Metadata for Accessibility Information

Current Possibilities and Future Potentials

Rehab Ouf
Why are we here today?
Accessible Formats

have been leading a rather unusual life the last month, much of it in the company of my aunt of whom I wrote to you. We have even spent several weeks together as Istanbul where I was appointed with the famed Santa 's Church. I am glad that the vicarage is faith-ful to miss my return. At the beginning of my father 's illness, I only learned in Bourne that I had married too late. My wife and I thought that I needed a change after years spent in London. I enjoyed Esmond's place of work in me. I open Palgrave too from the beginning of the new year.
Accessible Formats

Lack of common cataloging guidelines

Isolated practices

Non functional and informative metadata
Within the Same Institution

- Dual access policies
  - Catalog
  - Webpage

- Dual cataloging practices / Separate Catalog
  - A catalog accessible formats
  - General catalog

- Library functions
  - Burden
  - No interlibrary sharing
“While catalogs restricted to accessible materials are valuable, the importance of catalogs of general collections should not be underestimated; visually impaired people increasingly use them for certain materials.”

Ann Chapman

Separate Catalog Vs. General Catalog
A Unified Approach to Cataloging & Bibliographic Control of Accessible Formats

- Achieves a more inclusive information environment.
- Helps libraries in planning their operations and achieve better management of their resources.
- Enables interlibrary sharing, shared cataloging, copy cataloging and exchange of bibliographic data on the national and global levels.
Each type has unique characteristics and may need different equipment or software to use the material.

Accessible Formats As Complex Bibliographic Items

Come in a variety of formats, which are by nature complex and require complex cataloguing.
Accessible Formats As Complex Bibliographic Items

Come in a variety of formats, which are by nature complex and require complex cataloguing.

- Each type has unique characteristics and may need different equipment or software to use the material
- General types are further categorized into sub-categories
  - Braille books in print format
  - Braille in electronic format
  - Digital braille
Accessible Formats As Complex Bibliographic Items

Come in a variety of formats, which are by nature complex and require complex cataloguing.

- Each type has unique characteristics and may need different equipment or software to use the material
- General types are further categorized into sub-categories
  - Audiobooks in analog format
  - Audiobooks in digital format
  - Alone or mixed with text
Accessible Formats As Complex Bibliographic Items

Come in a variety of formats, which are by nature complex and require complex cataloguing.

- Each type has unique characteristics and may need different equipment or software to use the material
- General types are further categorized into sub-categories
- A single accessible format can combine different characteristics and mix several types of media
  - DAISY Digital Talking Books:
    - Sound recording
    - Electronic file
    - Audio only
    - Audio + Text
    - One Carrier
Accessible Formats As Complex Bibliographic Items

Come in a variety of formats, which are by nature complex and require complex cataloguing.

- Each type has unique characteristics and may need different equipment or software to use the material
- General types are further categorized into sub-categories
- A single accessible formats can combine different characteristics and mix several types of media
- Assistive technology is wide ranging and appeal to different senses
  - Screen Magnifiers (vision)
  - Screen readers (hearing)
  - Braille display (touching)
Each type has unique characteristics and may need different equipment or software to use the material.

General types are further categorized into sub-categories.

A single accessible format can combine different characteristics and mix several types of media.

Assistive technology is wide ranging and appeal to different senses.

Relationship with the original item from which they are derived.

“most accessible materials have a source in the form of a printed book.”
What Information Users With Special Needs Want

- Characteristics of the materials
- Target audience
- System requirements for the assistive technology
- Access details for the traditional materials
MARC As a Cataloging Platform For Accessible Formats
<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>007</td>
<td>Physical Description</td>
<td></td>
</tr>
<tr>
<td>245</td>
<td>Title Statement</td>
<td>$Medium</td>
</tr>
<tr>
<td>300</td>
<td>Physical Description</td>
<td>$aExtent</td>
</tr>
<tr>
<td>506</td>
<td>Restriction on Access Note</td>
<td></td>
</tr>
<tr>
<td>511</td>
<td>Participant or Performer Note</td>
<td>$a(Narrator, ...)</td>
</tr>
<tr>
<td>516</td>
<td>Type of Computer File or Data Note</td>
<td>$a(Digital talking book)</td>
</tr>
<tr>
<td>520</td>
<td>Summary, Etc. Note</td>
<td></td>
</tr>
<tr>
<td>521</td>
<td>Target Audience Note</td>
<td>Also, systematically used by: Used by: NLS to record (Narrator gender)</td>
</tr>
<tr>
<td>530</td>
<td>Additional Physical Form Available Note</td>
<td>(may also be available...)</td>
</tr>
<tr>
<td>534</td>
<td>Original Version Note</td>
<td>(Recorded from ..., originally published...)</td>
</tr>
<tr>
<td>538</td>
<td>System Details Note</td>
<td>(i.e. Type of DAISY: full audio and structure) + detailed system requirement including assistive technology to be used</td>
</tr>
<tr>
<td>546</td>
<td>Language Note</td>
<td>(English braille, American Edition (Contracted))</td>
</tr>
<tr>
<td>588</td>
<td>Source of Description Note</td>
<td>(description based on the print edition used for the braille transcription)</td>
</tr>
<tr>
<td>655</td>
<td>Index Genre Form Term</td>
<td>(i.e. Downloadable books, Braille books)</td>
</tr>
<tr>
<td>700</td>
<td>Added Entry Personal Name</td>
<td>Used to create an added entry by the Narrator, Transcriber...</td>
</tr>
<tr>
<td>852</td>
<td>Location</td>
<td></td>
</tr>
<tr>
<td>856</td>
<td>Electronic Location and Access</td>
<td></td>
</tr>
<tr>
<td>336</td>
<td>Content Type</td>
<td>$aTerm$2Code$2Source</td>
</tr>
<tr>
<td>-----</td>
<td>--------------</td>
<td>-----------------------</td>
</tr>
<tr>
<td>337</td>
<td>Media Type</td>
<td>$aTerm$2Code$2Source</td>
</tr>
<tr>
<td>338</td>
<td>Carrier Type</td>
<td>$aTerm$2Code$2Source</td>
</tr>
<tr>
<td>344</td>
<td>Sound Characteristics</td>
<td>$aType of Recording$gConfiguration of playback channels $2Source</td>
</tr>
<tr>
<td>347</td>
<td>Digital Characteristics</td>
<td>$aFile$Type$2bEncoding$Format$2Source</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>710</th>
<th>Added Entry-Corporate Name</th>
<th>Can be used to create an added entry by the recording institution</th>
</tr>
</thead>
<tbody>
<tr>
<td>MARC 21 Bibliographic - Full</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-----------------------------</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Indicators and Subfield Codes**
Field has no indicators or subfield codes; the data elements are positionally defined.

**Character Positions**

00 - Category of material
- Tactile material

01 - Specific material designation
  a - Memo
  b - Braille
  c - Combination
  d - Tactile, with no writing system
  u - Unspecified
  z - Other
  | - No attempt to code

02 - Undefined
# - Undefined

04 - Class of braille writing
- No specified class of braille writing
  - Literary braille
  - Format code braille
  - Mathematics and scientific braille
  - Computer braille
  - Music braille
  - Multiple braille types
  - Not applicable
  - Unknown
  - Other
  | - No attempt to code

06-08 - Braille music format
  # - No specified braille music format
  a - Bar over bar
  b - Bar by bar
  c - Line over line
  d - Paragraph
  e - Single line
  f - Section by section
  g - Line by line
  h - Open score
  i - Spanner short form scoring
  j - Short form scoring
  k - Outline
  l - Vertical score
  n - Not applicable
  u - Unknown
  z - Other
  | - No attempt to code

09 - Special physical characteristics
  a - Print/braille
  b - Jumbo or enlarged braille
  n - Not applicable
  u - Unknown
  z - Other
  | - No attempt to code

5 - Level of contraction
- Uncontracted
- Contracted
- Combination
- Not applicable
- Unknown
- Other
- No attempt to code
Traditional Problems Associated with the Cataloging of Accessible Formats
AACR2 Shortcomings

- Single GMD approach to the cataloguing record
- Inconsistent approach to the categorization of GMDs
- Records constructed from the viewpoint of the original item
- Concatenation of mixed information in note fields
- Restriction on the number of access points
Astrup 2 Shortcomings

- AACR 0.24 primacy rule
- Incompatible with the complex nature of accessible format
- Adding a qualifier

Single GMD approach to the cataloguing record
Inconsistent approach to the categorization of GMDs

AACR2 Shortcomings

• GMDs map to different FRBR entities
AACR2 Shortcomings

Records constructed from the viewpoint of the original item

- Data about the accessible format is pushed to the notes area or done using inappropriate fields
AACR2 Shortcomings

- Recording “data” in “textual” fields
- Surcharging 5XX fields; burring important data
- Hard to search and process by ILS

Concatenation of mixed information in note fields
Restriction on the number of access points

AACR2 Shortcomings

• Absence, by cataloging rules, of access points for some crucial entities, i.e. individuals and/or institutions which created the accessible format
AACR2 Shortcomings

- Single GMD approach to the cataloguing record
- Inconsistent approach to the categorization of GMDs
- Records constructed from the viewpoint of the original item
- Concatenation of mixed information in note fields
- Restriction on the number of access points
A Catalog for Users With Special Needs

What Metadata for Accessibility Information?
How Users With Special Needs Approach a Library Catalog?

- They need to quickly identify the resources that they can use in a vast collection of resources
- Sometimes, it is the starting point of a search done in a catalog
How Users With Special Needs Approach a Library Catalog?

• A user searching by title, author, subject, need to know if/(which of) the works presented to him in the list of results are in a format that he can use

• They need to quickly identify the resources that they can use in a vast collection of resources
  • Sometimes, it is the starting point of a search done in a catalog
Search Phase

- Information that supports searching & filtering
Record’s Display Phase

- Mode of access of the resource
- System requirements, i.e. the assistive technology
- Content of the material they can use vis-à-vis the content of the original format
- Entities involved in the creation of the accessible format (could be a search/filtering option)

Title: Birthplace of western civilization [cartographic material (tactile)] : [Nile River Valley and Near East]
Published: Watertown, Mass. : Howe Memorial Press, Perkins School for the Blind, [n.d.].
Description: 1 map (braille) ; 56 x 71 cm.
Book Number: TM 00243 (LOST)
Dewey No.: 912.32
Subjects: Nile River Valley -- Maps.
Location: DLC-8 TM 00243 NLS/BPL
Control No.: 84560
ENHANCING THE INFORMATION ENVIRONMENT FOR USERS WITH SPECIAL NEEDS
How RDA Solves Accessible Formats Cataloging Problems?

Three level approach to categorization of resources

- Content Type
- Media Type
- Carrier Type

MARC Provisions

- Replacing 245$h [Medium]
- 3 New Fields: 336, 337, 338
- Repeatable
- Describe as many Content, Media, Carriers as the resource encloses!
How RDA Solves Accessible Formats Cataloging Problems?

- Categorization based on human senses

- cartographic dataset
- cartographic image
- cartographic moving image
- cartographic tactile image
- cartographic tactile three-dimensional form
- cartographic three-dimensional form
- computer dataset
- computer program
- notated movement
- notated music
- performed music
- sounds
- spoken word
- still image
- tactile image
- tactile music
- tactile notated movement
- tactile text
- tactile three-dimensional form
- text
- three-dimensional form
How RDA Solves Accessible Formats Cataloging Problems?

- Information stored as **data elements** NOT **text strings**
- Solving the problem of 5XX note fields
- Great manipulation
- Data unambiguously defined
- Enhanced catalog functions
  - Accurate searching
  - Sound display
How RDA Solves Accessible Formats Cataloging Problems?

- Bibliographic and intellectual relationships
- Compare resource versions
- Clear definition of roles (braille embosser, transcriber,...)
- Enhanced catalog navigation
How RDA Solves Accessible Formats Cataloging Problems?

- Preferred Access Points!

- Permit the construction of access points for the **Expressions** not only the Works

- Solve the problem of accessible format vs. original format

- Permit construction of access points by the Creators of the accessible format
  - Recording institution of DAISY items
  - Narrator of a talking book

For senior high and adult. $HNLS/BPH

Also available for download from HAVD/Web-Braille as digital Braille.

Users must register with their cooperating library.


$English Braille, American edition (contracted braille).

$Description based on the print edition used for the Braille transcription.

@Vocabulary. $Downloadable books.

@HConAction.

@Braille books.$2ldcgt

@American Heritage college dictionary.

660 01a 100 words series

$1$DL-C08-88R 15198$HNLS/BPH

$0@http://hdl.loc.gov/loc.nclc/br.15198v01$3Volume 1.

$700 $DC035$OB00R6

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$bjaya 08/04/2004

$Distributed August 2004

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$HNLS BR GRP1

$HNLS NAT
001 726138
005 20160401192048.0
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008 11085876323012 crunnnnes | n eng
010 $a 2011962225
040 $aDLC-B$bdeng@DLC-B
043 $aen-us---
072 75@TRAVAN$SNBDL
080 0550317 $aAW$8$222
084 $a$8 736635$2z
245 04$aThe 10 best of everything national parks [sound recording] : $b$80000 top picks from coast to coast / c$9introduction by Fran P. Maiella.
246 3 $aTen best of everything national parks
300 $a$3Online resource (audio (26 hours, 31 minutes))
306 $a$263100
336 $aspoken word$bspu$2rdacontent
337 $aaudio$bs$2rdacontent
338 $acomputer$bc$2rdacontent
340 $aonline resource$bscr$2rdacontent
346 $a$9digitalmonographs$2rda
367 $aaudio $f$10digital$3monographs$2rda
385 $a$$a$eadults$2lcc
dgt
506 $a$ availability restricted to persons meeting the eligibility requirements of the National Library Service for the Blind and Physically Handicapped, Library of Congress.
511 0 $aHarrington by: Kerry Dukin.
516 $aDigital talking book. 3 levels. Digitally mastered.
520 $aFor this guide to exploring America’s National Parks, National Geographic Society editors consulted nature writers and outdoor enthusiasts to identify eighty areas of interest—as such natural wonders, wildlife, history, day hikes, and campgrounds, cuisine—and recommend the ten best parks in each category. 2011.
521 $aPredicate$9female narrator.$5WLS/$8BH
530 $aMay also be available for loan on cartridge. Contact your cooperating library for more information.
5707831426287341
530 $aFull audio with structure.
550 $a$9description based on cassette record.
593 $a$93/4cm
596 $a$9Digital
655 $a$9national parks and reserves$9United States.
655 $a$9downloadable books.
655 $a$9nonfiction.
655 $a$9talking books$8c$7rest
700 1 0 $aDukin, Kerry, $e narrator.
710 2 0 $aNational Geographic Society (U.S.)
852 $l$7DLC-B$8$8 736635$9WLS/$8BH
1. **Harry Potter and the Half-Blood Prince**
   by J K Rowling; Mary GrandPé
   Print book: Fiction : Juvenile audience  View all formats and languages »
   Language: English
   Database: WorldCat
   View all editions »

2. **Harry Potter and the Chamber of Secrets**
   by David Heyman; Steven Klop's; Chris Columbus; Daniel Radcliffe; Emma Watson; Rupert Grint; Kenneth Brannagh; John Cleese; Robbie Coltrane; Warwick Davis; Richard Griffiths; Richard Harris; Jason Isaacs; Alan Rickman; Fiona Shaw; Maggie Smith; Julie Walters; John Williams; J K Rowling; Warner Bros.
   Pictures (1969-); Heyday Films.; 1492 Pictures.;
   DVD video  Computer File  View all formats and languages »
   Language: English
   Database: WorldCat
   View all editions »

3. **Harry Potter and the Goblet of Fire**
   by Mike Newell; David Heyman; Steven Klov's; Daniel Radcliffe; Emma Watson; Rupert Grint; Maggie Smith; Gary Oldman; Roger Pratt; Patrick Doyle; J K Rowling; Heyday Films.; Warner Bros. Pictures (1969-); Warner Home Video (Firm);
   DVD video : NTSC color broadcast system  View all formats and languages »
   Database: WorldCat
   View all editions »
1. Harry Potter and the prisoner of Azkaban
   by J K Rowling
   Braille book : Braille : Fiction : Juvenile audience
   Language: English
   Database: WorldCat.

2. Harry Potter and the goblet of fire
   by J K Rowling
   Braille book : Braille : Fiction : Juvenile audience
   Language: English
   Publisher: [Boston, Mass.] : National Braille Press, [2000]
   Database: WorldCat.

3. Harry Potter and the sorcerer's stone
   by J K Rowling
   Braille book : Braille : Fiction : Juvenile audience
   Language: English
Thank You