

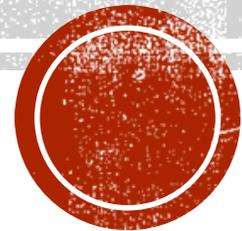
# **GRAPH THINKING, LINKED OPEN DATA & SEMANTIC WEB: PREPARING FOR THE POST-MARC WORLD.**

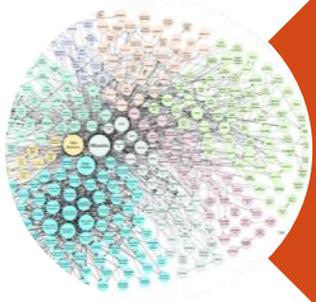
**ANCHALEE PANIGABUTRA-ROBERTS (Joy)**

**HEAD OF CATALOGING & METADATA**

**AMERICAN UNIVERSITY IN CAIRO LIBRARIES**

**AMICAL CONFERENCE 2015 ~ AMERICAN UNIVERSITY IN BULGARIA**





***The Visible Library***



***Digitized/Digital/  
Electronic Resources***



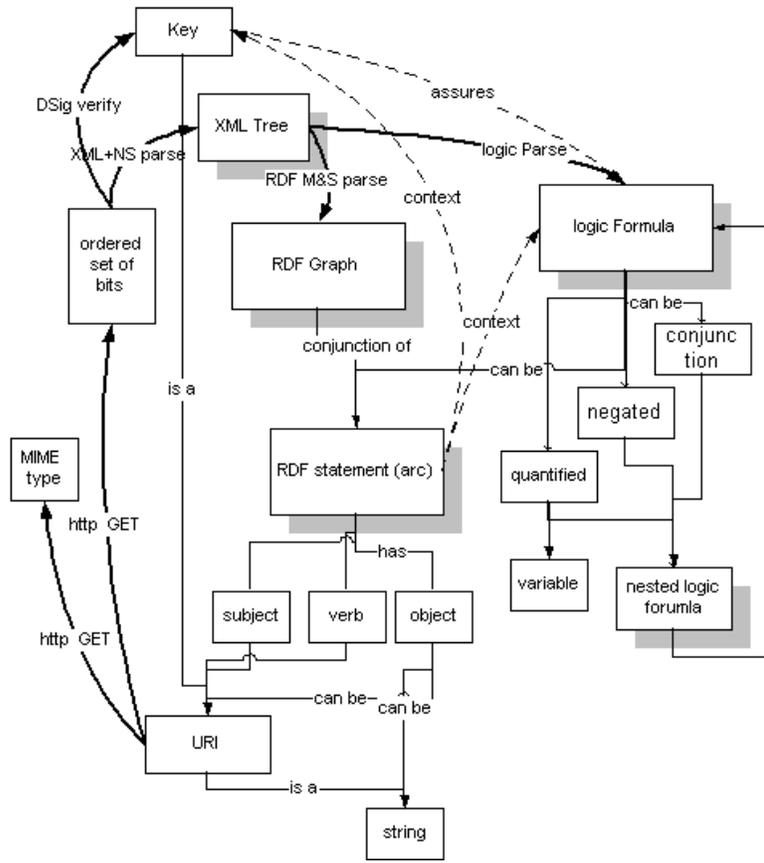
***Discovery  
Tools/Services***

**WHAT'S THE  
RIDDLE OF THE  
DAY?**



**“Semantic Web”**





Berners-Lee's Semantic Web (1998)

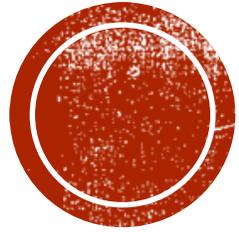
# THE SEMANTIC WEB

A new form of Web content  
that is meaningful to computers  
will unleash a revolution of new possibilities

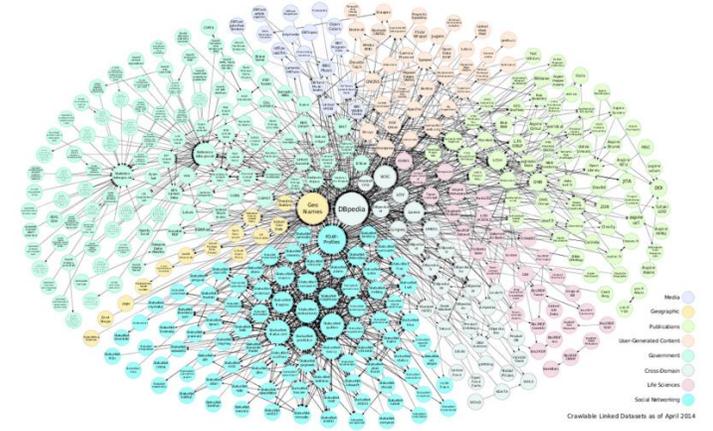
by  
TIM BERNERS-LEE,  
JAMES HENDLER and  
ORA LASSILA

PHOTOILLUSTRATIONS BY MIGUEL SALMERON





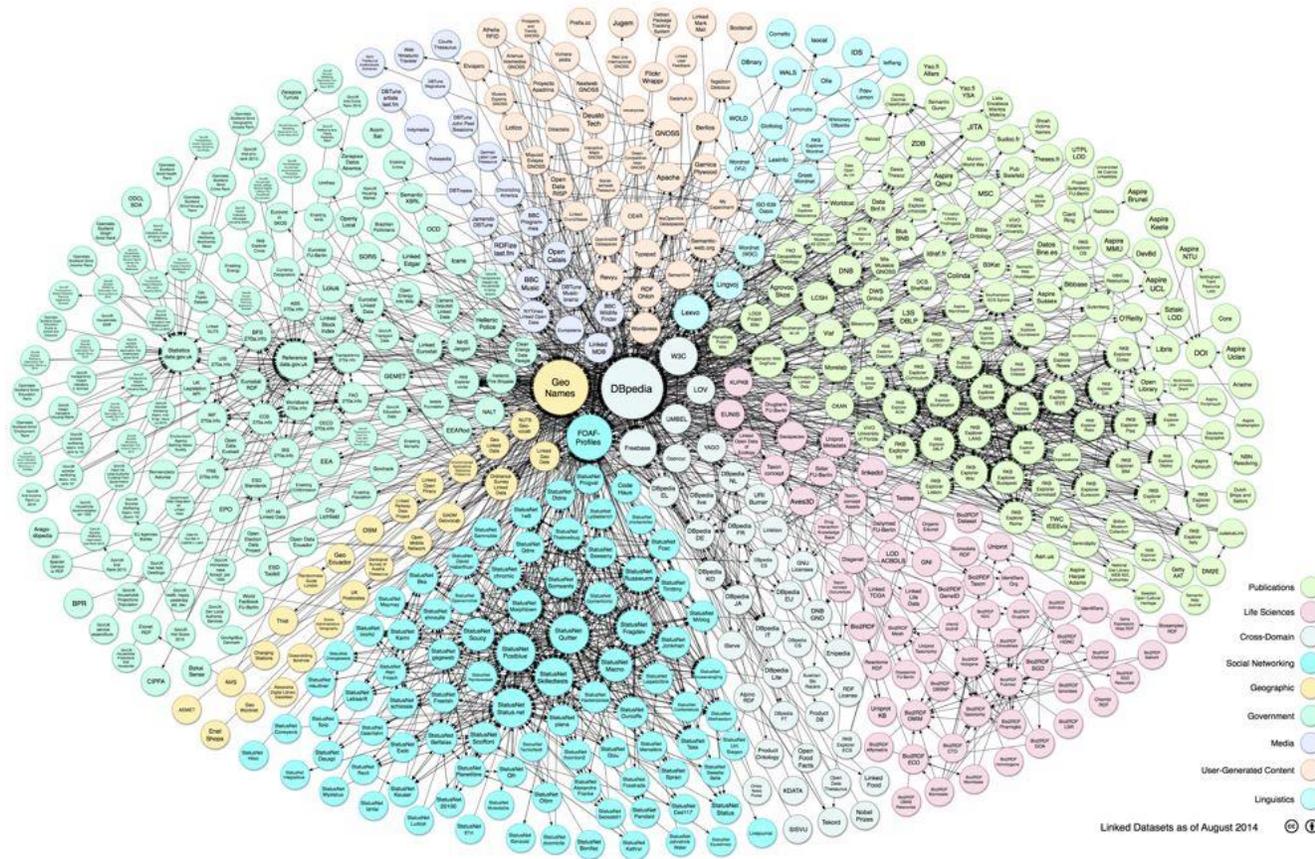
# THE VISIBLE LIBRARY



Semantic Web, Linked Open Data  
& BIBFRAME -> Schema.org



Last updated: 2014-08-30



# SEMANTIC WEB

“The semantic web marks a move from a global web of *human readable documents* (web pages), to a global web of *machine readable documents*; so that machines can automatically interpret the meaning of data on the web; what to do with it, and how to represent it.”

– What is the semantic web?  
<http://www.linkeddatatools.com/index.php>



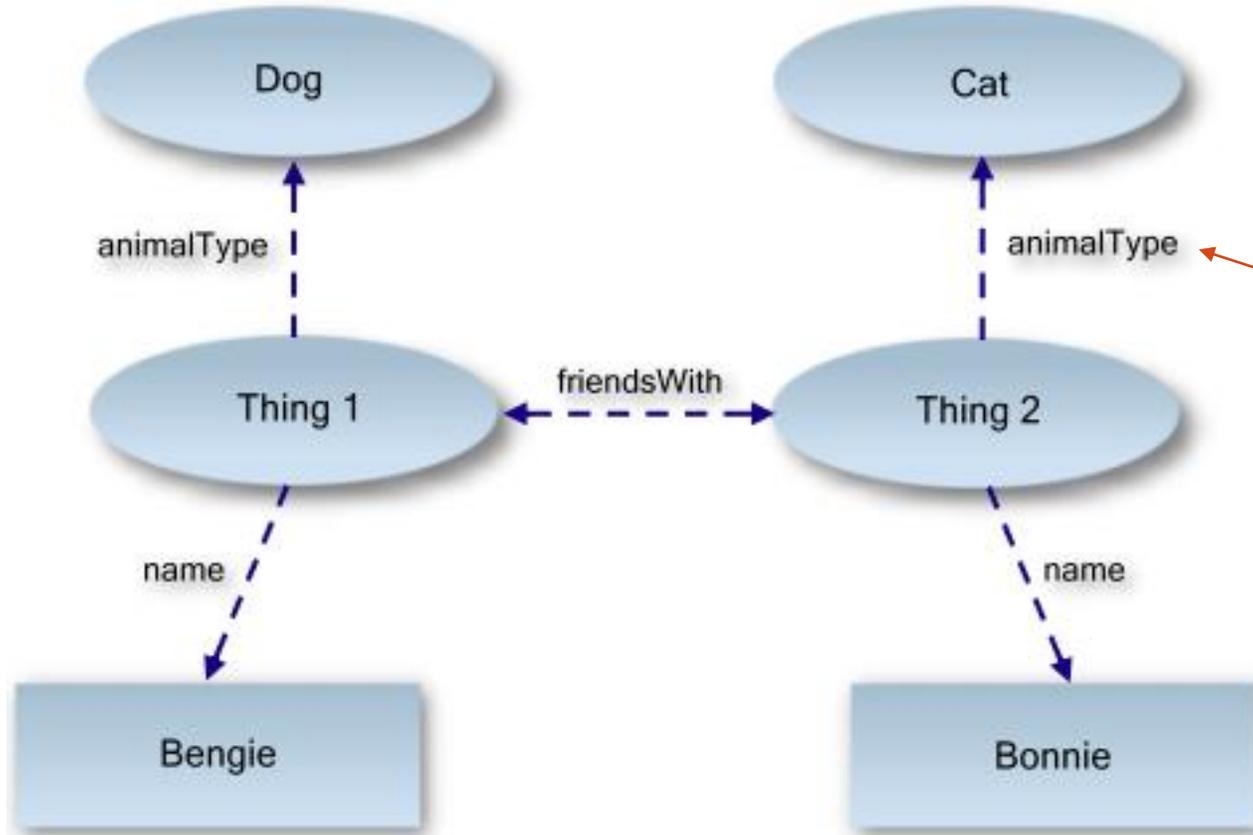
# SEMANTIC WEB & LINKED DATA



- **Web pages** - HTML documents that are linked to each other through the use of *hyperlinks*.
  - Humans or machines can read these documents.
  - Machines (computers) can read only by seeking keywords in a page.
- **Semantic web or web 3.0 technology** ~ a shift from publishing data in human readable HTML documents to machine readable documents.
  - Similar to what MARC has done for the databases (with numbers for coding data), but with language-based labels.
  - MARC data's limitation; number-based codes, hidden in local databases and manipulated by local systems only, not sharable on the web.
- **Linked data** ~ library data can now be published as web-based data that can be easily sharable, findable and linkable on the web.
- Source: Semantic web basics: <http://www.linkeddatatools.com/semantic-web-basics>



**Bengie is a dog. Bonnie is a cat. Bengie and Bonnie are friends.**



## **LINKED DATA (GRAPH) MODEL**

**Data**

**Description**

**Relationship**

<http://www.linkeddatatools.com/introducing-rdf>



# 'THINGS' NOT 'STRINGS'

```
01041cam 2200265 a 450000100200000000300040002000
50017000240080041000410100024000820200025001060200
04400131040001800175050002400193082001800217100003
20023524500870026724600360035425000120039026000370
04023000029004395000042004685200220005106500033007
30650001200763^###89048230#/AC/r91^DLC^19911106082
810.9^891101s1990####maua###j#####000#0#eng##^##$
a###89048230#/AC/r91^##$a0316107514 :$c$12.95^##$a
0316107506 (pbk.) :$c$5.95 ($6.95 Can.)^##$aDLC$cD
LC$dDLC^00$aGV943.25$b.B74 1990^00$a796.334/2$220^
10$aBrenner, Richard J.,$d1941-^10$aMake the team.
$pSoccer :$ba heads up guide to super soccer! /$cR
ichard J. Brenner.^30$aHeads up guide to super soc
cer.^##$a1st ed.^##$aBoston :$bLittle, Brown,$cc19
90.^##$a127 p. :$bill. ;$c19 cm.^##$a"A Sports ill
ustrated for kids book."^##$aInstructions for impr
oving soccer skills. Discusses dribbling, heading,
playmaking, defense, conditioning, mental attitud
e, how to handle problems with coaches, parents, a
nd other players, and the history of soccer.^#0$aS
occer$vJuvenile literature.^#1$aSoccer.^\  


```



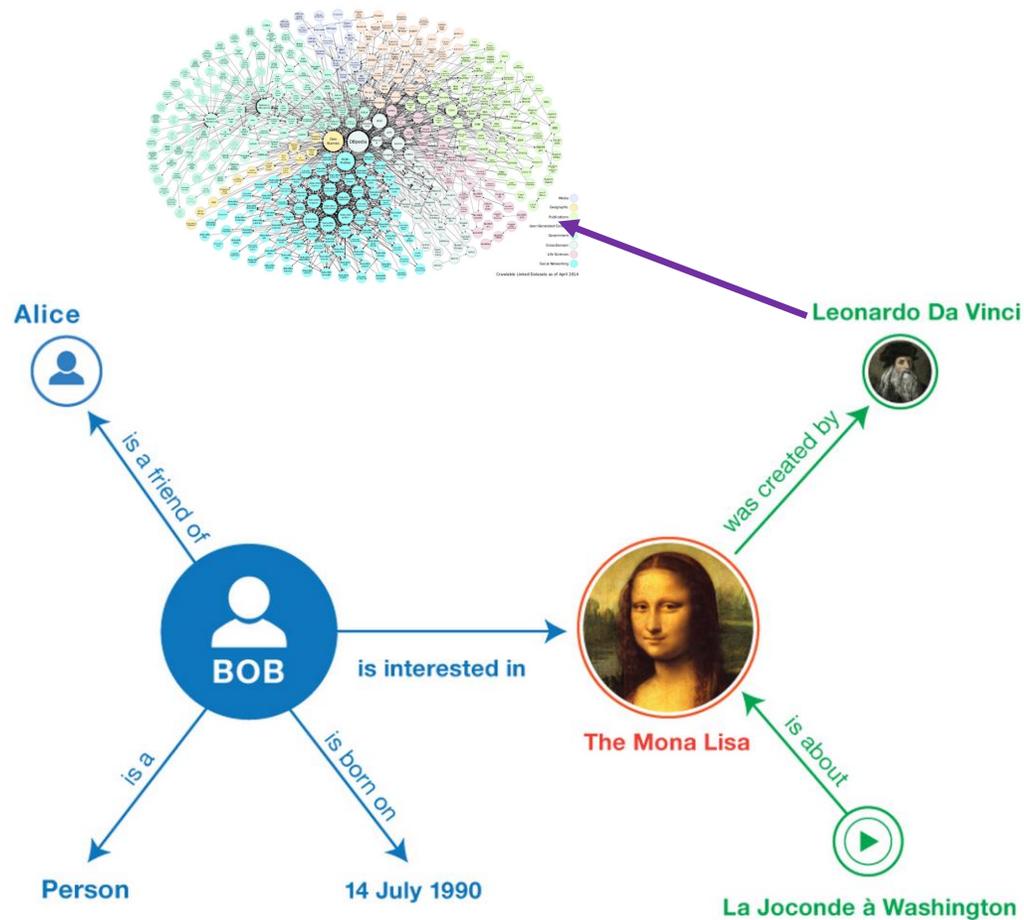


Fig. 1 Informal graph of the sample triples

# BRINGING BACK 'RDF' TO THE FUTURE...

EXAMPLE 1: Sample triples (informal)

<Bob> <is a> <person>.

<Bob> <is a friend of> <Alice>.

<Bob> <is born on> <the 4th of July 1990>.

<Bob> <is interested in> <the Mona Lisa>.

<the Mona Lisa> <was created by>  
<Leonardo da Vinci>.

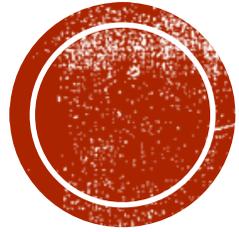
<the video 'La Joconde à Washington'> <is  
about> <the Mona Lisa>

**RDF Primer:**

<http://www.w3.org/TR/2014/NOTE-rdf11-primer-20140225/#fig1>

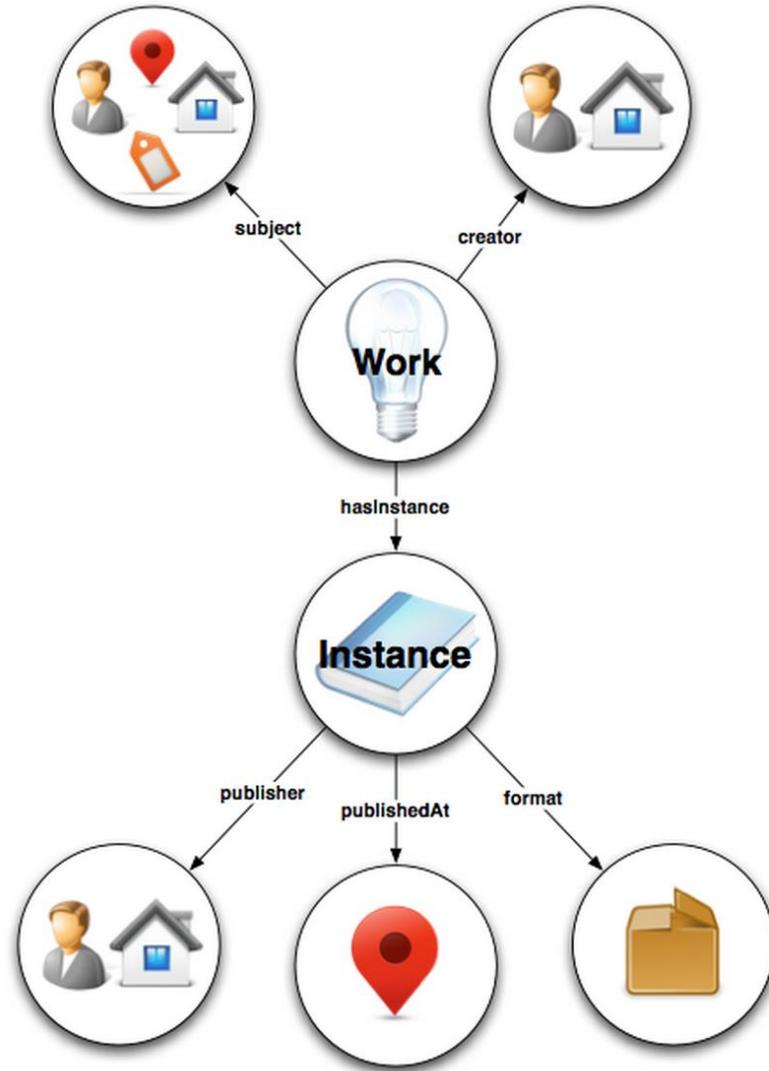
See also an example of RDF data in comparison to the relational database info.:  
[http://forge.taotesting.com/projects/tao/wiki/RDF by example](http://forge.taotesting.com/projects/tao/wiki/RDF_by_example)





# BIBFRAME AS LINKED DATA





# BIBFRAME AS LIBRARY LINKED DATA

[http://www.loc.gov/bibframe/docs/  
model.html](http://www.loc.gov/bibframe/docs/model.html)



# BIBFRAME EDITORS

**LC BIBFRAME:**  
<http://bibframe.org/tools/editor/>

## BIBFRAME Editor

Get the code [here](#). In the meantime, select a Profile below to get started.

### BIBFRAME - Kitchen Sink Profiles

[New HeldItem](#)

[New Instance](#)

[New Work](#)

[New Work, Instance, & HeldItem](#)

### BIBFRAME - Simple Monograph

[New Holding](#)

[New Instance](#)

[New Work](#)

[New monograph \(New Work, Instance, and Holding\)](#)

## Instance/Manifestation - Monograph

Instance of

Work - Monograph

Authorized access point

Authorized access point

Set

Title

Title

Set

Transcribed title

Transcribed title

Set

Abbreviated title

Title Entity

Edition statement

Edition statement

Set

Edition responsibility

Edition responsibility

Set

Media type

Media type

unmediated

Carrier

Carrier

volume e x

## Zepheira's BIBFRAME SCRIBE:

<http://editor.bibframe.zepheira.com/static/>

**bf**: BIBFRAME Scribe

## External Services

- AgroVoc
- FAST
- LC
- Local
- VIAF

Audio:

[Vinyl Record](#)

Bibliography:

[Electronic](#)

[Print](#)

Book:

[Electronic](#)

[Print](#)

Dissertation:

[Electronic](#)

[Print](#)

Painting:

[Image](#)

Title

Set

Title Remainder

Set

Author

Type to search +

Editor

Type to search +

Contributor

Type to search +

Translator

Type to search +

Illustrator

Type to search +

Content Category

Profile default value

text

Contents

Add

Language

Type to search +

Notes

Add

LCC Classification

Set

Subject

Type to search +



**Contents**

**Language**

**Notes**

**LCC Classification**

**Subject**

**Is Based On**

**Is Basis For**

**Publication**

**Carrier Category**

**Media Category**

**Dimensions**

**Edition Statement**

**Edition Responsibility**

**ISBN 10**

Not the right match? Use the **+** button to create a new resource

**Basmati rice** AGROVOC

Broken **rice** AGROVOC

Cold **rice** AGROVOC

Cooking **rice** quality AGROVOC

Deep water **rice** AGROVOC

Flooded **rice** AGROVOC

Irrigated **rice** AGROVOC

**Rice** AGROVOC

**Rice** FAST

**Rice** trade FAST

Cooking (**Rice**) FAST

**Rice**--Diseases and pests FAST

**Rice**--Economic aspects FAST

**Rice**--Research FAST

**RICE** occasional papers LC

**RICE** project technical report LC

# BIBFRAME SCRIBE LINKING TO AGROVOC:

## External Services

- AgroVoc
- FAST
- LC
- Local
- VIAF

```

</rdf:Description>

<rdf:Description rdf:about="http://example.org/work309da0b0">
  <rdf:type rdf:resource="http://bibframe.org/vocab/Bibliography"/>
  <ns0:hasInstance rdf:resource="http://example.org/id309da0b0-9145-4220-b679-2799b9181444"/>
  <ns0:contentCategory rdf:resource="http://id.loc.gov/vocabulary/contentTypes/txt"/>
  <ns0:subject rdf:resource="http://foris.fao.org/agrovoc/term/330606/">
</rdf:Description>
</rdf:RDF>

```



# AN ARABIC SAMPLE RECORD CONVERTED FROM MARCXML TO BIBFRAME.

Zepheira's BIBFRAME SCRIBE.

**Mukhtaṣar fī shawādh al-Qur'ān : | مختصر في شواذ القرآن : min kitāb al-badī' / and  
من كتاب البديع / لابن خالوية ؛ عني بنشره ج. برجشتراسر  
nashrihi J. Barjashtrāsar. [i](#)**

**Alternate Title(s)** Shawādh al-Qur'ān., شواذ القرآن., and Sammlung nichtkanonischer Koranlesarten.

**Creator(s)** [i](#) ابن خالوية: حسين بن أحمد | Ibn Khālawayh, Ḥusayn ibn Aḥmad, d. 980 or 81. [i](#)

**Contributor(s)** [i](#) Bergsträsser, Gotthelf, 1886-1933. [i](#)

**Subject(s)** [i](#) Qur'an > Readings. [i](#)  
[i](#) Qur'an > Criticism, interpretation, etc. [i](#)

**Note(s)** > Includes indexes.

**Language** > ara

**Item(s)** [i](#) Mukhtaṣar fī shawādh al-Qur'ān : | مختصر في شواذ القرآن : [i](#)

**Publisher(s)** al-Matḥa'ah al-Rahmānīyah, and 1934 [i](#) المطبعة الرحمانية: Misr : | [i](#)  
مصر : [i](#)

**Dimensions** > 24 cm.

**Extent** > 6, 228, 8 p ;





unsinkable Molly Brown cookbook denver public

Web Shopping News Images Videos More Search tools

About 3,400 results (0.27 seconds)

The unsinkable Molly Brown cookbook / (Work) - Denver ...

labs.zepheira.com/libhub/data.denverlibrary.org/53qzP\_n1/

Libhub : Denver Public Library. The unsinkable Molly Brown cookbook / ... catalogingSource: DLC; contributor: Brown, Margaret Tobin, 1867-1932. tag-049-XX-I ...

The unsinkable Molly Brown cookbook by May Bennett Wills ...

labs.libhub.org/denverpl/resource/N42F8SpD/

The unsinkable Molly Brown cookbook by May Bennett Wills and Caroline ... (Work) - Denver Public Library : Libhub by Denver Public Library is licensed under ...

The unsinkable Molly Brown cookbook by May Bennett Wills ...

labs.libhub.org/denverpl/.../The%20unsinkable%20Molly%20Brown%2...

rdf-schema#label: The unsinkable Molly Brown cookbook by May Bennett Wills ... Bancroft (Instance) - Denver Public Library : Libhub by Denver Public Library is ...

ver Public Library

unsinka  
Bennet  
ft

Your Library is near!

We're optimizing your library experience. Please stand by.

Redirecting in **-16**.

No thanks, i'll stay here.

type > http://bibfra.me/vocab/marc/Books  
> http://bibfra.me/vocab/lite/Work  
> http://bibfra.me/vocab/marc/LanguageMaterial

rdf-schema#label The unsinkable Molly Brown cookbook by May Bennett Wills and Caroline Bancroft

title The unsinkable Molly Brown cookbook

titleStatement by May Bennett Wills and Caroline Bancroft

creator Wills, May Bennett

contributor Brown, Margaret Tobin 1867-1932.

Denver  
10 W 14  
United S

Dis

## Zepheira's Project with Denver Public Library:

<http://goo.gl/nzR3UV>



[SAVE SEARCH](#)

Keyword search for:

[SEARCH](#)

Search by:

Any Field ▼

Limit by:

All formats ▼

[More Search Options](#)

1 - 1 of 1

Page: [1]

1. [THE UNSINKABLE MOLLY BROWN COOKBOOK](#)

by [Wills, May Bennett](#).

**Call Number:** 641.5 W685un

**Availability:** 4 (of 4)

**Current Holds:** 0

[FIND IT](#)

[FULL DISPLAY](#)

[PLACE HOLD](#)



1966

[Add to My List](#)



# BIBFRAME EXAMPLE FROM DPL.

## The unsinkable Molly Brown cookbook by May Bennett Wills and Caroline Bancroft

<b>type</b>	<ul style="list-style-type: none"><li>➤ <a href="http://bibfra.me/vocab/marc/Books">http://bibfra.me/vocab/marc/Books</a></li><li>➤ <a href="http://bibfra.me/vocab/lite/Work">http://bibfra.me/vocab/lite/Work</a></li><li>➤ <a href="http://bibfra.me/vocab/marc/LanguageMaterial">http://bibfra.me/vocab/marc/LanguageMaterial</a></li></ul>
<b>rdf-schema#label</b>	The unsinkable Molly Brown cookbook by May Bennett Wills and Caroline Bancroft
<b>title</b>	The unsinkable Molly Brown cookbook
<b>titleStatement</b>	by May Bennett Wills and Caroline Bancroft
<b>creator</b>	 <a href="#">Wills, May Bennett</a>
<b>contributor</b>	 <a href="#">Brown, Margaret Tobin 1867-1932.</a>
<b>subject</b>	 <a href="#">Cooking</a>  <a href="#">Colorado &gt; Imprints &gt; 1966. &gt; Denver</a>
<b>language</b>	eng
<b>catalogingSource</b>	DLC
<b>deweyNumber</b>	641.5
<b>illustrations</b>	<ul style="list-style-type: none"><li>➤ <a href="#">illustrations</a></li><li>➤ <a href="#">portraits</a></li></ul>
<b>index</b>	no index present
<b>lcCallNumber</b>	TX715
<b>lcItemNumber</b>	.W736
<b>literaryForm</b>	non fiction

### Context

#### Has Instance(s)

 [The unsinkable Molly Brown cookbook by May Bennett Wills and Caroline Bancroft](#)

### Source

 [Denver Public Library](#)

### Composition

 [Work + Instance](#)

**\*To see how BIBFRAME & Schema.org can be combined, use this link:**

**<http://labs.libhub.org/denverpl/resource/N42F8SpD/>  
to view the codes via: <http://linter.structured-data.org/>**

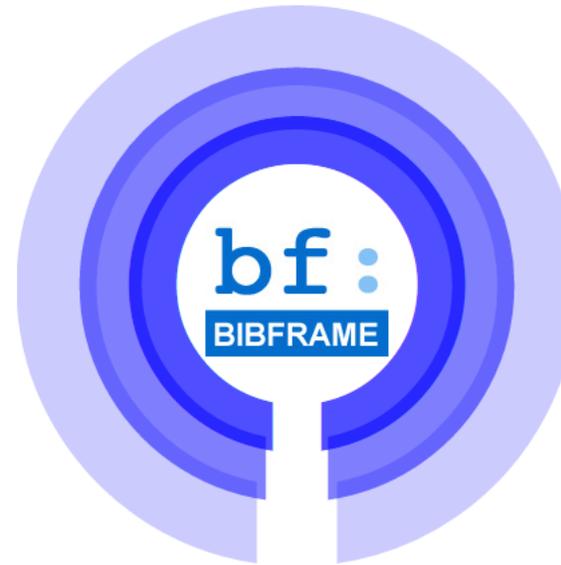


## Attributes of title

Label	title
Description	Title of the resource.
Remark	
Refines	
Is Refined By	<ul style="list-style-type: none"><li>■ abbreviated title</li><li>■ key title</li><li>■ title number</li><li>■ title part</li><li>■ title remainder</li><li>■ title statement</li><li>■ title variation</li><li>■ title variation date</li><li>■ titleVariationRemainder</li></ul>
Expected Value(s)	Literal
IRI	<a href="http://bibfra.me/vocab/lite/title">http://bibfra.me/vocab/lite/title</a>

Can be used to describe

- Instance
- Work



- Bibframe Lite
- Lite + ■ Library
- Lite + ■ Relation
- Lite + ■ Annotation
- Lite + ■ Library + ■ Rare Materials
- Lite + ■ Library + ■ Archive

# BIBFRAME

## Suggested starting terms

---

[Work](#) [Instance](#) [Authority](#) [Event](#)

**BIBFRA.ME Lite's Vocabulary.**

## All :: Classes

---

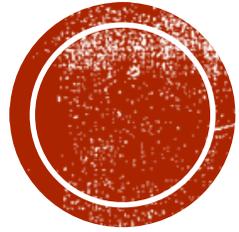
[Agent](#) [Annotation](#) [Authority](#) [Category](#) [Collection](#) [Concept](#) [Copyright Event](#) [Event](#) [Family](#)  
[Form](#) [Instance](#) [Meeting](#) [Organization](#) [Person](#) [Place](#) [Provider Event](#) [Resource](#) [Topic](#)  
[Work](#)

## All :: Properties

---

[alternative name](#) [annotator](#) [audience](#) [authority link](#) [body](#) [contributor](#) [control code](#) [copyright](#)  
[creator](#) [date](#) [description](#) [dimensions](#) [end date](#) [extent](#) [focus](#) [format](#) [genre](#) [image](#)  
[instantiates](#) [label](#) [language](#) [license](#) [link](#) [medium](#) [member of](#) [name](#) [note](#)  
[prefered label](#) [primary work](#) [provider agent](#) [provider date](#) [provider note](#) [provider place](#) [provision](#)  
[related](#) [rights statement](#) [start date](#) [subject](#) [target](#) [title](#) [title alternative](#) [what](#) [when](#)  
[where](#) [who](#) [why](#)





# OTHER LINKED DATA EXAMPLES.



# Description of Egypt

<http://bnb.data.bl.uk/id/resource/007491557>

- ★ **alternative title** Napoleon and the pharaohs

---

- ★ **bnb** GBA157741

---

- ★ **content note** Previous ed: 1994.

---

- ★ **description** At head of title: Naploeon and the Pharaohs.

---

- ★ **edition statement** New ed.

---

- ★ **extent** 169p.

---

- ★ **isbn 10** 3822855537

---

- ★ **language note** Text in English, French and German.

---

- ★ **subject**
  - Egypt
  - Egypt--Antiquities
  - Egypt--Description and travel

---

- ★ **title** Description of Egypt = Beschreibung Ägyptens = Description de l'Égypte

---

- ★ **type**
  - BibliographicResource
  - Book

---

- ★ **contributor** Néret, Gilles

---

- ★ **creator** Napoleon I, Emperor of the French, 1769-1821

---

- ★ **publication event** Köln : Benedikt Taschen, 2001

---

- ★ **same as** GBA157741

---

- ★ **see also** 3822855537

---

- ★ **spatial** Egypt

**\*See the SPARQL query in this slide's note.**



Searched from the main page:  
<http://bnb.data.bl.uk/>



Source: *British National Bibliography*.

Title: Description of Egypt: <http://bnb.data.bl.uk/id/resource/007491557>



## DESCRIPTION OF EGYPT.

### A PARTIAL RDF TURTLE CODES SHOWING MULTIPLE METADATA SOURCES IN THE PREFIXES HIGHLIGHTED (IN PURPLE) BELOW:

@prefix **rdf**: <<http://www.w3.org/1999/02/22-rdf-syntax-ns#>> .

@prefix **elements**: <<http://iflastandards.info/ns/isbd/elements/>> .

@prefix **dct**: <<http://purl.org/dc/terms/>> .

@prefix **rdfs**: <<http://www.w3.org/2000/01/rdf-schema#>> .

@prefix **blterms**: <<http://www.bl.uk/schemas/bibliographic/blterms#>> .

@prefix **bibo**: <<http://purl.org/ontology/bibo/>> .

@prefix **owl**: <<http://www.w3.org/2002/07/owl#>> .

@prefix **foaf**: <<http://xmlns.com/foaf/0.1/>> .

@prefix **linked-data**: <<http://purl.org/linked-data/api/vocab#>> .

@prefix **void**: <<http://rdfs.org/ns/void#>> .



<<http://bnb.data.bl.uk/id/resource/007491557>> elements:P1042 "Previous ed: 1994."@en ;

```
dct:alternative "Napoleon and the pharaohs" ;
dct:description "At head of title: Naploeon and the Pharaohs."@en ;
rdfs:label "Description of Egypt" ;
elements:P1073 "Text in English, French and German."@en ;
blterms:bnb "GBA157741" ;
bibo:isbn10 "3822855537" ;
elements:P1053 "169p."@en ;
elements:P1008 "New ed." ;
dct:title "Description of Egypt = Beschreibung Ägyptens = Description de l'Egypte" ;
dct:creator <http://bnb.data.bl.uk/id/person/NapoleonIEmperoroftheFrench1769-1821> ;
rdf:type dct:BibliographicResource ,
        bibo:Book ;
dct:contributor <http://bnb.data.bl.uk/id/person/N%C3%A9retGilles> ;
foaf:isPrimaryTopicOf <http://explore.bl.uk/primo\_library/libweb/action/search.do?vid=BLVU1%26fn=search%26v1%28freeText0%29=007491557> ,
                    <http://bnb.data.bl.uk/doc/resource/007491557.ttl> ;
blterms:publication <http://bnb.data.bl.uk/id/resource/007491557/publicationevent/K%C3%B6lnBenediktTaschen2001> ;
dct:subject <http://bnb.data.bl.uk/id/concept/lcsh/EgyptAntiquities> ,
            <http://bnb.data.bl.uk/id/concept/lcsh/EgyptDescriptionandtravel> ,
            <http://bnb.data.bl.uk/id/concept/place/lcsh/Egypt> ;
rdfs:seeAlso <http://www4.wiwiss.fu-berlin.de/bookmashup/books/3822855537> ;
dct:spatial <http://bnb.data.bl.uk/id/place/Egypt> ;
owl:sameAs <http://bnb.data.bl.uk/id/resource/GBA157741> .
```

Literal

BL's own triple stores' data:

<http://bnb.data.bl.uk/doc/concept/lcsh/EgyptAntiquities>



# LINKED DATA IN OCLC'S WORLDCAT.ORG

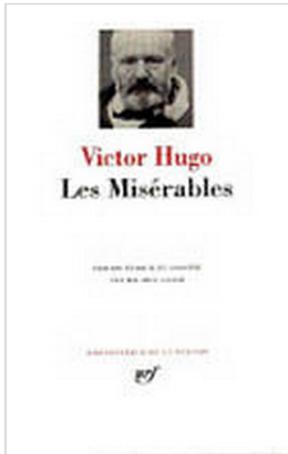


[Advanced Search](#) | [Find a Library](#)

[<< Return to Search Results](#)

[Cite/Export](#)

[Add to list](#) [Add tags](#) [Write a review](#) Rate this item:



## Les misérables

Author: [Victor Hugo](#); [Maurice Allemant](#)

Publisher: [Paris] : Gallimard, [1986]

Series: [Bibliothèque de la Pléiade](#), 85.

Edition/Format: Print book : Fiction : French [View all editions and formats](#)

Database: WorldCat

Rating: (not yet rated) 0 with reviews - Be the first.

Subjects [Paris \(France\) -- Social life and customs -- 19th century -- Fiction.](#)  
[France -- Social life and customs -- 19th century -- Fiction.](#)  
[Manners and customs.](#)

[View all subjects](#)

More like this [User lists](#) [Similar Items](#)

<http://www.worldcat.org/oclc/19607968>



# 'LES MISÉRABLES' AS LINKED DATA.

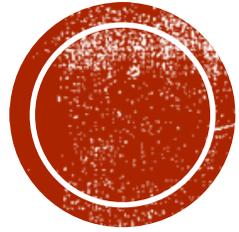
## Linked Data

[More info about Linked Data](#)

### Primary Entity

<<http://www.worldcat.org/oclc/19607968>> # **Les misérables**  
a [schema:Book](#), [schema:CreativeWork](#) ;  
library:oclcnum "19607968" ;  
library:placeOfPublication <<http://experiment.worldcat.org/entity/work/data/37574#Place/paris>> ; # **Paris**.  
library:placeOfPublication <<http://id.loc.gov/vocabulary/countries/fr>> ;  
schema:about <<http://id.worldcat.org/fast/1204289>> ; # **France**.  
schema:about <<http://experiment.worldcat.org/entity/work/data/37574#Topic/unterschicht>> ; # **Unterschicht**  
schema:about <[http://experiment.worldcat.org/entity/work/data/37574#Event/geschichte\\_1815\\_1834](http://experiment.worldcat.org/entity/work/data/37574#Event/geschichte_1815_1834)> ; # **Geschichte 1815-1834**.  
schema:about <[http://experiment.worldcat.org/entity/work/data/37574#Place/paris\\_france](http://experiment.worldcat.org/entity/work/data/37574#Place/paris_france)> ; # **Paris (France)**  
schema:about <<http://id.worldcat.org/fast/1205283>> ; # **France--Paris**.  
schema:about <[http://experiment.worldcat.org/entity/work/data/37574#Event/1800\\_1899](http://experiment.worldcat.org/entity/work/data/37574#Event/1800_1899)> ; # **1800 - 1899**  
schema:about <<http://id.worldcat.org/fast/1007815>> ; # **Manners and customs**  
schema:about <<http://experiment.worldcat.org/entity/work/data/37574#Place/france>> ; # **France**  
schema:about <<http://experiment.worldcat.org/entity/work/data/37574#Place/paris>> ; # **Paris**.  
schema:about <<http://dewey.info/class/843.8/>> ;  
schema:bookFormat [bgn:PrintBook](#) ;  
schema:contributor <<http://viaf.org/viaf/301938360>> ; # **Maurice Allemand**  
schema:creator <<http://viaf.org/viaf/9847974>> ; # **Victor Hugo**  
schema:datePublished "1986" ;  
schema:exampleOfWork <<http://worldcat.org/entity/work/id/37574>> ;  
schema:genre "Fiction"@en ;  
schema:genre "Fiction" ;  
schema:genre "Belletristische Darstellung" ;  
schema:inLanguage "fr" ;  
schema:isPartOf <[http://experiment.worldcat.org/entity/work/data/37574#Series/bibliotheque\\_de\\_la\\_pleiade](http://experiment.worldcat.org/entity/work/data/37574#Series/bibliotheque_de_la_pleiade)> ; # **Bibliothèque de la Pléiade** ;  
schema:name "Les misérables" ;  
schema:productID "19607968" ;  
schema:publication <[http://www.worldcat.org/title/-/oclc/19607968#PublicationEvent/paris\\_gallimard\\_1986](http://www.worldcat.org/title/-/oclc/19607968#PublicationEvent/paris_gallimard_1986)> ;  
schema:publisher <<http://experiment.worldcat.org/entity/work/data/37574#Agent/gallimard>> ; # **Gallimard**  
schema:workExample <<http://worldcat.org/isbn/9782070102648>> ;  
wdrs:describedby <<http://www.worldcat.org/title/-/oclc/19607968>> ;

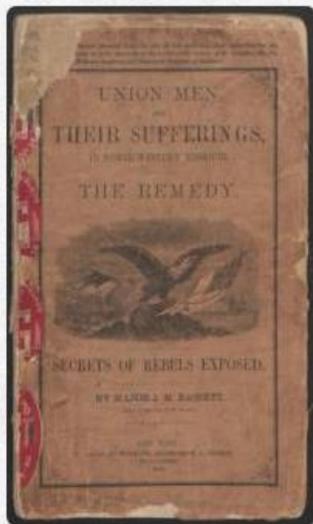




**DATA VISUALIZATION &  
OTHER NEW POSSIBILITIES  
FOR LIBRARIES WITH LINKED DATA.**



# Union Men and Their Sufferings in North-Western Missouri



 Transcription

**Title:** Union Men and Their Sufferings in North-Western Missouri

**Alternate title:** Union Men and Their Sufferings in North-Western Missouri. The Remedy. Secrets of Rebels Exposed.

**Creator:** J.M. Bassett

**Description:** This 1864 pamphlet, entitled "Union Men and Their Sufferings in North-Western Missouri," was written by Major J.M. Bassett, former Provost Marshal-General of the Northwest District of Missouri. Bassett provides a "glance at the history of the Rebellion in Northwest Missouri," admitting "it may be that my hatred for rebels is too intense, my sympathy for loyal men too strong, to make every sentence I write acceptable to all." The pamphlet, which features several black-and-white illustrations, was published by the Press of Wynkocp, Hallenbeck, and Thomas in New York, with proceeds from its sale given to The Ladies' Aid Society of St. Joseph, Missouri.

**Date original:** 1864

**Place:** Buchanan County, Missouri; Clay County, Missouri; Lawrence, Kansas; St. Joseph, Missouri; Jackson County, Missouri; Andrew County, Missouri; Clinton County, Missouri; Platte County, Missouri; Fort Leavenworth, Kansas; Livingston County, Missouri; Nodaway County, Missouri

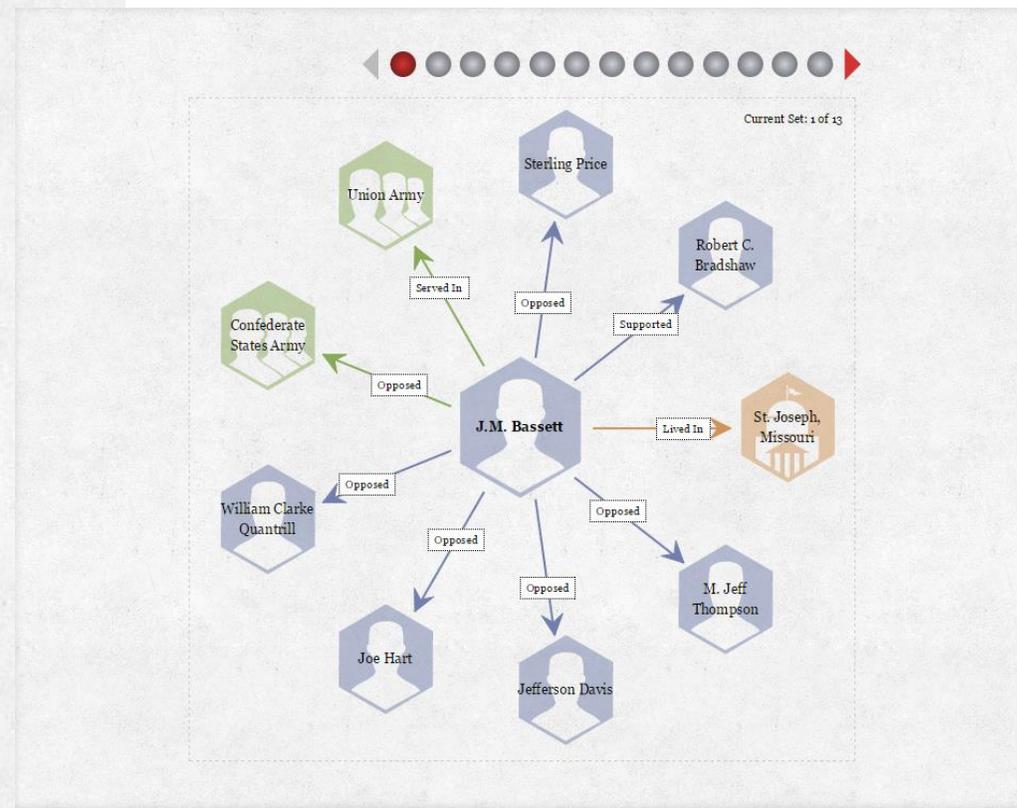
**Event:** Quantrill's Raid on Lawrence; Battle of Hemp Bales / Battle of Lexington

**Topic:** Battle for Missouri, 1861-1865 -- Military History of Missouri and Kansas; Guerrillas; Missouri military units (Union); Picturing the War; Surviving a Guerrilla War; Women; Missouri military units (Confederate); American Indians; African Americans; Kansas military units; Bushwhackers

**Person:** Jefferson Davis; Abraham Lincoln; William Clarke Quantrill; Hamilton R. Gamble; Sterling Price; Joseph Orville Shelby; Claiborne Fox Jackson; Samuel R. Curtis

**Owning organization:** St. Joseph Public Library

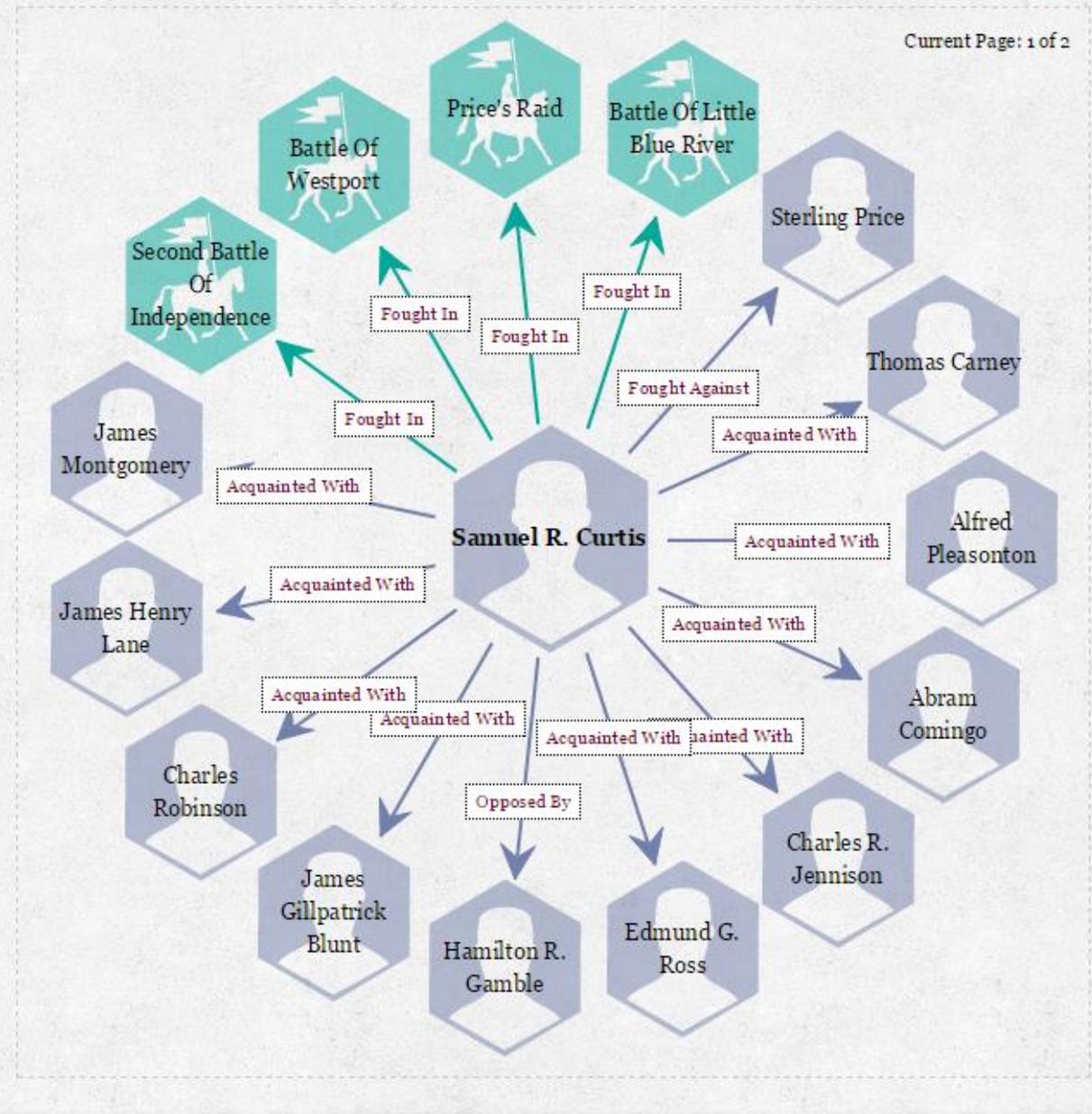
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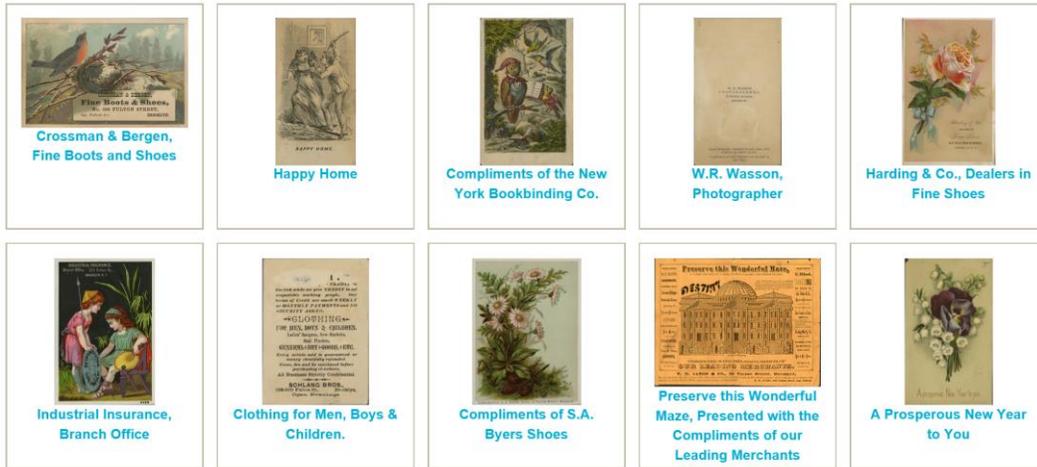
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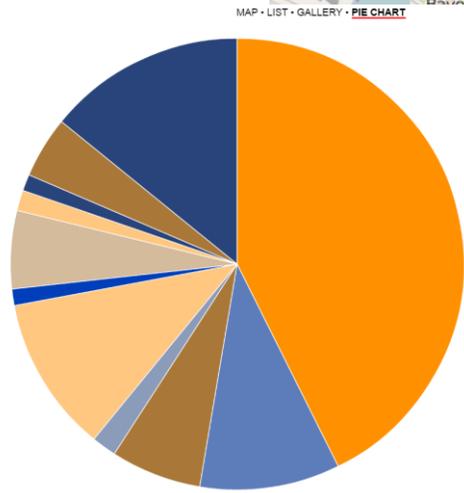
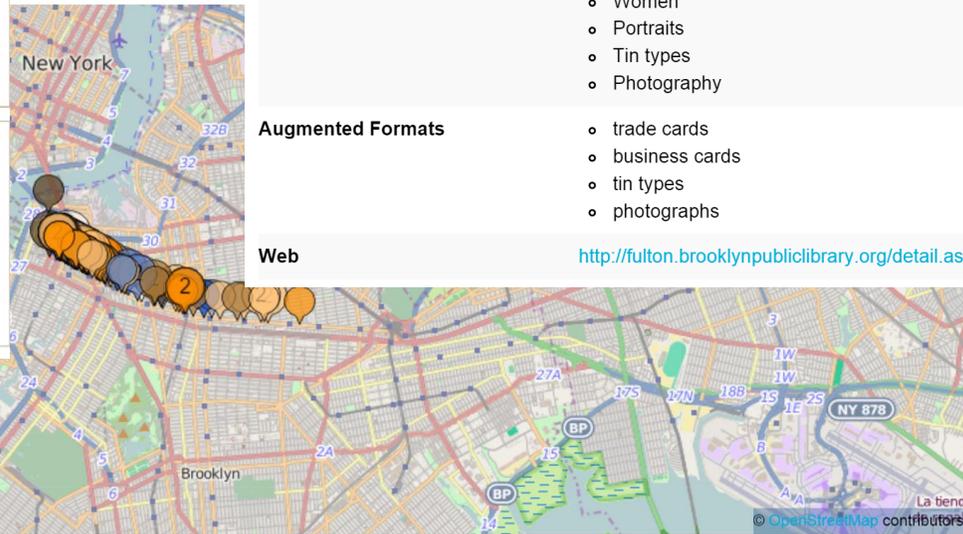


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- Music stores
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- Pet shops
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- Roller-skating rinks
- Shoe stores
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- Tailors
- Tobacco industry
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Image



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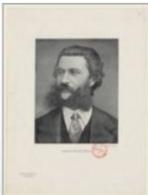
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<http://fulton.brooklynpubliclibrary.org/detail.asp?card=fc-0029>



# Johann Strauss (1825-1899)

**Johann Strauss (1825-1899)**



Country : Autriche  
Gender : masculin  
Birth : Vienne, 25-10-1825  
Death : Vienne, 03-06-1899  
Note : Compositeur, chef d'orchestre et violoniste  
Field : Musique  
Variants of the name : Johann Strauss fils (1825-1899)  
Johann Strauss II (1825-1899)  
ISNI : ISNI 0000 0001 2117 4622

[data.bnf.fr](#)  
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**Occupations**

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- Compositeur de l'œuvre adaptée (28)
- Auteur du texte (17)
- Auteur de lettres (5)
- Chant (3)
- Compositeur présumé (2)
- Agence de publicité (1)
- Orchestrateur (1)
- Librettiste (1)
- Arrangeur (1)
- Auteur ou responsable intellectuel (1381)
- Auteur ou responsable intellectuel (autre) (1)

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→ **Vienne chante et danse (1967)**  
**Musical genre:** opéra-comique  
Opérette en 2 actes et 18 tableaux. - Livret et couplets d'Henri Varna, Marc Cab et René Richard, d'après le roman de Suzanne Normand et Jean Acker, "Le Vagabond impérial". - Ais additionnels de Johann Strauss père et fils. - Orchestration de Mario Bua. - 1re représentation : Paris, Théâtre Mogador, 25 novembre 1967. - Nouvelle version en 1976

**Compositeur** 5991 documents

→ **Accelerationen [RV 234] (1860)**  
**Musical genre:** valse  
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Thongchai Winichakul

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**Siam mapped : a history of the geo-body of a nation**

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Thongchai Winichakul

Honolulu : University of Hawaii Press, c1994.

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✓ Olin Library Maps (Non-Circulating) G8026.P1 1945 U5

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Ubol, U

Bangkok : Boonkrong Bhanij Nityabhakdi, 1938.

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**Tourist map of Siam** 1938

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**Siam mapped: The making of Thai nationhood** 1996

Winichakul, Thongchai  
The Ecologist. Volume 26, Issue 5, p. 215.

**Siam Mapped and Mapping in Cambodia: Boundaries, Sovereignty, and Indigenous Conceptions of Space** 2002

Fox, J

Society & Natural Resources. Volume 15, Issue 1, pp. 65-78.

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The American Historical Review. Volume 100, Issue 2, p. 477.

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Original autograph letters relating to China and the Chinese together with the first Chinese proclamation printed in English, a manuscript map of the Opium War, original checks of the Earl of Macartney, early customs receipts, etc., 1686-1914

Wason, Charles, William, 1854-1918

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**François-Jules Harmand papers, 1845-1956, 1845-1922 (bulk)**

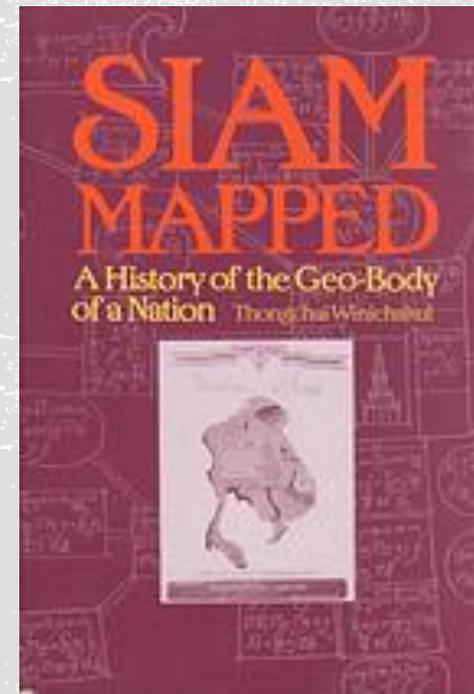
Harmand, François-Jules, 1845-1921

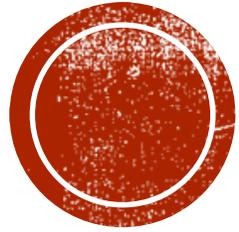
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# CORNELL UNIVERSITY LIBRARY

## ‘SIAM MAPPED’





# DISCOVERY SERVICES



# **Opportunities & Challenges:** ***Multiple Choices of Discovery Services***

- WorldShare, Summon, EDS, ENCORE, Primo, etc.
- Open Source Software (Blacklight, Invenio, Kaltura, etc.)
- Open Content (OER, DPLA, Europeana, Wikidata, Geonames, Arabic Collection Online, and etc.)

**BIBFRAME & Schema.org**

**= New players**

**Zepheira, Kuali-OLE, BIBFLOW, LC's contracts with Smart Software Inc. & Index Data.com,**

**and so forth.**

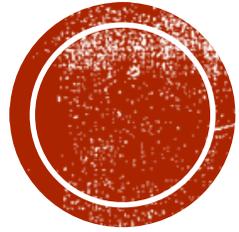
**DISCOVERY  
SERVICES**



**NEXT STEPS?**

**THE ROAD MAP  
TO BIBFRAME**

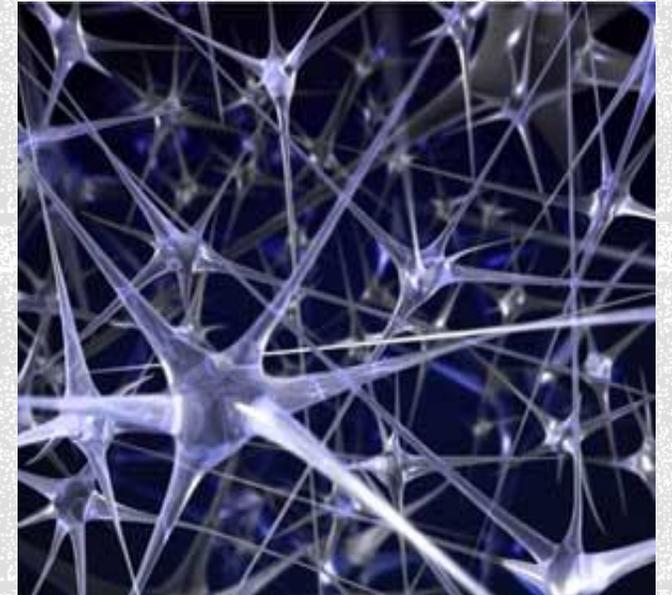




# HOW TO PLAN FOR THE TRANSITION TO BIBFRAME & LINKED DATA: RECOMMENDATIONS.

## **RECOMMENDATION: CATALOGING & METADATA SERVICES' ACTION PLAN**

- Education and training on BIBFRAME and linked data (workshops, conferences, etc., plus in-house training)
- Explore the option to be an early adopter/tester (with LC) of BIBFRAME.
- Clean your data to get ready for the data transformation.
- Pilot your own project or experiment with BIBFRAME.
- Monitor the development of BIBFRAME, Schema.org, linked data and other web and GLAM technologies.



- Education and transition planning for BIBFRAME and linked data in your library via **a steering committee** charged with:
  - Facilitating discussions and planning sessions
  - Keeping your library community informed on the new development.
  - Assessing the impact on your library.
  - Designing the in-house training program for your library.
- An assessment of your library's readiness for BIBFRAME based on the BIBFLOW Project.
- Plan for BIBFRAME's implementation based on the assessment data.

## RECOMMENDATION: A LIBRARY-WIDE ACTION PLAN.



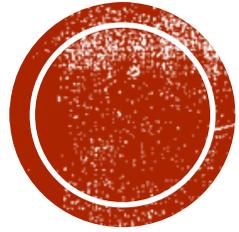


EmbellishedMinds.com

The only way to make sense out of change is to plunge into it, move with it, and join the dance.

~ Alan Watts ~





*YOU CAN NOW JOIN:*  
**AMICAL LINKED DATA &  
BIBFRAME INTEREST GROUP**

<http://connect.amicalnet.org/group/linked-data-bibframe-interest-group>

# ADDITIONAL RESOURCES (1)

- Semantic Web Basics: <http://www.linkeddatatools.com/semantic-web-basics>
- RDFa Primer: <http://www.w3.org/TR/rdfa-primer/>
- SPARQL Query: <http://www.w3.org/TR/sparql11-overview/>
- Schema.org & Bibliograph.net
- Linked Open Data Cloud: <http://datahub.io/group/lodcloud>
- OCLC's Data Strategy and Linked Data: <http://www.oclc.org/data.en.html>
- LC Linked Data Services: <http://id.loc.gov/>
- Getty Vocabularies as LOD: <http://www.getty.edu/research/tools/vocabularies/lod/index.html>
- BIBFRAME: <http://bibframe.org/>
  - Tools: editors and transformer: <http://bibframe.org/tools/>
  - Testing and implementation: <http://hangingtogether.org/?p=4487>
- BIBFRAME Update at ALAMW15: <https://www.youtube.com/watch?v=Aqjcc70K7x0>
- Zepheira, LLC: <http://zepheira.com/solutions/library/>
- Semantic Web in Libraries: <http://swib.org/>



# ADDITIONAL RESOURCES (2)

- Godby, Carol Jean, and Ray Denenberg. 2015. *Common ground: exploring compatibilities between the linked data models of the Library of Congress and OCLC*.  
<http://www.oclc.org/research/publications/2015/oclcresearch-loc-linked-data-2015.html>
- LD4 – Use cases: <https://wiki.duraspace.org/display/ld41/LD4L+Use+Cases>
- Miller, Eric and Uche Obbuji. 2015. "Linked Data Design for the Visible Library." *Bulletin of the American Society for Information Science and Technology* 41, no. 4: 23-29.  
[http://www.asis.org/Bulletin/Apr-15/AprMay15\\_Miller\\_Ogbuji.pdf](http://www.asis.org/Bulletin/Apr-15/AprMay15_Miller_Ogbuji.pdf)
- *NMC Horizon Report: 2015 Higher Education Edition*. 2015. Austin Texas: New Media Consortium.  
<http://cdn.nmc.org/media/2015-nmc-horizon-report-HE-EN.pdf>
- Schreur, Philip Evan. 2012. "The Academy Unbound." *Library Resources & Technical Services* 56, no. 4: 227-237. <https://stacks.stanford.edu/file/druid:bd701dh8028/Academy%20Unbound.pdf>
- Tillett, Barbara B. 2003. *What is FRBR?: a conceptual model for the bibliographic universe*. [Washington, D.C.]: Library of Congress, Cataloging Distribution Service.  
<http://www.loc.gov/cds/downloads/FRBR.PDF> .



# IMAGE CREDITS

Slide no. 3:

- Berners-Lee, Tim. 1998. Semantic Web' Road Map: <http://www.w3.org/DesignIssues/Semantic.html>
- Berners-Lee, T., J. Hendler, and O. Lassila. 2001. "The Semantic Web". *SCIENTIFIC AMERICAN - AMERICAN EDITION*-. 284: 28-37.

Slide no. 4:

- Miller, Eric. (2015). Accelerating the Visible Library. In: The Visible Library: Learn how the Web sees libraries. A Library Journal webcast presented by Atlas Systems, Zepheira and Library Journal, Thursday, February 26, 2015, slide no. 60: <https://goo.gl/mZRBK>
- Linking Open Data cloud diagram 2014, by Max Schmachtenberg, Christian Bizer, Anja Jentzsch and Richard Cyganiak. <http://lod-cloud.net/>

Slide no. 18:

- Description de l'Égypte: <http://dx.doi.org/10.5962/bhl.title.62506>
- data.bnf.fr Project by Bibliothèque Nationale de France: [http://data.bnf.fr/13900121/johann\\_strauss/](http://data.bnf.fr/13900121/johann_strauss/)

Slide 29:

- Change by Us. Created by [Libby Levi](#) and [Meredith Atwater](#) for opensource.com: <http://goo.gl/ZF0uOR>

Slide 30:

- Luke Detwiler's photo stream on Flickr, Gordon Creek Road: <http://goo.gl/9v5CHo>

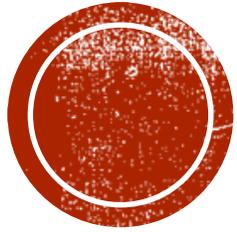
Slide 32:

- Neurons in the zebra fish's brain: [https://commonfund.nih.gov/highlights\\_2010](https://commonfund.nih.gov/highlights_2010)

Slide 33:

- Team work: <https://www.muezart.com/keynote-text-tree-infographics-sample>





**THANK YOU!**

