone.

RDA is being designed to prepare us for the technological capabilities of the Internet today and into the future. Our current cataloging environment continues to evolve to be more and more Web-based. We need to catalog a much wider range of information carriers than we used to. We also need to deal with many more types of content and complexity of content in the resources that we're cataloging. Metadata is now created by a wider range of personnel. It's not only done by skilled professional catalogers but by support staff, non-library staff and also publishers who have a wide range of skill levels. Some of us are using structures other than the MARC format for our records like using Dublin Core for some digital resources, and we now have access to descriptive data resources in digital form. Even when the resource itself is in a book format, the descriptive data is now available from many publishers using ONIX, which is information that we can capture for our bibliographic records.

In the digital world, we sometimes find the basic bibliographic description is an integral part of a digital object. The software that helps create the digital object or digitizes some analog object can automatically provide a basic set of metadata. Those are the attributes of the data elements to describe that object. Think of how the software for word processing works. It suggests a name for your document based on the first words that you type on the top line of your text. Ironically, the titles from early manuscripts in Babylonian days were also the text from the first line. Kind of interesting -- computers come full circle.

Software now automatically provides some data such as the date that you created the text. So we can envision more and more of this automated creating of some of the attributes that we need for the bibliographic control in our catalog systems that we can capture, saving catalogers time. RDA builds on this to emphasize transcribing what you see for the basic elements of bibliographic description. This is the principle of accurate representation. A key aspect of this new environment is that it is built on element-based metadata schemas, and I'll come back to that in a moment.

In the late 1990s, those of us that were on the Joint Steering Committee for the revision of the Anglo-American Cataloguing Rules decided to actively try to make changes for the future of the Anglo-American Rules. We realized that all these changes in our environment and the development of conceptual models that give us a new way to look at our environment also gave us new opportunities for improving how we catalog and how we deliver bibliographic information to our users. So in 1997 we held the International Conference on the Principles and Future Development of AACR in Toronto, Canada. We invited experts from around the world to share in the development of an action plan for the future or AACR.

Some of the recommendations for [from] that meeting have guided thinking about our new directions such as the desire to document the basic principles that underlie the rules and explorations into content versus carrier challenging the logical structure of AACR. Some recommendations from that conference have already been implemented like the new views on seriality with continuing resources and harmonization of serials cataloging standards among the ISBD, ISSN and AACR communities. Other recommendations from that conference are still dreams like the future internationalization of the rules for their expanded use worldwide as content standard for both bibliographic and authority records. But now we want to make those dreams a reality.

In 2002, work began on a draft revision of AACR2 then called AACR3. However, by April of 2005, the plan had changed. The reactions to the initial draft of AACR3 particularly raised concerns about the need to move closer to alignment with FRBR's model and to build an element set. So a new structure and plan were developed and the name was changed to Resource Description and Access to emphasize those two important aspects of cataloging -- description and access. And importantly from the world perspective, we removed "Anglo-American" so we could take a more international view.

With 2002's edition of AACR2, the Joint Steering Committee developed a strategic plan for AACR and now for RDA. The text is on the Web site at the address that's shown here, and the plan lays out the goals for RDA. In the strategic plan it says that RDA is intended to be a new code that will be more consistent across all types of content and media and that demonstrates the commonalities of different types of resources. That, in turn, should make the rules easier to remember and to apply. No more specific case laws coming up for every single instance.

The Joint Steering Committee stated our goals for RDA as follows: "We envision RDA as a new standard for resource description access designed for the digital world. In other words, RDA will be a Web-based tool that is optimized for use as an online product. It will be a tool that addresses cataloging all types of content and media and a tool that results in records that are intended for use in a digital environment through the Internet, also through Web OPACs and other future systems. The records that are created using RDA will be readily adaptable to new emerging database structures."

The goals in the RDA Strategic Plan go on to declare that RDA will provide a consistent, flexible and extensible framework for both the technical and content description of all the types of resources and all types of contents; that it will be compatible with internationally established principles, models and standards. So that while RDA is being developed for use in the English language communities, it can also be used in other language communities, and we're expecting that other countries will translate it and adjust its instructions to follow their preferred language and script conventions just as now there are many translations of AACR2.

Options are also being added to RDA to allow for the use of other languages and scripts, other calendars, other numeric systems and so forth so we can reach

things that are common beyond those things used in the Anglo-American worlds. We also intend that RDA will produce information that's compatible across many communities like for publishers, archives, museums and other information organizations. The Joint Steering Committee decision to make RDA a content standard rather than a display standard was really a key to moving RDA forward for the Web environment.

RDA contains instructions for transcribing or recording information for each element in descriptions, not for how to code it, not for how to display it. The data that's constructed following RDA guidelines can be displayed using any display format. However for libraries that are wishing to follow a display of the ISBD format, there will be an appendix on the ISBD display of RDA records to indicate the order of elements and punctuation to be used. This honors our agreement to keep RDA compatible with the ISBDs.

Like AACR2, RDA is independent of the formation, medium or system used to store or communicate the data. That means RDA does not, itself, tell you how to code all of the elements, so data created using RDA can be packaged in any type of communication format or schema for resource description and access, not just MARC21 but MODS, Dublin Core or many other forms. RDA does have an appendix to show how to map the RDA elements with the MARC format to help catalogers who are using MARC21, and we hope to have a mapping for Dublin Core by the first release of RDA. For future releases of RDA, we also hope to work with other communities and include mappings for other metadata schema. So we're building the compatibility, the flexibility and the extensibility of RDA to other systems and schema.

Also in the RDA Strategic Plan, we make it explicit that RDA instructions for descriptions and access points will enable users to find, identify, select and obtain resources that are appropriate to their information needs. So RDA directly relates the elements of descriptions and access points to the FRBR user tasks that they support. The RDA instructions are arranged by the attributes and relationships that are needed to meet the FRBR user tasks. For the FRBR Group 2 entities of persons, families and corporate bodies, RDA also includes the user tasks from FRAD to find, identify, contextualize and justify. Focusing on the users' tasks is a very important aspect for helping catalogers decide what data to provide for our users. And we want to change the approach to cataloging to get back to more principle-based rules that build catalogers' judgment and are easier to use.

But speaking of principles, the Paris Principles of 1961 were built to maximize on card catalog technology with main entries and added entries. In 2001, Natalia Kasparova of the Russian State Library and a member of the IFLA cataloging section at that time reminded us that it had been 40 years since the Paris Principles and it was time to review them again for today's digital environment. IFLA took on that work and there have been five meetings of the IFLA Meetings of Experts on an International Cataloguing code known as IME ICC.

IFLA's new statement of international cataloging principles covers both bibliographic and authority records and all types of resources. Because the principles are to guide rule makers, the statement begins with some basic principles behind cataloging principles for people that are building catalogs -- to first and foremost think of the user. We want the future codes and rules to be easy to understand and to provide only as much metadata as is needed to meet user tasks, to provide accurate data and the minimally necessary elements to identify a resource. In addition, the cataloger should include data to help the user navigate the pathways to related resources and if principles seem to contradict each other in a particular situation, the cataloger should take a defensible, practical solution. The idea is to build catalogers' judgment in deciding how to describe or provide access to bibliographic resources. RDA is being based on these new principles.

To give you an idea of how following these principles means a change from AACR2, let's look at the principle of representation again, which was shown on the previous slide. This comes into play for transcribed information. RDA will simplify the process of transcription by taking what you see on the resource. This eliminates many of the AACR2 rules that instruct catalogers now to alter the data that they are transcribing. For example, in RDA, inaccuracies will be recorded as they're found on the item, and the corrected data will be provided separately if it's needed. This and other simplifications to the transcription rules are designed to facilitate automated capture of that data and reusing the metadata from other sources such as from publishers. Some of us now copy this information from ONIX data from the publishers. Catalogers will also have more flexibility in RDA to take capitalization as it appears and will take abbreviations as they appear on the resources. The similarities and the differences between RDA and AACR2 will be pointed out during training. In fact, the Joint Steering Committee will be working with trainers to help prepare you for a smooth transition.

I keep referring to the Joint Steering Committee but who are they and what other groups are behind the making of this new standard? There's a Committee of Principles known as the COP who provide the administrative oversight for the development of cataloging rules. The members are the directors or their representatives from the American Library Association, the Canadian Library Association, the Chartered Institute of Library and Information Professionals known as CILIP, the British Library, the Library of Congress, the Library and Archives Canada and, just this year, the National Library of Australia. Beacher Wiggins is our COP representative for the Library of Congress, and Mary Ghikas is the ALA representative to the COP. There's also the group of co-publishers who manage the AAACR Fund, which is the money that's generated by the sales of AAACR and supports the maintenance and development of rules. The publishers are at the American Library Association, the Canadian Library Association and CILIP.

Then there's the Joint Steering Committee for revision of Anglo-American Cataloguing Rules whose name changed in April of 2007 to the Joint Steering Committee for the Development of RDA, so we could still keep the JSC initials. It's comprised of representatives from the constituent organizations in the United States, Canada, Australia and the United Kingdom, and I am the representative for the Library of Congress and John Attig is the representative for the American Library Association. Here we all are a couple of weeks ago in Chicago. Actually this is both the Joint Steering Committee for the Development of RDA plus our project manager on the far right and the RDA editor on the far left--Tom Delsey, and our secretary.

The Joint Steering Committee has also paid close attention to developments in other metadata communities and has initiated collaborations with the publishers who are developing their own metadata set called ONIX. Together, we developed control vocabularies for media type, content type and carrier type. Those are defined in examples given at the back of your handout.

Last year, the JSC representatives met at the British Library with key representatives from Dublin Core, IEEE/LOM and the Semantic Web communities, and we agreed to examine the fit between RDA and other metadata models. We agreed to work together to develop a data dictionary and to create a registry for the RDA element sets and control terms. This is one of the first steps in making it more usable in an Internet environment. This year, the Joint Steering Committee is participating in another joint effort to determine what revisions are necessary to accommodate encoding RDA in MARC21 for the initial

release of RDA. This RDA/MARC Working Group will be presenting proposals to MARBI [ALA's Machine-Readable Bibliographic Information Committee] at their meeting this June.

In RDA, the concepts are still those we're familiar with but they're being expressed differently as a set of elements and sub-elements and element sub-types to make the data more usable on the Web. I'll talk more about this when we have our session on RDA later this year but basically there's a table of the RDA elements that indicates their names and their properties. This element-based approach of well-structured metadata makes the data in our descriptions more usable on the Internet because it's similar to the structures that are being used by other metadata communities and by the Web itself. This is another piece of that element analysis table, and you'll see again we have familiar things, a publication statement that has sub-elements of place, publisher's name and date. It's just being packaged in a different way.

RDA will have a core set of elements recommended for the identification of each entity. New elements are being added to RDA, some to solve problems with AACR2 and some to add elements that are lacking in AACR2. The data elements for media type, carrier type and content type will be used instead of the GMDs -- the General Material Designators that are currently in AACR2. One of the complaints about the GMDs now found in AACR2 is that they're not consistent; they're a mixture of content and carrier types and the list is incomplete. Other elements such as the examples shown on the slide are missing in AACR2: the file characteristics, video formats, archival custodial information and braille characteristics.

RDA's current structure is shown here. Some of you who have been following the early drafts will have seen the evolution of this structure over time as the JSC considered the feedback and moved closer to the FRBR model and user tasks. There will be a general introduction to provide background. There will be a Part A on the attributes -- that is the data elements for describing each kind of entity. Part B provides guidelines on making relationships among the entities. At the end are appendices about such things as capitalization, abbreviations and initial articles plus an appendix on how to present the descriptive data including the ISBD display format and the MARC21 mapping to RDA elements. There will also be information on how to present authority data. Three appendices will cover relationship designators and there will also be a glossary and an index. Remember, this is an online Web-based tool so there will also be keyword access.

We're making an attempt to update the card catalog-based terminology that remains in AACR2. For example, the AACR2 term heading, of course, comes from the text that was typed at the top of a catalog card or the head of the card, and we're replacing that term with access point. So the main entry and added entry headings will become access points. The information that we now give in "see" references will now be recorded as variant access points. AACR2 uses two very problematic terms, mainly "entry" which, you know, can either be an authorized heading or can refer to the whole bibliographic record. And also the term "uniform title" is used in AACR2. It's problematic because it has multiple meanings -- it can be a co-locating title for a work, it can be a unique distinguishing title to distinguish among works or a standardized collective title and so on. So instead of using that term, RDA is using the term principle, excuse me, "preferred title" for a work and when we link a preferred title with the creator, we have a preferred access point for the work.

We're also moving away from the term "authority control," and this is because new technologies give us more options for controlling the display forms for the name for an entry. We will probably continue to declare one form as a default authorized or preferred access point for the entity but on the Internet, any of the variant forms that are identified with the entity can be used for display. This lets us display a form that fits better with the user's need for a particular language or a script. In addition to new terminology, RDA is being written to fit past, present and future cataloging scenarios.

Whether you are working with a card catalog, an integrated library system with an OPAC, or a system that makes internal links and expresses relationships between entities, RDA can be used. This picture shows a scenario that links clusters of data describing each of the FRBR entities making the relationships explicit. This data can be mined and displayed in different ways depending on the user tasks. The Joint Steering Committee has kept this scenario in mind as our view for the future as we develop RDA. We hope that future systems will be developed to take full advantage of mining the metadata that catalogers are providing. It should be easier to fulfill the functions of the catalog, to display all of the works associated with a person, all of the expressions of the same work and all of the manifestations of the same expression and then all of the items and their special characteristics plus all of the other related works that are in the system. All of these things are guiding a user through, navigating them through our rich collections.

For now, most of us are in a scenario using the MARC format in an integrated library system. These are self-contained records. These records may or may not have any connection to each other, but I personally hope that RDA will encourage systems designers to develop much better systems for the future. I actually think we're at a very exciting time for the development of new information systems that are more global in nature and can take better use of the cataloging information, to make cataloging easier and make the results of cataloging much flexible and useful to our users.

There's also a scenario for the past forms of card or book catalogs where all of the bibliographic holdings information is all together in a separate card file, and there's another file for authority data. RDA also will work in that scenario.

We expect the publishers of RDA to have a new prototype of RDA online to demonstrate during the ALA conference in Anaheim this June. We also expect the beta version of the Web tool to be available to demonstrate Aug. 8, at the IFLA satellite workshop in Quebec, Canada. We hope that same version can be made more widely available to use for the review of the full draft of RDA. During this next review period, people will be asked to comment to the Joint Steering Committee regarding the content of RDA, specifically on the element sets, the values for those elements that are prescribed and on the core set of elements. We expect the publishers will have a mechanism to receive comments on the Web tool, itself.

RDA is being designed as a Web tool, that is, it can be viewed on your computer and have keyword access in addition to an index. It's being designed and coded to enable displays of different views. For example, you'll be able to customize your view to see just the guidelines that are relevant to the type of materials you're cataloging. If you're cataloging a serial, you can view just the guidelines for serials. If you're cataloging a map, you can see just those guidelines for cartographic materials and so on.

You'll also be able to add your own annotations and will be able to share them with others. This feature may be what we use to document cataloging decisions on alternative rules or options for the Program for Cooperative Cataloging.

We also intend to include a basic set of workflows to take you step-by-step through a cataloging process using simple language with links to the RDA guidelines and examples. You will also have the ability to build your own step-by-step workflows. There should be the ability also to print any part of the Web

tool that you wish, and it's also planned that there be a link between your integrated library system data input screen, like the cataloging module, and the relevant RDA instructions. At one point this was called an RDA button that you would actually click in your cataloging module, and it would connect you directly to the RDA. Not sure exactly how that will evolve in the final product.

But the co-publishers have told us there will be different pricing structures for different types of users and numbers of simultaneous users, and they're still exploring the possibilities of printed versions of RDA, perhaps customized versions for a particular need. The Library of Congress will also be exploring how best to incorporate RDA into Catalogers' Desktop.

So, in summary, RDA is a content standard intended for the digital environment. It continues some of the traditions from its Anglo-American cataloging roots and IFLA's international descriptive standards. It focuses on the user-oriented conceptual models of FRBR and FRAD and their user tasks, their elements, their relationships and attributes and their new vocabulary.

Throughout all of this is the increased awareness of how small has become with Internet capabilities and how important it is to share bibliographic information globally and also help reduce global costs. Our bibliographic and authority information is being used worldwide and also across different information communities. IFLA is updating the underlying principles that support the organization of information and doing it in a way to help build catalogers' judgment.

Our new standard for resource description and access will enable us to more easily harvest descriptive metadata from many sources in a less rigid, more flexible way than we do now with AACR2 and the LC rule interpretations. Unlike AACR2, RDA will be based on the elements needed to provide access to information about those things. It will have more controlled vocabularies that we will register on the Internet for everyone to share increasing the opportunities for more consistent data on the Web and increasing the precision of future searches.

All of these things are interconnected and leading us into the future of bibliographic control. They're providing us with updated standards for today's Web environment while still supporting many of the traditional concepts and certainly supporting the traditional collections in our libraries, archives and museums. RDA will be a tool to help us move into the future.

The Joint Steering Committee provides updates on our progress with RDA, and there's much more information found on our Web site. This is the Web address, and I encourage you to check that site and stay involved in the upcoming final review of the full draft. If you haven't already looked there, you should take a look and look at the "Frequently Asked Questions." Those have wonderful answers to many of the questions I'm sure that you have.

And speaking of questions, we now, I think, have time to address some of them that you have today but first let me thank you very much for your attention.

[applause]

[music]

[end of transcript]