

Metadata Standards

MARC, DC, METS, MODS, EAD

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Online Guest Lecture Series

Department of Library and Information Science

Central University of Himachal Pradesh

21 June 2021

Data and Metadata

49204084041

Data

- Cricket Score - India - All Out 36
- Lowest Total in Test history by India.
- First Test. India Vs Australia.
Adelaide. Saturday, Dec 17-19, 2020.
- Second innings in First Pink Ball Test

Metadata

Cricketer	Score
Prithvi Shaw	4
Mayank Agarwal	9
Jasprit Bumrah	2
Cheteshwar Pujara	0
Virat Kohli	4
Ajinkya Rahane	0
Hanuma Vihari	8
Wriddhiman Saha	4
Ravichandran Ashwin	0
Umesh Yadav	4
Mohammad Sami	1



Lecture - 5 METADATA

File Name Dr. Nanaji Shewale.jpg
File Size 78 KiB
File Type JPEG
File Type Extension jpg

Designation Librarian
Institute Gokhale Institute of
Politics and Economics
Place Pune, Maharashtra

Image Size 402x531
Megapixels .0213
Raw Header FF D8 EF E0 10 4A
Standard Exif



21st June 2021
4.30 - 5.30

Metadata Elements Example

File Name Dr. Nanaji Shewale.jpg
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21st June 2021
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Central University of Himachal Pradesh

Lecture - 5 METADATA

Muruli N



What is Metadata?

- Metadata is structured information that
 - describes, explains, locates, or otherwise makes it easier to retrieve, use, or manage an information resource.
- Metadata is often called
 - data about data or
 - information about information.
- Metadata is key to ensuring that
 - resources will survive and continue to be accessible forever.

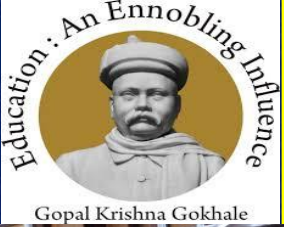
Metadata Definitions

- Data describing content, content, and structure of records and their management through time. *ISO Records Management Standard*
- Data describing stored data: that is, data describing the structure, data elements, interrelationships, and other characteristics of electronic records. *US Department of Defense*
- Structured information that describes, explains, locates, or otherwise makes it easier to retrieve, use, or manage an information resource. *US National Information Standards Organization (NISO)*

Importance of Metadata

- Recent **Veritas Report** on unlocking the value of data found that
- On average, employees **lose two hours a day** searching for data
- Resulting in a **16 percent drop** in workforce efficiency.
- For organization of **1,000 workers** that are dependent on data,
- The inability to find the right data at the right time costs that organization **£16m a year**.

- <https://www.veritas.com/news-releases/2019-03-12-data-management-challenges-cost-millions-a-year-reveals-veritas-research>



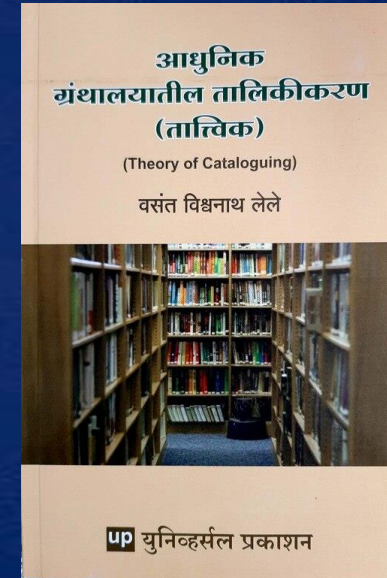
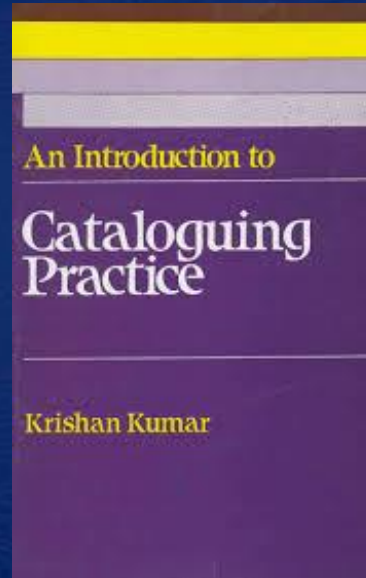
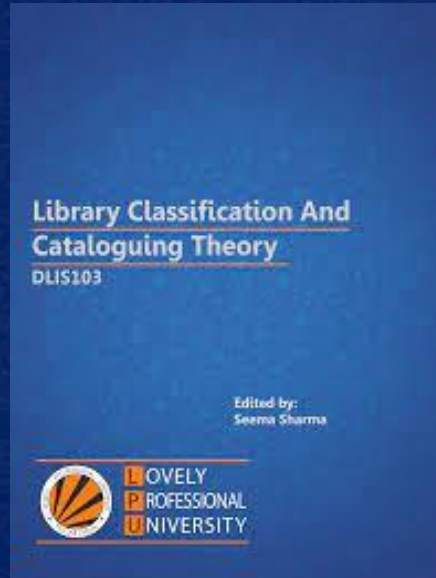
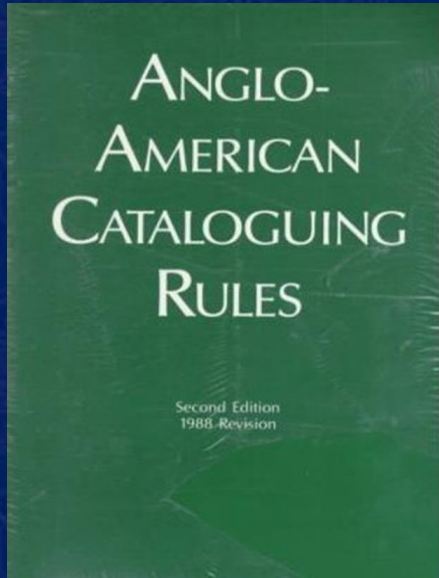
Metadata in Libraries



Metadata use in Libraries

- Means of cataloging items in libraries in both digital and analog format.
- Helps classify, aggregate, identify, and locate a particular object a library might hold in its collection.
- Until the 1980s, catalogue cards used to display a book's title, author, subject matter, and call number, etc.
- Classification Systems like DDC, CC are the early example of metadata usage.
- Metadata is obtained by cataloguing the library resources
- This Metadata is stored in ILMS, using the MARC metadata standard.
- Purpose - To direct patrons to the physical or electronic location of items

Metadata Type - Descriptive



Metadata Type - Structured

No	Title	Author	Publisher	Year	Amount
1	Anglo American Cataloguing Rules (AACR)	Gorman, Michael	American Library Association, US	1978	500
2	Library Classification and Cataloguing Theory	Sharma, Seema	Lovely Professional University, Chandigarh	2015	600
3	An introduction to Cataloguing Practice	Kumar, Krishan	Oxford University Press, Delhi	1998	700
4	आधुनिक ग्रंथालयातील तालिकीकरण (तात्विक)	लेले, व. वि.	युनिव्हर्सल पब्लिकेशन्स, पुणे	2005	800
5	Library Cataloguing Theory	Lal, C	EEP Publishers, Delhi	2007	900

Types of Metadata

- **Descriptive metadata** describes a resource for purposes such as discovery and identification. It can include elements such as title, abstract, author, and keywords.
- **Structural metadata** indicates how compound objects are put together, for example, how pages are ordered to form chapters.
- **Administrative metadata** provides information to help manage a resource, such as **when and how** it was created, **file type** and other technical information, and **who can access** it.
 - **Rights management metadata**, which deals with intellectual property rights,
 - **Preservation metadata**, which contains information needed to archive and preserve a resource

What Does Metadata Do?

- Resource Discovery
 - Allowing resources to be found by relevant criteria;
 - Identifying resources;
 - Bringing similar resources together;
 - Distinguishing dissimilar resources; and
 - Giving location information
- Organizing Electronic Resources
- Interoperability
- Digital Identification
- Archiving and Preservation

Metadata Schemes / Schema

- Sets of metadata elements designed for a specific purpose
- For describing a particular type of information resource.
 - MARC, MARC21
 - Dublin Core
 - The Text Encoding Initiative (TEI)
 - Metadata Encoding and Transmission Standard (METS)
 - Metadata Object Description Schema (MODS)
 - The Encoded Archival Description (EAD)
 - Learning Object Metadata
 - E-Commerce – and ONIX
 - Visual Objects – CDWA and VRA
 - MPEG Multimedia Metadata

A large white rectangular sign is mounted on two grey metal poles. The sign is positioned over a two-lane asphalt road that stretches into the distance. The background features rolling brown and green hills under a bright blue sky with wispy clouds. The sun is visible in the distance, creating a lens flare effect.

**Genesis of Machine Readable
Cataloguing from
USMARC to MARC21**

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Librarian

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Zelazny, Roger 1937-1995

SCIFI
ZEL

Nine princes in amber [1st ed.], by
Roger Zelazny. Garden City, NY,
Doubleday [1970]

188 p. ; 22 cm.

Cover art: Amelia S. Edwards.

FOR USE IN MERRIL COLLECTION ONLY.
NOT AVAILABLE FOR INTERLIBRARY LOAN

1. Amber (Imaginary place)--Fiction.
I. Title





MARC

MAchine **R**eadable **C**ataloguing. “**Machine-readable**” means that one particular type of machine, a computer, can read and interpret the data in the cataloguing record. “**Cataloguing record**” means a **Bibliographic Record**, or the information traditionally shown on a catalogue card.

Bibliographic Record?

- **Bibliographic description** stored either manually or electronically.
- Information about an item, recorded in a standard format and held in a database. **Cards / online catalog**.
- Bibliographic record **includes** call number, author, title, publication information, paging, subject headings, etc.
- **Uses** Character strings, including a record label, a directory, and a bibliographic data describing one entity.

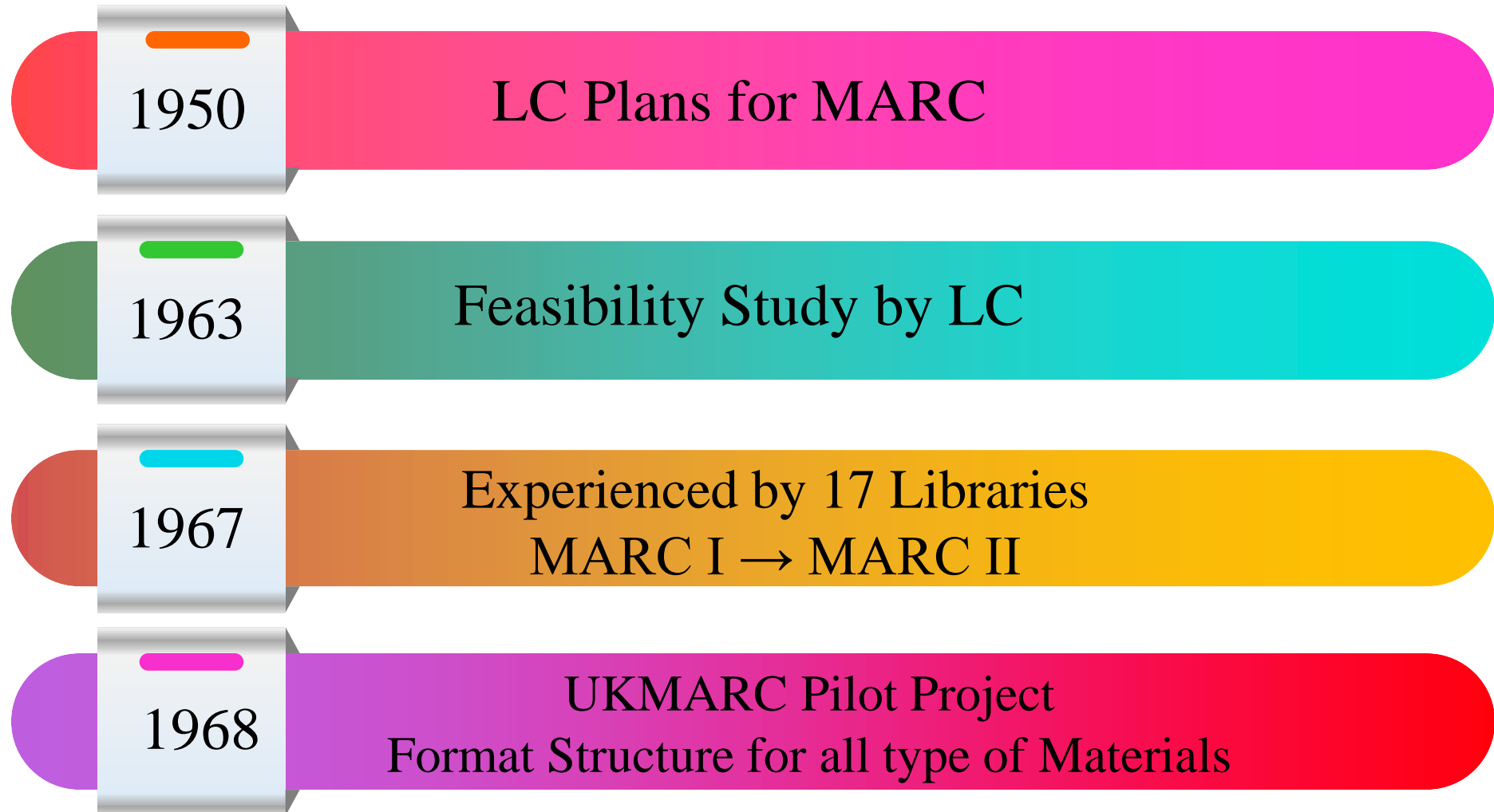
MARC

Machine Readable Cataloguing

- **MARC** standards are a set of digital formats for the description of items catalogued by libraries, such as books.
- American computer scientist **Henriette Avram** developed MARC in the 1960s to create records that could be read by computers and shared among libraries



MARC: History



Communication Barriers

- ✗ Lack of International Cataloguing Standards
- ✗ Lack of International Subject Control Systems
- ✗ Variety Classification Systems
- ✗ Language Difficulties.
- ✗ Character Sets, Codes, Non-Roman Alphabets
- ✗ Exchange of Bibliographic Records
- ✗ Various Roles of National Bibliographies / Libraries

UNIMARC: Solution?

Features

Co-op effort of 16 Countries
Implements ISBD
Multilingual Material
Material Specification Independent
Stability – Tags, Indicators, Subfields
Abridging Format between different MARC
Independent of Cataloguing Codes
Accommodates Local / Specific Data

UNIMARC based MARC Formats

SAMARC, Chinese MARC,
JAPANMARC, YU-MARC (croatia)
1st Ed – 1977, 2nd Ed – 1980
Scope –tags, indicators, subfiled codes
Facilitate International Data Exchange
Format X → UNIMARC → Format Y

UNIMARC: UNIversal MARC

Development

- Developed by IFLA, 1977
- UNIMARC Handbook, 2nd ed., 1980
- UNIMARC Manual, 1983
- Need for international ‘switching’ format

Scope

- Specify the content designators (tags, indicators and subfield codes)
- Covers monographs, serials, cartographic materials, music, sound recordings, graphics, projected and video materials, rare books and electronic resources.

Purpose

- Facilitate the international exchange of bibliographic data in MARC form between national bibliographic agencies.
- UNIMARC - a model for the development of new machine-readable bibliographic formats.

Users

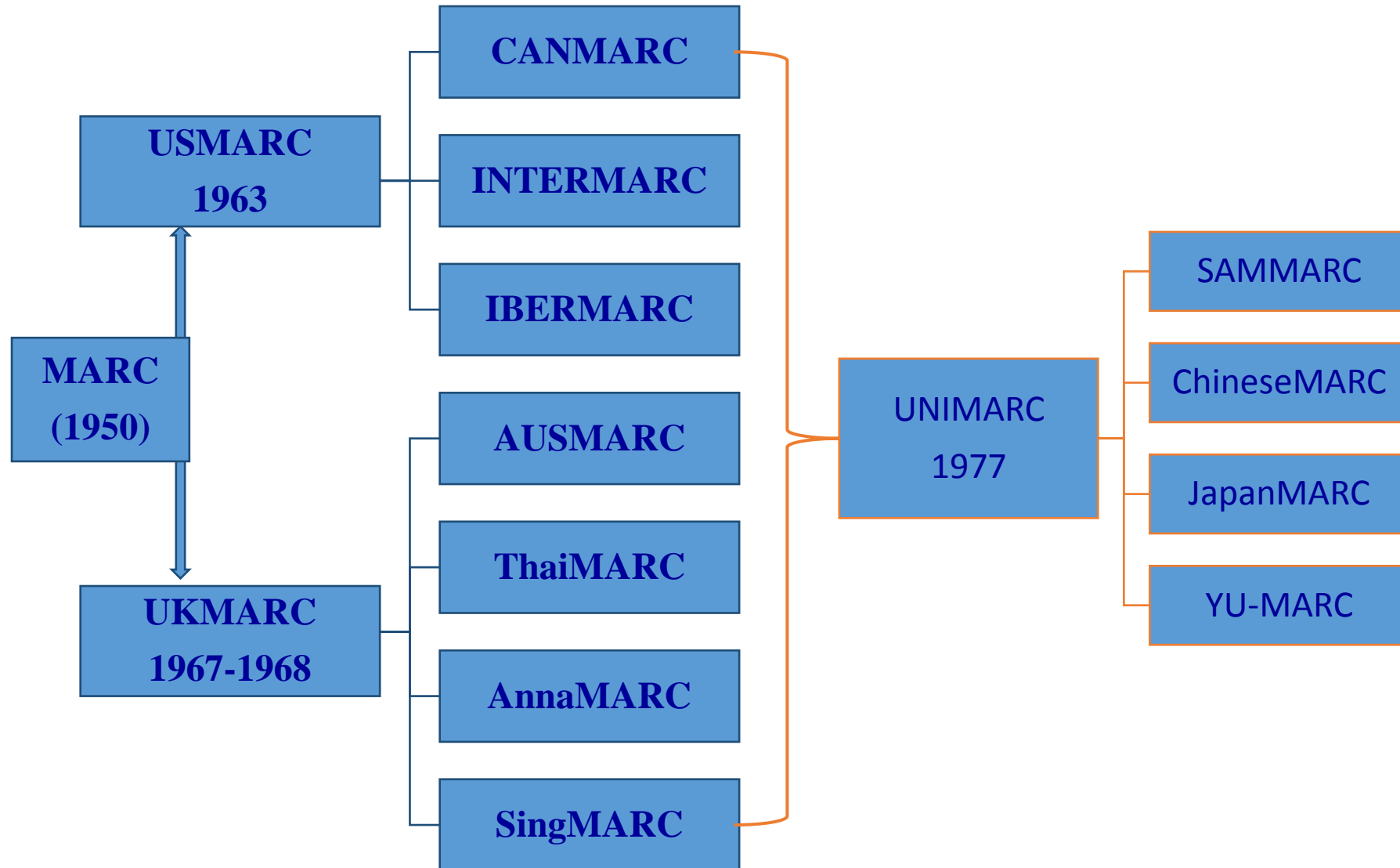
- National libraries for international exchange
- Certain countries for exchange between national library and others

CCF: Common Communication Format

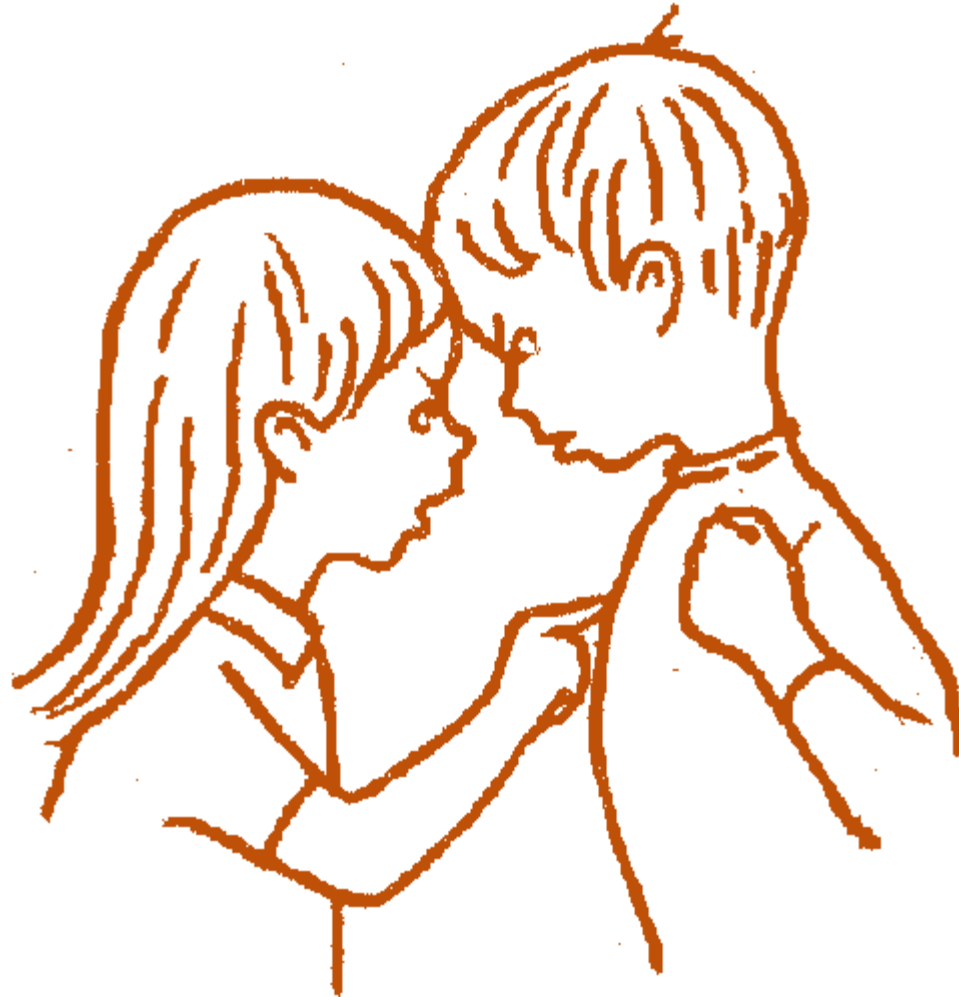
- Symposium organised by the UNISIST in 1978 on Bibliographic Exchange Formats
- On recommendations of the Symposium
- UNESCO formed the ad-hoc group on the establishment of the CCF.
- Published in 1984, second ed. in 1988.
- Users
 - S&T sector
 - Commonly in India
 - UN agencies

UNISIST – United Nations International Scientific Information System

Summary - History of MARCs



My MARC is the Best?



Towards MARC21

- Usage of Various MARCs

	UKMARC	UNIMARC	USMARC
1986	6	10	7
1992	4	20	11

- LC and BL Meet : on 21 June 1994

- For harmonization and simplification of USMARC and UKMARC
- Compatibility with ultimate goal to achieve one single MARC

- MARC21

- In 1999 LC and NLC merged USMARC and CANMARC to MARC21
- Published *MARC21 Format for Bibliographic Data*
- MARC21 Documentation maintained by LC

MARC21

- Formerly called US MARC
- Marketed as international
- Universality of UNIMARC not satisfactory
- National Library of Canada adopted
- British Library abandoned UKMARC
- Uses the ISO 2709 record structure
- Huge number of records available
- Format not proprietary
- Allows variable length and repeatable fields and subfields





Bibliographic Data

Authority Data

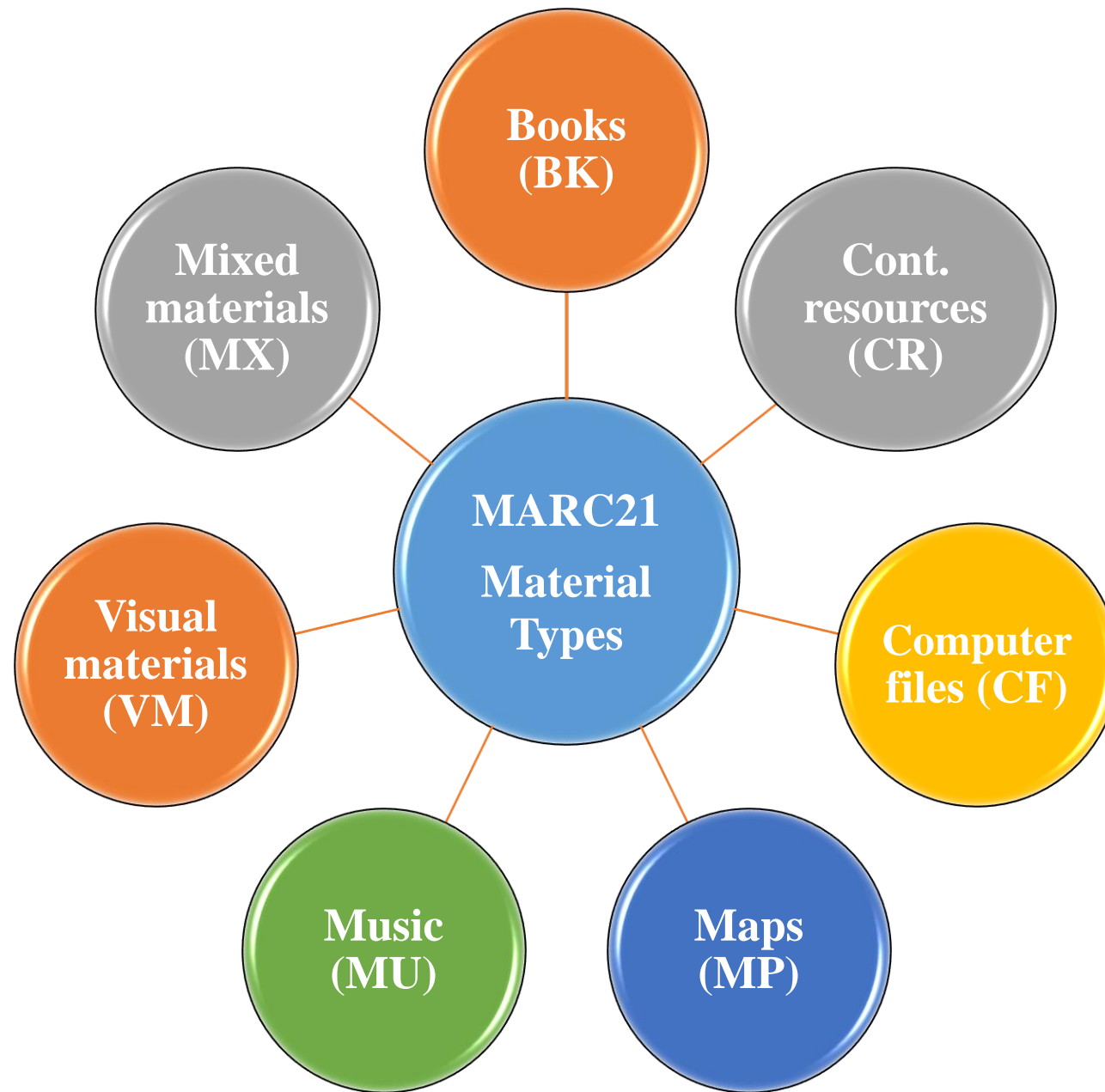
Holdings Data

Classification Data

Community Information

Designed for information about related events, programs, etc. and common data that can be integrated into a public access catalog, etc.

MARC21 Types of Material



MARC21 Structure

Structure

- Structure of MARC Record is an implementation of International standards like ISO 2709 / ANSI Z39.2

Content Designation

- Fields, subfields, etc. to identify explicitly and characterize further the data elements within a record


Content

- Data elements identified by standards outside the formats. e.g. AACR, LCSH, NLMC

MARC21: Commonly used Tags

Tag	Data Field
010	Library of Congress Control Number (LCCN)
020	International Standard Book Number (ISBN)
100	Personal name main entry (author)
245	Title information
250	Edition
260	Publication information
300	Physical description / collation
490	Series statement
520	Annotation or summary note
650	Topical subject heading
700	Personal name added entry (joint author, editor, or illustrator)

AACR2R Catalogue Card


	Brenner, Richard J., 1941-	
PN12345	Make the team. Soccer : a heads up guide to super soccer!/Richard J	
	Brenner . -- 1st ed. -- Boston : Little, Brown, c1990.	
	127 p. : ill. ; 19 cm.	
	"A Sports illustrated for kids book."	
	Summary: Instructions for improving soccer skills. Discusses	
	dribbling, heading, playmaking, defense, conditioning, mental attitude, how to	
	handle problems with coaches, parents, and other players, and the history of	
	soccer.	
	ISBN 0316107514 : \$12.95	
	1. Soccer -- Juvenile literature. 2. Soccer. II. Title: Heads up guide to	
	super soccer. II. Title.	
	Dewey Class no.: 796.334/2 -- dc 20	89-48230
		MARC

0XX

1XX

250

245

	Brenner, Richard J., 1941-		
PN12345	Make the team. Soccer : a heads up guide to super soccer!/Richard J		
	Brenner . -- 1st ed. -- Boston : Little, Brown, c1990.		260
	127 p. : ill. ; 19 cm.	3XX	
	"A Sports illustrated for kids book."		5XX
	Summary: Instructions for improving soccer skills. Discusses		
	dribbling, heading, playmaking, defense, conditioning, mental attitude, how to		
	handle problems with coaches, parents, and other players, and the history of		
	soccer.		
		0XX	
	ISBN 0316107514 : \$12.95		
	1. Soccer -- Juvenile literature. 2. Soccer. I. Title: Heads up guide to		
	super soccer. II. Title.		
	Dewey Class no.: 796.334/2 -- dc 20	0XX	89-48230
			MARC

Mnemonic Catalogue Record

TITLE: Make the team. Soccer : a heads up guide to super soccer! / Richard J. Brenner.

ADDED TITLE: Heads up guide to super soccer

AUTHOR: Brenner, Richard J., 1941-

PUBLISHED: 1st ed. Boston : Little, Brown, c1990.

MATERIAL: 127 p. : ill. ; 19 cm.

NOTE: "A Sports illustrated for kids book."

NOTE: Instructions for improving soccer skills. Discusses dribbling, heading, playmaking, defense, conditioning, mental attitude, how to handle problems with coaches, parents, and other players, and the history of soccer.

SUBJECT: Soccer--Juvenile literature. Soccer.

Copies Available: PN12345

MARC21 Record: An Example

Leader 01041cam 2200265 a 4500

Control No. 001 ###89048230

Fixed Data 008 891101s1990 maua j 001 0 eng

LCCN 010 ## \$a ###89048230

ISBN 020 ## \$a 0316107514 : \$c \$12.95

ISBN 020 ## \$a 0316107506(pbk.):\$c \$5.95
(\$6.95Can.)

Cat. Source 040 ## \$a DLC \$c DLC \$d DLC

LC Call No. 050 00 \$a GV943.25 \$b .B74 1990

Dewey No. 082 00 \$a 796.334/2 \$2 20

MARC21 Record: An Example

ME:Pers Name 100 1# \$a Brenner, Richard J., \$d 1941-

Title 245 10 \$a Make the team. \$p Soccer : \$b a heads up guide to super soccer! / \$c Richard J. Brenner.

Variant Title 246 30 \$a Heads up guide to super soccer

Edition 250 ## \$a 1st ed.

Publication 260 ## \$a Boston : \$b Little, Brown, \$c c1990.

Phys Desc 300 ## \$a 127 p. : \$b ill. ; \$c 19 cm.


Note: General 500 ## \$a “A Sports illustrated for kids book”.

Note: Summary 520 ## \$a Instructions for improving soccer skills. Discusses dribbling, heading, playmaking, defense, conditioning, mental attitude, how to handle problems with coaches, parents, and other players, and the history of soccer.

Subj: Topical 650 #0 \$a Soccer \$v Juvenile literature.

Subj: Topical 650 #1 \$a Soccer.

AACR2 Catalogue Record: An Example

	Brenner, Richard J., 1941-	
PN12345	Make the team. Soccer : a heads up guide to super soccer!/Richard J	
	Brenner . -- 1st ed. -- Boston : Little, Brown, c1990.	
	127 p. : ill. ; 19 cm.	
	"A Sports illustrated for kids book."	
	Summary: Instructions for improving soccer skills. Discusses	
	dribbling, heading, playmaking, defense, conditioning, mental attitude, how to	
	handle problems with coaches, parents, and other players, and the history of	
	soccer.	
	ISBN 0316107514 : \$12.95	
	1. Soccer -- Juvenile literature. 2. Soccer. II. Title: Heads up guide to	
	super soccer. II. Title.	
	Dewey Class no.: 796.334/2 -- dc 20	89-48230
		MARC

MARC21 Record Structure

Leader

- Contains coded values and are identified by relative character position
- Define the parameters for processing the record.
- Leader is a fixed in length, 24 Characters, and
- Occurs at the beginning of each MARC record.

Directory

- Contains the tag, starting location and length of each field within record.
- Length of directory entry is defined in the entry map of Leader/20-23
- In MARC21, length of a directory entry is 12 characters
- It ends with a *field terminator character*.

Variable Fields

- Data content of a record is divided into variable fields.
- Variable Control Fields - Coded Fields 007 & 008
- Variable Data Fields

MARC21 Terminologies

Field:	Each bibliographic record divided into Fields which are subdivided into subfields. E.g. Author, Title, Edition, etc.
Subfield:	Most fields contain several related pieces of data. Each type of data within the field is called subfield. E.g. Author Last Name, First Name, Date, etc
Tag:	Each Field is represented with a 3 digit number called a “tag” It identifies the field and the kind kind of data that follows. Tag can be Alphabetic or Numeric - Z39.2, MARC21 uses only Numeric Tags Stored in the Directory and not in the field itself
Indicator:	Two character positions following the tag. One or both the positions are used. Undefined indicators are blank, i.e. #
Subfield Code:	One lowercase letter preceded by delimiter, indicates the type of data that follows it.
Delimiter:	A Character used to separate subfields. It can be @, \$, _ or ^ as in WINISIS.

MARC21: Blocks and Divisions

Code	Area
0XX	Control information, numbers, codes
1XX	Main entries
2XX	Titles, edition, imprint
3XX	Physical description, etc.
4XX	Series statements
5XX	Notes
6XX	Subject added entries
7XX	Added entries other than subject or series
8XX	Series added entries (other authoritative forms)
9XX	Used for locally-defined uses

MARC21: 0XX

Control Information, Numbers, Codes

- 001 – Control Number
- 003 – Control Number Identifier
- 005 – Date and Time of Latest Transaction
- 006 - Fixed-Length Data Elements - Additional Material Characteristics
- 007 - Physical Description Fixed Field
- 008 - Fixed-Length Data Elements
- 010 - Library Of Congress Control Number (NR)
- 015 - National Bibliography Number (R)
- 020 - International Standard Book Number (R)**
- 022 - International Standard Serial Number (R)**
- 024 - Other Standard Identifier (R)
- 040 - Cataloging Source (NR)
- 082 - Dewey Decimal Classification Number (R)**
- 084 - Other Classification Number (R)

MARC21: 1XX

Main Entry Fields

100 - Main Entry--Personal Name (NR)

100 1#\$aAdams, Henry,\$d1838-1918.

110 - Main Entry--Corporate Name (NR)

110 1#\$aUnited States.\$bCourt of Appeals (2nd Circuit)

111 - Main Entry--Meeting Name (NR)

111 2#\$aParis Peace Conference\$d(1919-1920)

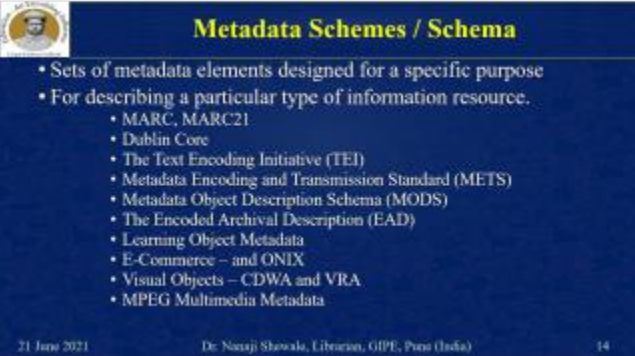
130 - Main Entry--Uniform Title (NR)

130 0#\$aBible.\$lEnglish.\$sAuthorized.\$kSelections.\$f1970.

MARC21: 20X – 24X

Title and Related information Block

- 210 - Abbreviated Title (R)
- 222 - Key Title (R)
- 240 - Uniform Title (NR)
- 242 - Translation Of Title By Cataloging Agency (R)
- 243 - Collective Uniform Title (NR)
- 245 - Title Statement (NR)**
- 246 - Varying Form Of Title (R)
- 247 - Former Title (R)



Metadata Schemes / Schema

- Sets of metadata elements designed for a specific purpose
- For describing a particular type of information resource.
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 - Visual Objects – CDWA and VIRA
 - MPEG Multimedia Metadata

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245: MARC21 Sub-Fields and Indicators

245 - TITLE STATEMENT (NR)

Indicators

First - Title added entry

0 - No added entry

1 - Added entry

Second - Nonfiling characters

0-9 - Number of nonfiling characters

Subfield Codes

\$a - Title (NR)

\$b - Remainder of title (NR)

\$c - Statement of responsibility, etc. (NR)

\$f - Inclusive dates (NR)

\$g - Bulk dates (NR)

\$h - Medium (NR)

\$k - Form (R)

\$s - Version (NR)

\$n - Number of part/section of a work (R)

\$p - Name of part/section of a work (R)

MARC21: Tags, Sub-Fields and Indicators

245 03 \$a Le Bureau**\$h**[filmstrip] =**\$b**La Oficina = Das Büro.

245 00 \$a Hamlet ;**\$b**Romeo and Juliette ; Othello...

245 00 \$a Oklahoma**\$h**[sound recording] ;**\$b**Carousel ; South Pacific...

245 00 \$a Map of Nelson, Richmond, Motueka :**\$b**scale 1:20000.

245 15 \$a The "winter mind" :**\$b**William Bonk and American letters /**\$c**Burt Kimmelman.

245 00 \$a Love from Joy :**\$b**letters from a farmer's wife. **\$n**Part III,**\$p**1987-1995, At the bungalow.

MARC21: 25X – 28X

Edition, Imprint, Etc. Fields

- 250 - Edition Statement (NR)**
- 254 - Musical Presentation Statement (NR)
- 255 - Cartographic Mathematical Data (R)
- 256 - Computer File Characteristics (NR)
- 257 - Country Of Producing Entity For Archival Films (NR)\
- 258 - Philatelic Issue Data (R)
- 260 - Publication, Distribution, Etc. (Imprint) (R)**
- 263 - Projected Publication Date (NR)
- 264 - Production, Publication, Distribution, Manufacture, and Copyright Notice (R)
- 270 - Address (R)

MARC21: 3XX

Physical Description, Etc.

300 - Physical Description (R)

- 306 - Playing Time (NR)
- 307 - Hours, etc. (R)
- 310 - Current Publication Frequency (NR)
- 321 - Former Publication Frequency (R)
- 336 - Content Type (R)
- 337 - Media Type (R)
- 338 - Carrier Type (R)
- 340 - Physical Medium (R)
- 342 - Geospatial Reference Data (R)
- 343 - Planar Coordinate Data (R)
- 344 - Sound Characteristics (R)
- 345 - Projection Characteristics of Moving Image (R)
- 346 - Video Characteristics (R)
- 347 - Digital File Characteristics (R)
- 348 - Format of Notated Music (R)
- 351 - Organization and Arrangement of Materials (R)
- 352 - Digital Graphic Representation (R)

355 - Security Classification Control (R)

357 - Originator Dissemination Control (NR)

362 - Dates of Publication and/or Sequential Designation (R)

363 - Normalized Date and Sequential Designation (R)

365 - Trade Price (R)

366 - Trade Availability Information (R)

370 - Associated Place (R)

377 - Associated Language (R)

380 - Form of Work (R)

381 - Other Distinguishing Characteristics of Work or Expression (R)

382 - Medium of Performance (R)

383 - Numeric Designation of Musical Work (R)

384 - Key (NR)

385 - Audience Characteristics (R)

386 - Creator/Contributor Characteristics (R)

388 - Time Period of Creation (R)

MARC21: 490 / 8XX

Series Statement / Series Added Entries

490 - Series Statement (R)

800 - Series Added Entry - Personal Name (R)

810 - Series Added Entry - Corporate Name (R)

811 - Series Added Entry - Meeting Name (R)

830 - Series Added Entry - Uniform Title (R)

MARC21: 5XX

- 500 - General Note (R)**
- 501 - With Note (R)
- 502 - Dissertation Note (R)
- 504 - Bibliography, Etc. Note (R)**
- 505 - Formatted Contents Note (R)
- 506 - Restrictions On Access Note (R)
- 510 - Citation/references Note (R)
- 520 - Summary, Etc. (R)**
- 521 - Target Audience Note (R)
- 525 - Supplement Note (R)
- 538 - System Details Note (R)
- 546 - Language Note (R)
- 567 - Methodology Note (R)
- 580 - Linking Entry Complexity Note (R)
- 59x - Local Notes

MARC21:6XX

Subject Access Entries

600 - Subject Added Entry - Personal Name (R)

610 - Subject Added Entry - Corporate Name (R)

611 - Subject Added Entry - Meeting Name (R)

630 - Subject Added Entry - Uniform Title (R)

650 - Subject Added Entry - Topical Term (R)

647 - Subject Added Entry - Named Event (R)

648 - Subject Added Entry - Chronological Term (R)

651 - Subject Added Entry - Geographic Name (R)

653 - Index Term - Uncontrolled (R)

654 - Subject Added Entry - Faceted Topical Terms (R)

655 - Index Term - Genre/Form (R)

656 - Index Term - Occupation (R)

657 - Index Term - Function (R)

658 - Index Term - Curriculum Objective (R)

662 - Subject Added Entry - Hierarchical Place Name (R)

69X - Local Subject Access Fields (R)

MARC21: 70X – 75X

Added Entry Fields

- 700** - Added Entry - Personal Name (R)
- 710** - Added Entry - Corporate Name (R)
- 711** - Added Entry - Meeting Name (R)
- 720** - Added Entry - Uncontrolled Name (R)
- 730** - Added Entry - Uniform Title (R)
- 740** - Added Entry - Uncontrolled Related/Analytical Title (R)
- 751** - Added Entry - Geographic Name (R)
- 752** - Added Entry - Hierarchical Place Name (R)
- 753** - System Details Access to Computer Files (R)
- 754** - Added Entry - Taxonomic Identification (R)
- 758** - Resource Identifier (R)

MARC21: 841 – 88X

Holdings, Alternate Graphics, Etc

850 - Holding Institution

852 - Location (R)

852 ##\$aNational Archives and Records Service\$bGenealogical Research Recording

856 - Electronic Location and Access (R)







856 4# <http://dspace.gipe.ac.in/xmlui/handle/10973/49054>

856 4# <https://www.loc.gov/marc/umb/>

MARC21: 942

Local Information

942 ? - ADDED ENTRY ELEMENTS (KOHA) 

▲ 2	Source of classification or shelving scheme	<input type="text" value="Dewey Decimal Classification"/>  
▲ c	Koha [default] item type *	<input type="text" value="Book"/>  
▲ e	Edition	<input type="text"/> 
▲ h	Classification part	<input type="text"/>
▲ i	Item part	<input type="text"/> 
▲ k	Call number prefix	<input type="text"/>
▲ m	Call number suffix	<input type="text"/>
▲ n	Suppress in OPAC	<input type="text"/>

0 - Withdrawn status

1 - Lost status

2 - Source of classification

3 - Materials (bound or other part)

4 - Damaged status

5 - Use restrictions

7 - Not for loan

8 - Collection code

a - Permanent location

b - Current location

c - Shelving location

d - Date acquired

e - Source of acquisition

f - Coded location qualifier

g - Cost, normal purchase price

h - Serial Enumeration / chronology

j - Shelving control number

o - Full call number

p - Barcode

t - Copy number

u - Uniform Resource Identifier

v - Cost, replacement price

w - Price effective from

x - Non-public note

y - Koha item type

z - Public note

MARC21: Reading List

1. The Internationalization of MARC

- **Part I -** The emergence and divergence of MARC. Library Review 44(4) 1995
- **Part II -** Some Marc formats based on USMARC. Library Review 44(6) 1995
- **Part III -** Some MARC formats based on UKMARC: Library Review 44(6) 1995
- **Part IV -** UNIMARC : some formats based on it and some other MARC formats. Library Review 44(7) 1995

2. Understanding MARC Bibliographic: Machine Readable Cataloguing

<http://lcweb.loc.gov/marc/umb/umbhome.html>

3. MARC21 Concise format for Bibliographic Data : 2001 Concise Edition

<http://lcweb.loc.gov/marc/bibliographic/ecbdhome.html>

4. Bibliographic Formats and Standards / OCLC. 3rd edition

<http://www.oclc.org/bibformats/>



Dublin Core

- Discussions at a 1995 workshop sponsored by **OCLC** and the National Center for Supercomputing Applications (**NCSA**).
- As the workshop was held in **Dublin, Ohio**, the element set was named the Dublin Core.
- Dublin Core and related specifications is managed by the **Dublin Core Metadata Initiative (DCMI)**.
- Original objective - to define a set of elements that could be used **by authors** to describe their own Web resources.
- Goal was to define a few elements and some simple rules that could be applied by **non-catalogers**.
- Original **13 core elements** were later increased to 15

Dublin Core Elements

Dublin Core Elements

Rights	Contributor	Creator
Subject	Coverage	Title
Publisher	Identifier	Description
Type	Date	Source
Relation	Format	Language

Dublin Core Example

Title="Metadata Demystified"

Creator="Brand, Amy"

Creator="Daly, Frank"

Creator="Meyers, Barbara"

Subject="metadata"

Description="Presents an overview of metadata conventions in publishing."

Publisher="NISO Press"

Publisher="The Sheridan Press"

Date="2003-07"

Type="Text"

Format="application/pdf"

Identifier=http://www.niso.org/standards/resources/Metadata_Demystified.pdf

Language="en"

DC Example from DSpace@GIPE

```
<?xml version="1.0" encoding="utf-8" standalone="no"?>
```

```
<dublin_core schema="dc">
```

```
<dcvalue element="title" qualifier="none">Third conference on health for all to universal health coverage:  
Journey so far and challenges ahead</dcvalue>
```

```
<dcvalue element="contributor" qualifier="author">Indian Health Economics and Policy Association  
(IHEPA)</dcvalue>
```

```
<dcvalue element="identifier" qualifier="uri">no-content.pdf</dcvalue>
```

```
<dcvalue element="identifier" qualifier="uri">GIPE-41-20.pdf</dcvalue>
```

```
<dcvalue element="identifier" qualifier="citation">39 p</dcvalue>
```

```
<dcvalue element="type" qualifier="none">Book</dcvalue>
```

```
<dcvalue element="identifier" qualifier="accno">GIPE-41-20</dcvalue>
```

```
<dcvalue element="publisher" qualifier="none">Indian Health Economics and Policy Association (IHEPA),  
Dharwad</dcvalue>
```

```
<dcvalue element="date" qualifier="issued">2014</dcvalue>
```

```
</dublin_core>
```

Metadata – Simple Record

DSpace@GIPE / Dhananjayrao Gadgil Library / GIPE Workshop / Conference / Seminars / View Item

Third Conference on Health for All to Universal Health Coverage: Journey so far and Challenges Ahead. 06-07 January 2014 (PDF)



URI
no-content.pdf
GIPE-41-20.pdf
<http://hdl.handle.net/10973/39437>

Collections
GIPE Workshop / Conference / Seminars [30]

View/Open

-  no-content.pdf (93.16Kb)
-  GIPE-41-20.pdf (1.630Mb)

Date
2014

Author
Indian Health Economics and Policy
Association (IHEPA)

Metadata
[Show full item record](#)

Metadata – Full Record

Third Conference on Health for All to Universal Health Coverage: Journey so far and Challenges Ahead. 06-07 January 2014 (PDF)

dc.contributor.author	Indian Health Economics and Policy Association (IHEPA)
dc.date.accessioned	2016-06-28T08:54:47Z
dc.date.available	2016-06-28T08:54:47Z
dc.date.issued	2014
dc.identifier.citation	39 p
dc.identifier.uri	no-content.pdf
dc.identifier.uri	GIPE-41-20.pdf
dc.identifier.uri	http://hdl.handle.net/10973/39437
dc.publisher	Indian Health Economics and Policy Association (IHEPA), Dharwad
dc.title	Third Conference on Health for All to Universal Health Coverage: Journey so far and Challenges Ahead. 06-07 January 2014 (PDF)
dc.type	Book
dc.identifier.accno	GIPE-41-20

Metadata Encoding and Transmission Standard (METS)

- Metadata standard for encoding **Descriptive, Administrative, and Structural metadata** regarding objects within a **Digital Library**.
- Expressed using the **XML** schema language of the World Wide Web Consortium (W3C).
- The standard is maintained as part of the **MARC standards** of the **Library of Congress**
- It is being developed as an initiative of the **Digital Library Federation (DLF)**.
- **The 7 sections of a METS document**
 - METS header, Descriptive Metadata, Administrative Metadata,
 - File Section, Structural Map, Structural Links, Behavioral Section

METS Sections

1. **Header section.** This section can contain condensed descriptive metadata about the resource. `< metsHdr />`
2. **Descriptive Metadata section.** This section contains metadata that describes the resource itself, such as the title and author. `< dmdSec />`
3. **Administrative Metadata section.** This section contains four types of administrative metadata: technical metadata, intellectual property rights metadata, source metadata, and digital provenance metadata. `< amdSec />`
4. **File Section.** This section contains a list of the files that make up the electronic version of the resource. `< fileSec />`
5. **Structural Map section.** This section contains a description of the hierarchical organization of the source document. `< structMap />`
6. **Structural Link section.** This section describes links within the structural map. `< structLink />`
7. **Behavior Section.** This section associates executable behaviors with the resource content. `< behaviorec />`

Metadata Object Description Schema (MODS)

- **Library of Congress** developed MODS to capture more data than Dublin Core and be less complex and more user-friendly than MARC format.
- MODS was first announced in **June 2002**.
- A descriptive metadata schema that is a **derivative of MARC21** and intended to either carry selected data from existing MARC21 records or enable the creation of original resource description records.
- Includes a **subset of MARC fields** and uses **language based tags** rather than the numeric ones used in MARC 21 records.
- In some cases, it re-groups elements of **MARC 21 bibliographic** format.
- Like DC, METS, MODS is expressed using the **XML** schema language.

Encoded Archival Description (EAD)

- A **nonproprietary** encoding standard for **machine-readable finding aids** such as inventories, registers, indexes, and other documents
- Used by **archives, libraries, museums**, and manuscript repositories to support the use of their holdings – LOC
- Finding aids are used not only to store metadata, **but to help find resources.**

Courtesy: <http://pages.cs.wisc.edu/~caden/projects/Choosing%20a%20Metadata%20Type--Partial%20Draft.pdf>



Thank you!

Dr. Dimple Patel

Registrar and Vice Chancellor of
Central University of Himachal Pradesh

&

All of you!