البوابة العربية للهكبات والمعلومات

مؤتمر

النموذج المعياري BIBFRAME لوصف المصادر

 وإناثها في بيئة الويب: النحاسيات والتطبيقات

 القاهرة، مصر

 9-10 سبتمبر 2015
Cataloging Arabic Heritage Resources Using MARC21/AACR2 and BIBFRAME/RDA Comparative Study

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The standard model “BIBFRAME” for resources description and access in web environment: applications and challenges

Cairo, Egypt, 9-10, 2015
Outline

• Brief History of Modern Cataloging
• Overview of RDA, BIBFRAME, Linked Data and the Semantic Web
• Challenges of Cataloging Arabic Heritage Resources using AACR2/MARC21
• Potential of Cataloging Arabic Heritage Resources using RDA/BIBFRAME
• Relevant Arabic Heritage Resources Cataloging Projects
• Useful Resources
• Conclusion
Brief History of Modern Cataloging

- Early cataloging codes
  - No “one” set for US libraries
    - 1940s: ALA cataloging rules
    - 1961 IFLA’s Paris Principles
    - Cutter’s Rules for a Printed Dictionary Catalog
- 1967: Anglo-American Cataloging Rules (AACR)
  - 2 versions!: North American text and a British text
- 1969: ISBDs (consolidated in 2007)
- 1978: Anglo-American Cataloging Rules Revised (AACR2)
- 1960s: MARC developed (Henriette Avram)
  - Work completed 1969
  - US standard by 1971; international standard 1973
  - Several “flavors” of MARC
Brief History of Modern Cataloging

• **The Rebirth of RDA**
  – 1998: FRBR Published by IFLA
  – 2002-2004: Work on new standards AACR3
  – 2005: AACR3 developed to be RDA

• 2006-2007: community reviews of draft portions of RDA
• More updates and revisions on RDA
• June 22, 2010: Public release of RDA Toolkit
• July 1st 2010 – Dec. 2010: Training, testing and creating records
• January 1 – March 31, 2011: analysis and evaluation
• June 2011: Big RDA announcement
• (postpone implementation, no sooner than January 2013)
The Rebirth of Bibframe

- 2012: The initiation of the Bibliographic Transition Framework (Bibframe) by the Library of Congress which is based on one of the RDA testing report recommendations for the need for a transition from MARC 21 to a new format that can better represent FRBR family entities, enable Linked data and make cataloging data part of the Semantic Web
- 2011-2012: LC RDA Training (Library of Congress)
  - Conducted by Program for Cooperative Cataloging (PCC)
- March 31, 2013: RDA Implementation by LC and other national libraries
- 2014-2015: Bibframe Pilot Project-LIBHUB Initiative
- BIBFRAME Implementation Testbed initiative (Library of Alexandria is listed in this project)
An important distinction

An Important Distinction

- **FRBR**
  - conceptual model
- **RDA/AACR2:**
  - content standard
- **ISBD**
  - display format/standard
- **MARC 21**
  - standard communication format
  - other standard communication formats: ONIX, Dublin Core
- **Bibframe**
  - standard data model
Context

- AACR2, RDA, MARC 21 record environment
- MARC does not allow a full implementation of RDA
- Library data is designed for the use and consumption by humans, but not integrated with the Web
- Linked data promise a possibility to increase the visibility and usage of library data on the Web
Outlook & Summary

(Understanding MARC Bibliographic -- http://www.loc.gov/marc/umb/)
“As library automation technology changes and as cataloging needs change, the MARC 21 formats and related MARC 21 documentation are changing also.”

(Understanding MARC Bibliographic -- http://www.loc.gov/marc/umb/)
"As computers and technology continue to advance, important issues arise about the quality of library data and computer-based library automation systems. You need to be aware of these issues and their importance to your library."

(Understanding MARC Bibliographic -- http://www.loc.gov/marc/umb/)
Current Library Catalogs

• Online library Catalogs are still part of the invisible web
• The BIBFRAME is developed to make library catalog data integral part of the semantic web
RDA/BIBFRAME goals is to move catalog data to be part of the Semantic Web, not only on the Web and support for linked-data standards. Positioning libraries within the bigger web info-sphere.
The **BIBFRAME** is an undertaking by the Library of Congress and the community to better accommodate future needs of the library community.

A major focus of the initiative will be to **determine a transition path for the MARC 21 exchange format to more Web based, Linked Data standards.**

**Zepheira** and The **Library of Congress** are working together to **develop a Linked Data model, vocabulary and enabling tools / services for supporting this Initiative.** [http://bibframe.org](http://bibframe.org)
Overview of BIBFRAME

BIBFRAME Model

- Creative Work
- Instance
- Authority
- Annotation
MARC21 Bib Records as BIBFRAME Resources

165 Work

sorted by: labels, then by ... • · grouped as sorted

1, 2, 3 (1)

1.

1, 2, 3

Note(s)  Touch and feel board book.
        Formerly CIP.

Subject(s)  Counting--Pictorial works--Juvenile literature

Classification  513.211

In Series  Touch and feel.

Instance(s)  1, 2, 3

Dimensions  16 cm.

Extent  12 p.

Note(s)  Touch and feel board book.
        Formerly CIP.

Illustration  chiefly col. ill.
### MARC record

**WorldCat: Women at the Hague**

<table>
<thead>
<tr>
<th>OCLC 1074574</th>
<th>CLU Holdings - 294 other holdings; 10 other IRs</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1 CLU holding in GLIMIR cluster; 295 other holdings in GLIMIR cluster</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Books</th>
<th>Rec Statc</th>
<th>Entered</th>
<th>Replaced</th>
</tr>
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<tr>
<td>Type</td>
<td>a</td>
<td>Srce</td>
<td>Audn</td>
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<tr>
<td></td>
<td>m</td>
<td>Form</td>
<td>Ctrl</td>
</tr>
<tr>
<td></td>
<td></td>
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<td></td>
<td>GPub</td>
<td>Ctry</td>
</tr>
<tr>
<td></td>
<td></td>
<td>LITF</td>
<td>Lang</td>
</tr>
<tr>
<td>Desci</td>
<td>11Is</td>
<td>Fest</td>
<td>Indx</td>
</tr>
<tr>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

**010** 15025357

**040** DLC $b eng $c TLM $d CRL $d OCLCQ $d OCLCQ $d STF $d NIALS $d AMAZN $d UKMGB $d BMC $d OCLCA $d MIGCL $d OCLCQ $d OCLCO $d HIN $d VA $d DEBBG

**016** 7_ 000017737 $2 Uk

**016** 7_ 012785073 $2 Uk

**019** 123238394

**043** e-----

**050** 00 D613 $b A4 1915

**082** _4 940.3/12

**084** MS 3150 $2 rvk

**084** NW 8100 $2 rvk

**049** CLUM

**100** 1_ Addams, Jane, $d 1860-1935.

**245** 10 Women at the Hague: $b the International Congress of Women and its results / $c by three delegates to the congress from the United States, Jane Addams, Emily G. Balch ... Alice Hamilton ...


**300** vii, 171 pages ; $c 18 cm

**336** text $b txt $2 rdaemon

**337** unmediated $b n $2 rdaemon

**338** volume $b nc $2 rdaemon

**505** 0_ Journey and impressions of the Congress / Emily G. Balch -- At the war capitals / Alice Hamilton -- The revolt against war / Jane Addams -- Factors in continuing the war / Jane Addams -- At the northern capitals / Emily G. Balch -- The time for making peace / Emily G. Balch -- Women and Internationalism / Jane Addams.
Bibliographic Framework Initiative

Initiated by the Library of Congress, BIBFRAME provides a foundation for the future of bibliographic description, both on the web, and in the broader networked world. This site presents general information about the project, including presentations, FAQs, and links to working documents. In addition to being a replacement for MARC, BIBFRAME serves as a general model for expressing and connecting bibliographic data. A major focus of the initiative will be to determine a transition path for the MARC 21 formats while preserving a robust data exchange that has supported resource sharing and cataloging cost savings in recent decades.

What's New
- BIBFRAME Update Forum at ALA
  February 1, 10:30-11:30am
  McCormick Place West
- BIBFRAME at ALA
- New White Paper Available
  Common Ground: Exploring
  Enhancements Between the Linked Data Models of the Library of Congress and OCLC
Overview of Linked-Data

Linked Data is a **methodology for providing relationships between things (data, concepts and documents)** anywhere on the web, using

**URI’s for identifying;**

**RDF/XML for describing;**

**HTTP for publishing;**

these things and relationships in a way that they can be interpreted and used by humans and software.
Linked Data 5-star scheme

- Make your stuff available on the Web
- Make it available as structured data
- Use non-proprietary formats
- Use URIs to identify things, so that people can point at your stuff
- Link your data to other data to provide context
Relationship between Linked Data and the Semantic Web

- Semantic Web is a vision of a “Web of Data”
- Linked Data is a means to achieve that vision
- Semantic Web is *What* and Linked Data is *How*
- The “linked-data” in a library context can also use a unique identifier such as (cross-referenced URIs) in the metadata records as the linking mechanisms for linking metadata elements (names, subject or bibliographic data) across multiple library systems.
Linked Data in Library Catalogs

LC authority record with LCCN Permalink

The Library of Congress

LIBRARY OF CONGRESS AUTHORITIES

LC control no.: nr2005017009
LCCN permalink: http://lccn.loc.gov/nr2005017009

HEADING: Abū al-'Amāyim, Muḥammad
000 00957cz a2200217n 450
001 6597349
005 20080930071501.0
008 050725n|acnamabn|b|aaa|c
010 __a nr2005017009
035 __a (OCoLC)oca06693202
040 __a CtY-N |b|eng|c CtY-N |d|OCoLC
100 1 __a Abū al-'Amāyim, Muḥammad
400 1 __a Abul Amayem, Mohamed
400 1 __a Abou Al-Amayem, Muhammed
400 1 __a Al-Amayem, Muhammad Abou
400 1 __a Amayem, Muhammed Abou Al-
400 1 __a Ebu'l- Amayim, Muhammed
400 1 __a أبو العماد ماهر
667 __a Machine-derived non-Latin script reference project.
667 __a Non-Latin script reference not evaluated.
Current state of Linked Data in libraries

- Developing use cases
- Structuring, cleaning and releasing data
- Developing new frameworks and tools
- Exploration, prototypes and proofs of concept
- Learning!
Example

**OCLC Linked Data**

OCLC has been working with Linked Data for several years. As can be seen from the publishing of the Dewey Decimal Classification (DDC), the Virtual International Authority File (VIAF) and Faceted Application of Subject Terminology (FAST) as linked data. The release of experimental WorldCat Linked Data in June 2012 was another milestone in the exposure of WorldCat.org bibliographic metadata as linked data.

The OCLC linked data strategy is an evolving mix of Linked Open Data (LOD) and Linked Enterprise Data (LED). This means that we will have incremental releases of new data and services, as we better understand how to model and publish the information.

The next step on this evolutionary journey into linked data is the production release of WorldCat Works, the first entity in a series of WorldCat linked data releases.

**WorldCat Linked Data**

The bibliographic metadata found in WorldCat contains a rich set of objects that can be represented in linked data. Extracting entities like works, persons, and places from that metadata will create a foundation of WorldCat linked data, which will support the introduction of Web services that offer a range of functionality and access to the data.

The Schema.org ontology, extended by other ontologies as needed, is being used as a basis for modeling WorldCat bibliographic data. This provides fullest coverage, improved functionality, and better consumption of this data for our harvest partners and library members looking to do more with structured data exposed within HTML pages (via RDFa 1.1). More detailed information about the vocabulary used by WorldCat.org linked data is available.
Example

Bibliographic Framework Initiative

Initiated by the Library of Congress, BIBFRAME provides a foundation for the future of bibliographic description, both on the web, and in the broader networked world. This site presents general information about the project, including presentations, FAQs, and links to working documents. In addition to being a replacement for MARC, BIBFRAME serves as a general model for expressing and connecting bibliographic data. A major focus of the initiative will be to determine a transition path for the MARC 21 formats while preserving a robust data exchange that has supported resource sharing and cataloging cost savings in recent decades.

General Information
- Frequently asked questions
- Webcasts and presentations
- Contact us
- Document archive

Model & Vocabulary
- BIBFRAME model
- BIBFRAME vocabulary
  - Model view
  - Category view
  - List view
- BIBFRAME specifications

Implementation & Testing
- BIBFRAME testbed
- Implementation register
- BIBFRAME tools and downloads
- Demonstration datasets

Model & Vocabulary
- BIBFRAME model
- BIBFRAME vocabulary
  - Vocabulary description
  - Terminology & conventions
- BIBFRAME draft specifications
  - BIBFRAME Profiles
  - BIBFRAME Authorities
  - BIBFRAME Relationships
- Analyses
  - AV Modeling Study
- Use cases
  - MARC mapping (coming soon)

What's New
BIBFRAME Update Forum at ALA
February 1, 10:30-11:30am
McCormick Place West, W198a

BIBFRAME at ALA

New White Paper Available
Common Ground: Exploring
Compatibility Between the Linked
Data Models of the Library of
Congress and OCLC

BIBFRAME Editor
Example

Linked Data in WorldCat.org
Haydar, Kāmil

VIAF ID: 54048924 (Personal)
Permalink: http://viaf.org/viaf/54048924

Preferred Forms

100 1 _ †a Haydar, Kāmil

Links to BIBALEX
### VIAF Linked-Authorities

**VIAF**
Virtual International Authority File

**Search**
- **Select Field:** Personal Names
- **Select Index:** Egypt
- **Search Terms:** ديكنز تشارلز

1 heading found for ديكنز تشارلز *(in egaxa)*

<table>
<thead>
<tr>
<th>Heading</th>
<th>Type</th>
<th>Sample Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dickens, Charles, 1812-1870</td>
<td>Personal</td>
<td>Oliver Twist</td>
</tr>
<tr>
<td>Dickens, Charles (Charles John Huffam), 1812-1870</td>
<td>Personal</td>
<td>Oliver Twist</td>
</tr>
<tr>
<td>ديكنس, Чарлз, 1812-1870</td>
<td>Personal</td>
<td>Oliver Twist</td>
</tr>
<tr>
<td>ديكنز, تشارلز, 1812-1870</td>
<td>Personal</td>
<td>Oliver Twist</td>
</tr>
<tr>
<td>Dickens, Charles English novelist and draftsman, 1812-1870</td>
<td>Personal</td>
<td>The Pickwick papers.</td>
</tr>
<tr>
<td>Dickens, Charles</td>
<td>Personal</td>
<td>David Copperfield, 2002:</td>
</tr>
</tbody>
</table>
**RDA and MARC**

**New MARC Fields**

<table>
<thead>
<tr>
<th>Field Number</th>
<th>Description</th>
</tr>
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<tbody>
<tr>
<td>040</td>
<td>IEH $b$ eng $f$ rda $f$c IEH</td>
</tr>
<tr>
<td>020</td>
<td></td>
</tr>
<tr>
<td>041</td>
<td>$f$h $f$b</td>
</tr>
<tr>
<td>050</td>
<td>$f$b</td>
</tr>
<tr>
<td>090</td>
<td>$f$b</td>
</tr>
<tr>
<td>049</td>
<td>IEHA</td>
</tr>
<tr>
<td>1</td>
<td>$f$e $f$4</td>
</tr>
<tr>
<td>245</td>
<td>$f$b $f$c</td>
</tr>
<tr>
<td>246</td>
<td>$f$b $f$c</td>
</tr>
<tr>
<td>250</td>
<td></td>
</tr>
<tr>
<td>264</td>
<td>$f$b $f$c</td>
</tr>
<tr>
<td>300</td>
<td>$f$b $f$c</td>
</tr>
<tr>
<td>336</td>
<td>$f$b $f$2</td>
</tr>
<tr>
<td>337</td>
<td>$f$b $f$2</td>
</tr>
<tr>
<td>338</td>
<td>$f$b $f$2</td>
</tr>
<tr>
<td>490</td>
<td>$f$t $f$v</td>
</tr>
<tr>
<td>7XX</td>
<td></td>
</tr>
</tbody>
</table>

**Variable fields**
RDA and MARC

New MARC Fields (Relator Codes)

100 1  Faddād, al-ʻAyyāshī, ⌦d 1955– ⌦e author.

710 2  Friedrich-Ebert-Stiftung, ⌦e sponsoring body.

710 2  Şalāt al-ʻArḍ lil-Funūn Umm al-Fahm, ⌦e host institution.
RDA and MARC

New MARC Fields
(relationship designators)

700 0  🅱️ Adaptation of (work): 🅱️ Nizāmī Ganjavī, 🅱️ 1140 or 41–1202 or 3, 🅱️ author. 🅱️ Khusraw va Shīrīn.


775 0 8  🅱️ Reproduction of (manifestation):
 Sabha Olivier, M. G. 🅱️ Recherches sur l'origine des Berbères. 🅱️ Bône : Imprimerie Dagand, 1867 🅱️ (OCLC) 68183895
### RDA (FRBR and FRAD)

<table>
<thead>
<tr>
<th>FRBR Groups</th>
<th>FRBR/FRAD Entities</th>
<th>RDA</th>
</tr>
</thead>
</table>
| **Group 1 (Primary) [resources]**  
*Products of intellectual or artistic endeavors* | Work  
Expression  
Manifestation  
Item | Section 2: Attributes of Work and Expression |
| **Group 2**  
[Creators+]  
*Those responsible for producing Group 1 entities and more* | Person  
Family  
Corporate Body | Section 3: Attributes of Person, Family, and Corporate Body |
| **Group 3**  
[Subjects]  
*Subjects of intellectual or artistic endeavors* | Concept  
Object  
Event  
Place  
(All Group 1 & 2 Entities) | Section 4: Attributes of Concept, Object, Event, and Place |
FRBR User Tasks

(Searching for information resources):

• **Find**—to find resources that correspond to the user’s stated search criteria

• **Identify**—to confirm that the resource described corresponds to the resource sought, or to distinguish between two or more resources with similar characteristics

• **Select**—to select a resource that is appropriate to the user’s needs

• **Obtain**—to acquire or access the resource described.
## RDA (FRBR and FRAD)

<table>
<thead>
<tr>
<th>FRAD user tasks</th>
<th>Principles to achieve FRAD user tasks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Find</td>
<td>Differentiate</td>
</tr>
<tr>
<td>Identify</td>
<td>Represent</td>
</tr>
<tr>
<td>Contextualize</td>
<td>Language preference</td>
</tr>
<tr>
<td>Justify</td>
<td>Common usage</td>
</tr>
</tbody>
</table>

RDA 4 principles for persons, families, and corporate bodies are meant to meet the FRAD user tasks, they are: find, identify, understand the relationship, and understand why a name has been recorded. They are covered in RDA 8.2.
RDA (FRBR and FRAD)

FRBR Structure – Group 1

Work is realized through Expression

Expression is embodied in Manifestation

Manifestation is exemplified by Item

Inherent Group 1 Relationships
RDA and FRBR in ILS
Better Collocation of Bibliographic Data based on RDA/FRBR
RDA and FRBR in ILS

Better Collocation of Bibliographic Data based on RDA/FRBR
Relationships

RDA is based on FRBR Relationships between and among entities.

"Relationships serve as the vehicle for representing the link between one entity and another.

Relationships are the means of assisting the user to ‘navigate’ the universe that is represented in a bibliography, catalogue, or bibliographic database."
FRBR Structure - Relationships

- Work
- Expression
- Manifestation
- Item

- is owned by
- is produced by
- is realized by
- is created by

Relationships Between Groups 1 and 2

- Person
- Family
- Corporate Body
BIBFRAME Relationships

Draft Document for Public Review (April 25, 2014)

Table of Contents
• Introduction
• Relationships that Connect Works and Instances
• Other Resource Relationships
  - Works, Expressions, Translations
  - Equivalent Instances
• External Relationships
• Relationships and Properties
  - Basic Relationships
  - Table of Relationship Properties
A BIBFRAME Relationship is a relationship between a BIBFRAME Work or Instance and another BIBFRAME Work or Instance. Thus there are four types of relationships:
- Work to Work
- Work to Instance
- Instance to Work
- Instance to Instance
A relationship is expressed as an RDF triple, i.e. subject/property/object. Example:
‘WorkA bf:precedes WorkB’.
To which extent Bibframe will be able to represent relationships among Arabic heritage resources?
Challenges of Cataloging Arabic Heritage Resources using AACR2/MARC21

- **No specific fields for Arabic Manuscripts**
  - Incipit, explicit, folios, physical characteristics and condition of the copy, etc. goes to general notes field 500

- **Relationships are not clear**
  - No use of relationship designators

- **Mix of WEMI**
  - Some MARC fields are applicable to Work, others applicable to expression, manifestation or item

- **Mix of content and carrier**
  - Cataloging is based on the carrier not content (Arabic manuscripts on microform, DVD

- **Imprint vs. publishing**
  - Mixing between production, printing and publishing data in 260
Potential of Cataloging Arabic Heritage Resources using RDA/BIBFRAME

- **Alternatives for coding special manuscript data?**
  - Flexibility to add namespaces or field qualifiers (Incipit, explicit, folios, physical characteristics and condition of the copy, etc.) needs testing

- **Relationships are more clear**
  - Uses many relationships and relators designations.

- **Better representation of FRBR**
  - Developed to support representation of FRBR WEMI entities and relations among them

- **Content comes first and carrier comes second**
  - Linking reproductions

- **Imprint vs. publishing**
  - Distinguishes between production, printing and publishing in 264
Potential of Cataloging Arabic Heritage Resources using RDA/BIBFRAME

Relationships between Arabic Heritage Resources

• Annotations (Hawashi/Hawamish)
• Commentaries (Shruh/taliqat)
• Supplementary Works (Dhiyul/takmilah)
• Abridged works (Tahdhib/ikhtisar)
• Extracts (Mustakhrajat)
• Copies (Nusakh)
• Facsimile editions
• Reproductions

Does the above relationships fit into RDA/FRBR/BIBFRAME relationships?
Examples
Commentary by the Learned Shaykh al-Fanari on Sa’d al-Din al-Taftazani’s “Commentary on ‘al-Miftāḥ”

Kitāb miftāḥ al-‘ulūm (The key to sciences) by Persian polymath Yusuf ibn Abi Bakr al-Sa’idaki (1160–c. 1228) is a monumental work comprising 12 sciences of the Arabic language. Generally divided into three areas (morphology, grammar, and rhetoric), al-Miftāḥ (or the Key, for short) became the subject of numerous commentaries. One of the main commentators on it was another Persian polymath by the name of Mas’ud ibn Umar al-Taftazani (1322–c. 1389), who wrote two commentaries. The longer one of the two gained great reception in its own right, and became known among scholars as al-Muţâwanîl (The long commentary). As is the case with many pioneering works in the Arabic language, that long commentary itself became the subject of a new commentary (or supercommentary), which is preserved in this manuscript by Hasan ibn Muhammad Shah al-Fanari (1436 or 1437–1481 or 1482). Al-Fanari studied at the Aleppo school of Edime (in present-day Turkey) and later moved to Egypt, before returning to Anatolia, where he sought the patronage of Ottoman sultans Muhammad Khan II and Bayezid II. This manuscript on rhetoric is entitled Hāshiyat al-shaykh al-‘allāmah al-Fanārī wa ashārī talākhīs al-miftāḥ ilā Sa’d al-Dīn al-Taftāzārī (Commentary by the learned shaykh al-Fanari on Sa’d al-Dīn al-Taftazani’s “Commentary on al-Miftāḥ”).

Associated name
Examples
Examples
Project for the digitisation and online presentation of Arabic, Persian, and Turkish manuscripts at Leipzig University Library

From October 2012 until January 2015, the remaining Arabic, Persian, and Turkish manuscripts at Leipzig University Library that have not been catalogued and/or digitized yet, will be subject to a final online cataloguing and digitization process. Thereby, all Arabic, Persian, and Turkish manuscripts at Leipzig University Library will be online accessible by 2015. This project works with an abbreviated cataloguing template and is complemented with complete digital images. The project is supported by the German Research Foundation (Deutsche Forschungsgemeinschaft, DFG).

Parts of the University Library's holdings have been previously catalogued and digitised in two projects:

- the "Refaia Project" (www.refaia.uni-leipzig.de)
- the "Project for the online cataloguing and digital presentation of newly acquired Arabic, Persian, and Turkish manuscripts at Leipzig University Library" (www.islamic-manuscripts.net)

The following collections at Leipzig University Library are part of the project:

- 376 manuscripts of the former Senate Library (Ratsbibliothek), which was renamed Municipal Library (Stadtbibliothek) in 1831. In 1962, they became part of the University Library. This collection has the classmark B. or. It has been catalogued in detail by Heinrich Leberecht Fleischer (1801-1888) in his Latin catalogue "Codices Orientalium Linguarum", published in 1838. This catalogue can be read and downloaded alongside an abridged English translation on this website under "Historical Catalogues".
- 302 manuscripts belonging to the University Library. They have been catalogued by Karl Vollers (1857-1909) in "Katalog der islamischen, christlich-orientalischen, jüdischen und samaritanischen Handschriften der Universitätsbibliothek zu Leipzig", published in 1906. This collection has the classmark Vollers. The catalogue can be read and downloaded on this website under "Historical Catalogues".
<table>
<thead>
<tr>
<th>Basic Manuscript Template</th>
<th>Description of texts</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Physical description</strong></td>
<td><strong>Description of texts</strong></td>
</tr>
<tr>
<td>Call Number</td>
<td>Author</td>
</tr>
<tr>
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<td>Reference to Book Decoration and Watermarks</td>
<td>Completeness</td>
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<td>Page numbers</td>
<td>References to further Exemplars and/or Editions</td>
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New Haven, CT, Yale University, Beinecke Rare Book & Manuscript Library, Beinecke MS 553

Description: ff. 2 - Gift of Edwin J. Beinecke, 1964.
Notes: Manuscript fragment on paper (unidentified watermark) of outline drawings of saints and prophets and 2 scenes from the New Testament, from a pattern book, with script headings.
Number of Parts: 1 - Number of Images Available: 4
Direct Link: http://ds.lib.berkeley.edu/BeineckeNS553_47
View a detailed description: http://brbl-net.library.yale.edu/pre1600ms/docs/pre1600_ms553.htm
View in the Beinecke’s Digital Library: http://brbl-dl.library.yale.edu/vufind/Record/3592140

Part 1: 220 x 317 mm. and 80 x 298 mm.
Description: - paper
Country:
Region: Egypt (?)
Assigned Date: [between 1400 and 1700]
Dated by scribe: No
Document: No
Notes: Mounted between glass.
Number of Texts: 1

Text 1:
Title: Outline drawings from a pattern book.

Small  | Medium  | Large
Books:


Resources

• RDA:
  http://www.carli.illinois.edu/products-services/i-share/cat/rda-resources

• BIBFRAME:
  http://www.loc.gov/catworkshop/bibframe/

Linked Open Data:
  http://aims.fao.org/linked-open-data-webinars-at-aims
  http://aims.fao.org/lode/bd
  http://www.youtube.com/watch?v=6yNPcJXJj0U
European libraries use of Linked Open Data (LOD):  
http://www.theeuropeanlibrary.org/tel4/newsitem/5802

USA Project LD4L (Linked-Data for Libraries):  
https://wiki.duraspace.org/display/ld4l/LD4L+Use+Cases

USA Bibframe testing and implementation projects:  
http://hangingtogether.org/?p=4487

Authority files and linked data (different approaches)  
http://www.uebertext.org/2014/07/name-authority-files-linked-data.html

LIBHUB Initiative  
http://www.libhub.org/ (No library from the MENA currently participating in this project)

BIBFRAME Implementation Testbed initiative (Library of Alexandria is listed in this project)  
http://www.loc.gov/bibframe/implementation/register.html
Conclusion

• Libraries have a huge amount of identifiers
• No other community does authorities like we do
• We identify, structure, organize data in different ways
• With BIBFRAME we can leverage existing Web standards make library content more visible on the Web
• Translate MARC skills and practices into a Linked Data context
• Arabic heritage resources has a very rich authorship structure and can use Bibframe/RDA to their full potential. Further research is recommended by libraries in the MENA region.
Questions?
Thank you