Library Linked Data for the Uninitiated

Lizzy Baus & Sara Ring, Minitex

http://z.umn.edu/14cy Library Technology Conference March 2016



Intro/Agenda

- Linked Data
- BIBFRAME
- Workflow
- Case studies/more info

Why Linked Data?

Linked data is the future of the web

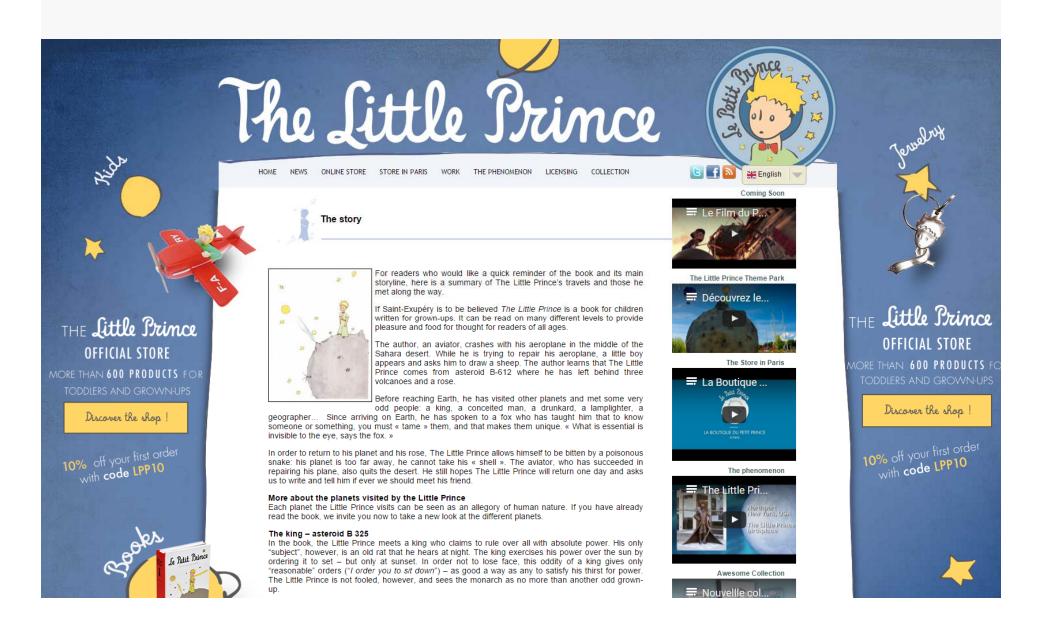
Data will no longer be in silos

 Relationships are powerful and worth the effort

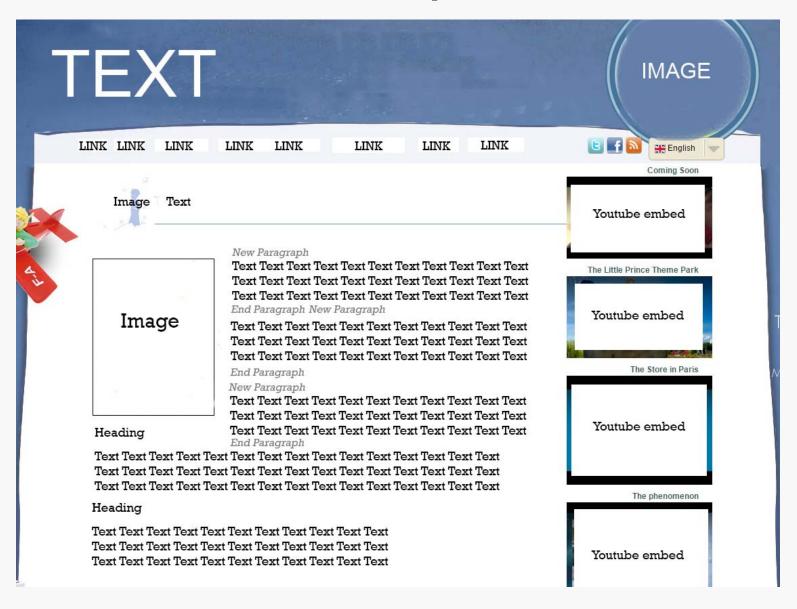
Why Linked Data?

So what's the problem with how things are now?

What a human sees



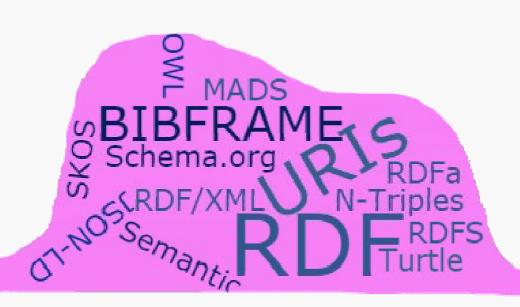
What a computer sees



What is Linked Data?

A set of principles and best practices for sharing data and building relationships between data on the web so that machines can "understand" and interpret the data.

What are the principles and best practices?



Resource Description Framework (RDF)

What is it?

RDF provides a way to describe anything you encounter in the world: people, places, concepts, words, documents, etc.

RDF provides a way to describe **relationships**: how one thing relates to another thing

RDF Components

Statement: A combination of a Resource, a Property, and a Property value

Resource >> Subject
Property >> Predicate

Property Value → Object

Statements are usually referred to as **triples**

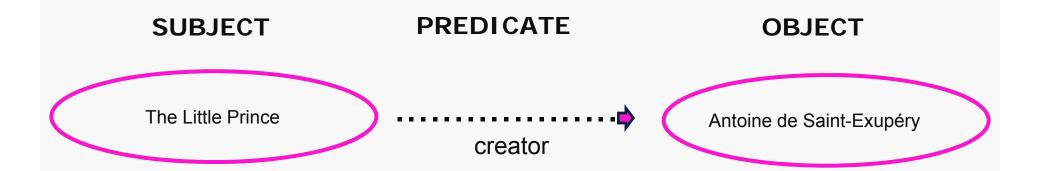
Triple Example

Statement
The creator of the Little Prince is Antoine de Saint-Exupéry

Subject Little Prince

Predicate creator

Object Antoine de Saint-Exupéry



<?xml version="1.0"encoding="UTF-8"?>

<rdf: RDF

xmlns:rdf=http://www.w3.org/1999/02/22-rdf-syntax-ns#

xmlns: dc=http://purl.org/dc/elements/1.1/>

<rdf: Description

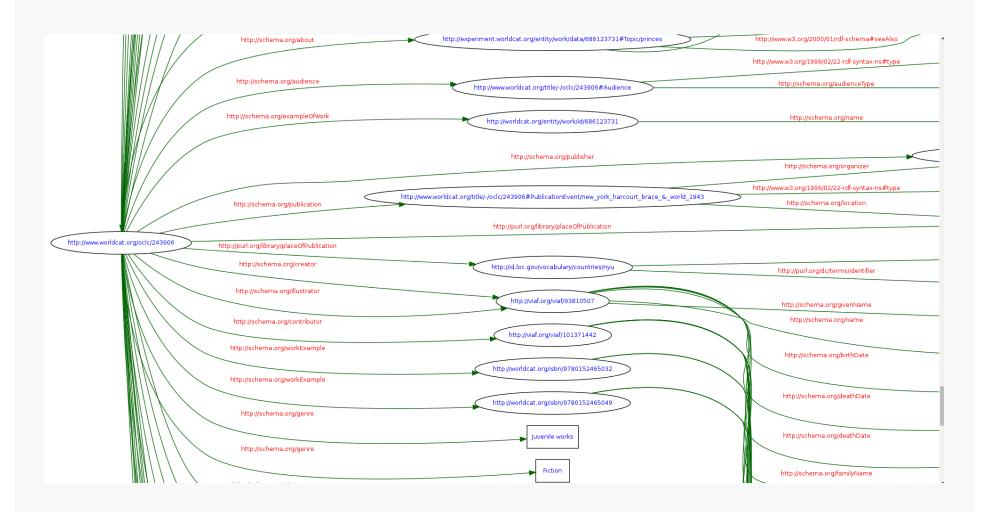
rdf:about=https://en.wikipedia.org/wiki/The_Little_Prince>

<dc:creator>Antoine de Saint-Exupéry</dc:creator>

</rdf: Description>

</rdf: RDF>

RDF graph: The Little Prince



VIAF

Virtual International Authority File

Select Field: Select Index: Search Terms: All VIAF ■





http://schema.org/name

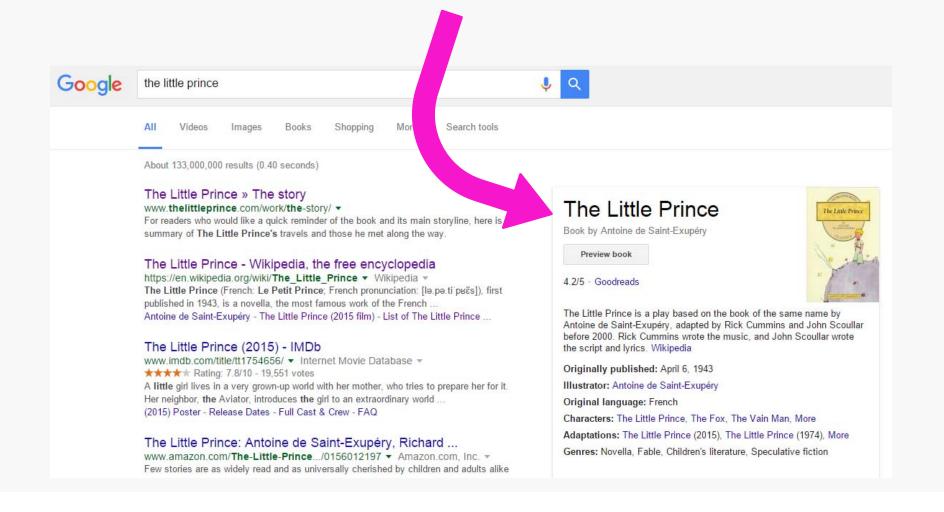
Antoine de Saint-Exupéry

RDF Exercise

We are going to create some RDF of our own!

- Look at the Dublin Core records
- Break the data into triples in the spreadsheet (use URIs if you can find them)
- We will mark it up as RDF/XML

Visualizing RDF



https://en.wikipedia.org/wiki/The Little Prince

The Little Prince

From Wikipedia, the free encyclopedia (Redirected from The little prince)

This article is about the novella. For other uses, see Little Prin "Asteroid B-612" redirects here. For the foundation, see B612

The Little Prince (French: Le Petit Prince; French pronunciation: [le.t (1900-1944).

The novella is the fourth most-translated book in the world and w million copies annually with sales totaling over 140 million copies

After the outbreak of the Second World War Saint-Exupéry was e including a tender tale of loneliness, friendship, love, and loss, in to have drawn on those same experiences in The Little Prince.

Since its first publication in the United States, the novella has bee

Contents [hide]

- 1 Overview
- 2 Plot
- 3 Tone and writing style
- 4 Inspirations
- 4.1 Events and characters
- 42 The Rose
- 4.3 The Prince
- 5 Background
 - 5.1 Manuscript
 - 5.2 Dedication
 - 5.3 Illustrations 5.4 Post-publication
 - 5.5 Reception
- 6 Literary translations and printed editions
 - 6.1 Spanish editions
- 6.2 Extension of copyrights in France
- 7 Adaptations and sequels
- 8 Honours and legacy
 - 8.1 Museums and exhibits
 - 8.2 Numismatics and philatelic
 - 8.3 Astronomy
 - 8.4 Insignia and awards
- 8.5 Schools



Antoine de Saint-Exupéry Author

Original title Le Petit Prince

Translator (English editions)

Katherine Woods

T.V.F. Cuffe

Irene Testot-Ferry Alan Wakeman Richard Howard^[1]

David Wilkinson

Antoine de Saint-Exupéry Illustrator

Cover artist Antoine de Saint-Exupéry

Country United States

Language French

Revnal & Hitchcock (U.S.) Publisher

Gallimard (France)[2]

Publication

date

1943 (U.S.: English & French)

(France, French,

1945)[2][Note 1]

Preceded by Pilote de guerre (1942)

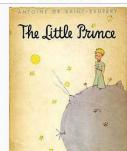
Followed by Lettre à un otage (1944) poet, and pioneering aviator Antoine de Saint-Exupéry

alects (as well as Braille),[3][4] selling nearly two

of the writings for which he would be remembered, experiences in the Sahara Desert, and he is thought

creen, television, ballet, and operatic works.[3][10]

The Little Prince



Antoine de Saint-Exupéry Original title Le Petit Prince Translator (English editions)

> Katherine Woods T.V.F. Cuffe Irene Testot-Ferry Alan Wakeman Richard Howard^[1] David Wilkinson

Antoine de Saint-Exupéry Cover artist Antoine de Saint-Exunéry Country United States

Language French

Publisher Reynal & Hitchcock (U.S.) Gallimard (France)[2]

Publication 1943 (U.S.: English & French) (France, French,

1945)[2][Note 1] Preceded by Pilote de guerre (1942) Followed by Lettre à un otage (1944)

dbpedia.org/page/The_Little_Prince

About: The Little Prince

An Entity of Type: written work, from Named Graph: http://dbpedia.org, within Data Space: dbpedia.org

The Little Prince (French: Le Petit Prince; French pronunciation: [le.pe.tiˈpʁɛ̃s]), first published in 1943, is a novella and the most famous work of the French aristocrat, writer, poet and planguage, and was voted the best book of the 20th century in France.

Property	Value
dbo:abstract	The Little Prince (French: Le Petit Prince; French pronunciation: [le.pe.tiˈpuɛ̃s]), first published in 1943, is a novella a both the most-read and most-translated book in the French language, and was voted the best book of the 20th centu totalling over 140 million copies worldwide, it has become one of the best-selling books ever published. After the outb produced almost half of the writings for which he would be remembered, including a tender tale of loneliness, friends experiences in the Sahara Desert, and he is thought to have drawn on those same experiences in The Little Prince. S radio plays, live stage, film screen, television, ballet, and operatic works.
dbo:author	■ dbr:Antoine_de_Saint-Exupéry
dbo:coverArtist	 dbr:Antoine_de_Saint-Exupéry
dbo:illustrator	 dbr:Antoine_de_Saint-Exupéry
dbo:previousWork	dbr:Flight_to_Arras
dbo:publisher	 dbr:Reynal_&_Hitchcock dbr:Éditions_Gallimard
dbo:thumbnail	 http://en.wikipedia.org/wiki/Special:FilePath/Littleprince.JPG?width=300
dbo:translator	 dbr:Richard_Howard
dbo:wikiPageExternalLink	 http://web.archive.org/web/20070329010927/http:/habpro.tripod.com/visionslp/id13.html http://books.google.com/books/about/The_Tale_of_the_Rose.html?id=OarX1V7Mh6cC http://habpro.tripod.com/visionslp/id13.html http://hibpro.tripod.com/visionslp/id13.html http://www.b612.cn/image/2011-10-19.html http://www.nbcnewyork.com/video/#l/on-air/as-seen-on/The-Little-Prince-A-New-York-Story-Exhibition/241919181 http://www.patoche.org/lepetitprince/gallima.htm http://www.patoche.org/lepetitprince/gallima.htm http://www.thelittleprince.com/ http://www.trussel.com/saint-ex/stexbib.htm#47 http://www.trussel.com/saint-ex/stexbib.htm#47 http://www.freewebs.com/shirtsleeves/quotes/littleprince.html nyt:1989/05/12/arts/in-the-footsteps-of-saint-exupery.html http://www.tbs.co.jp/l-prince http://www.tbs.co.jp/l-prince/en/w-map.html http://www.tbs.co.jp/l-prince/en/w-map.html http://www.guardian.co.uk/world/2010/aug/01/little-prince-return-multimedia http://www.dkagencies.com/MSB/LE-PETIT-PRINCE_1.aspx http://www.sparknotes.com/lit/littleprince/ http://www.lepetitprince.com/

Querying

Find all artists/bands that are originally from Wisconsin

```
SPARQL:
PREFIX owl: <a href="http://www.w3.org/2002/07/owl#">http://www.w3.org/2002/07/owl#>
PREFIX xsd: <a href="http://www.w3.org/2001/XMLSchema#">http://www.w3.org/2001/XMLSchema#</a>
PREFIX rdfs: <a href="http://www.w3.org/2000/01/rdf-schema#">http://www.w3.org/2000/01/rdf-schema#>
PREFIX rdf: <a href="http://www.w3.org/1999/02/22-rdf-syntax-ns#">http://www.w3.org/1999/02/22-rdf-syntax-ns#</a>
PREFIX foaf: <a href="http://xmlns.com/foaf/0.1/">http://xmlns.com/foaf/0.1/>
PREFIX dc: <a href="http://purl.org/dc/elements/1.1/">http://purl.org/dc/elements/1.1/>
PREFIX : <a href="http://dbpedia.org/resource/">http://dbpedia.org/resource/>
PREFIX dbpedia2: <a href="http://dbpedia.org/property/">http://dbpedia.org/property/>
PREFIX dbpedia: <a href="http://dbpedia.org/">http://dbpedia.org/>
PREFIX skos: <a href="http://www.w3.org/2004/02/skos/core#">http://www.w3.org/2004/02/skos/core#>
PREFIX dbo: <a href="http://dbpedia.org/ontology/">http://dbpedia.org/ontology/>
SELECT ?person ?bandname ?description WHERE {
           ?person rdf:type dbo:MusicalArtist .
           ?person dbo:birthPlace ?born .
           ?person rdfs:comment ?description .
           ?person dbo:associatedBand ?bandname
           FILTER (LANG(?description) = 'en') .
           FILTER (regex(?born, "Wisconsin", "i"))
} ORDER BY ASC(?person) ?bandname
Results: Browse
                                                    Reset
                                         Go!
```

Query Results

```
PREFIX dbo: <a href="https://dbpedia.org/ontology/">PREFIX dbo: <a href="https://dbpedia.org/ontology/">https://dbpedia.org/ontology/</a></a>

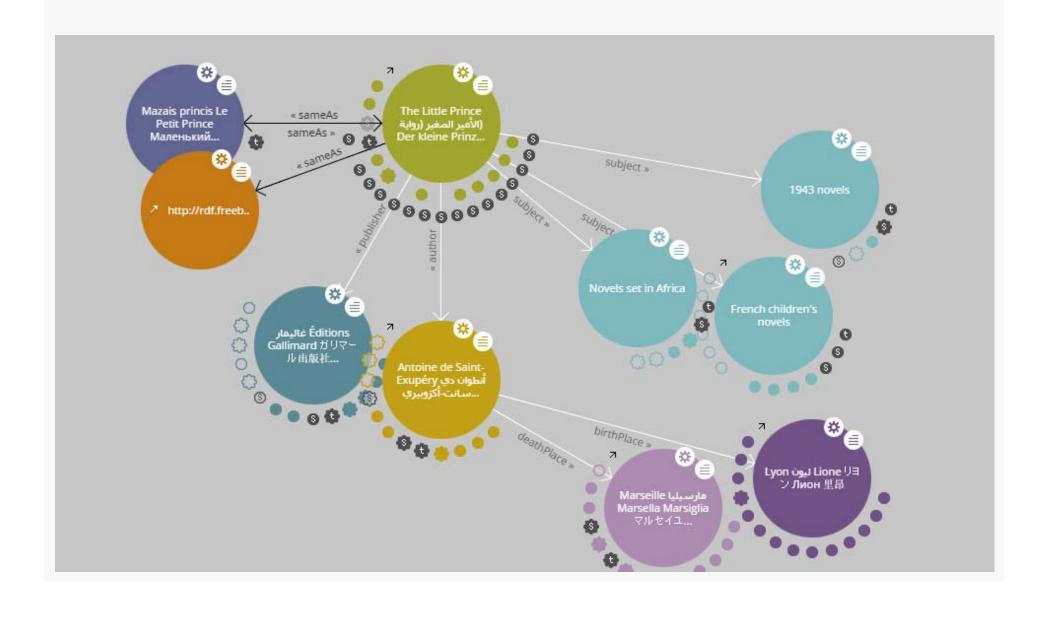
Results: Browse

Total Results: Browse
```

SPARQL results:

person	bandname	description
:Billy_Flynn_(musician) ঐ	:Jimmy_Dawkins ঐ	"Billy Flynn (born August 11, 1956) is an American Chicago blues and electric blues guitarist, singer and songwriter. In addition to his own work, Hummel, Willie Kent, Snooky Pryor, Big Bill Morganfield, John Brim, Jody Williams, Little Arthur Duncan, Deitra Farr, and Billy Boy Arnold."
:Billy_Flynn_(musician) ঐ	:Mississippi_Heat ₽	"Billy Flynn (born August 11, 1956) is an American Chicago blues and electric blues guitarist, singer and songwriter. In addition to his own work, Hummel, Willie Kent, Snooky Pryor, Big Bill Morganfield, John Brim, Jody Williams, Little Arthur Duncan, Deitra Farr, and Billy Boy Arnold."
:Billy_Flynn_(musician) ঐ	:The_Legendary_Blues_Band ঐ	"Billy Flynn (born August 11, 1956) is an American Chicago blues and electric blues guitarist, singer and songwriter. In addition to his own work, Hummel, Willie Kent, Snooky Pryor, Big Bill Morganfield, John Brim, Jody Williams, Little Arthur Duncan, Deitra Farr, and Billy Boy Arnold."
:Bobby_Hatfield ₪	:Bill_Medley @	"Robert Lee "Bobby" Hatfield (August 10, 1940 - November 5, 2003) was an American singer, best known as one half of the Righteous Brother
:Bobby_Hatfield &	:The_Righteous_Brothers &	"Robert Lee "Bobby" Hatfield (August 10, 1940 - November 5, 2003) was an American singer, best known as one half of the Righteous Brother
:Brian_Ritchie &	:Violent_Femmes @	"Brian Ritchie (born 21 November 1960) is the bass guitarist for the alternative rock band Violent Femmes. In addition to his bass playing, Ritchi
:Brian_Ritchie @	:Zen_Circus ট্র	"Brian Ritchie (born 21 November 1960) is the bass guitarist for the alternative rock band Violent Femmes. In addition to his bass playing, Ritchi
:Bruce_Robb @	:Art_Garfunkel ঐ	"Bruce Robb (born October 22, 1954) is an American musician, record producer, engineer, and music supervisor."@en
:Bruce_Robb ₺	:Del_Shannon @	"Bruce Robb (born October 22, 1954) is an American musician, record producer, engineer, and music supervisor."@en
:Bruce_Robb @	:Harry_Nilsson @	"Bruce Robb (born October 22, 1954) is an American musician, record producer, engineer, and music supervisor."@en
:Bruce_Robb ₺	:John_Mellencamp &	"Bruce Robb (born October 22, 1954) is an American musician, record producer, engineer, and music supervisor."@en
:Bruce_Robb @	:Ringo_Starr &	"Bruce Robb (born October 22, 1954) is an American musician, record producer, engineer, and music supervisor."@en
:Bruce_Robb ₽	:Robert_Bradley's_Blackwater_Surprise ঐ	"Bruce Robb (born October 22, 1954) is an American musician, record producer, engineer, and music supervisor."@en
:Bruce_Robb @	:Steve_Cropper ₺	"Bruce Robb (born October 22, 1954) is an American musician, record producer, engineer, and music supervisor."@en
:Bruce_Robb ₺	:The_Lemonheads &	"Bruce Robb (born October 22, 1954) is an American musician, record producer, engineer, and music supervisor."@en
:Bruce_Robb @	:The_Robbs ঐ	"Bruce Robb (born October 22, 1954) is an American musician, record producer, engineer, and music supervisor."@en
:Chris_Broach ঐ	:Braid_(band) 🗗	"Chris Broach (born Christopher Robert Broach: September 5, 1976 in Madison, WI) is one of the guitarists/vocalists in the 90's Emo band Braic Broach went to see Braid play a show at The Red Herring, in Urbana, Illinois. After the show, he was introduced to Bob Nanna through a mutual
:Chris_Broach &	:L'Spaerow ঐ	"Chris Broach (born Christopher Robert Broach: September 5, 1976 in Madison, WI) is one of the guitarists/vocalists in the 90's Emo band Braic Broach went to see Braid play a show at The Red Herring, in Urbana, Illinois. After the show, he was introduced to Bob Nanna through a mutual
:Chris_Broach ঐ	:Life_at_Sea ₪	"Chris Broach (born Christopher Robert Broach: September 5, 1976 in Madison, WI) is one of the guitarists/vocalists in the 90's Emo band Braic Broach went to see Braid play a show at The Red Herring, in Urbana, Illinois. After the show, he was introduced to Bob Nanna through a mutual

Another RDF visualization tool en.lodlive.it

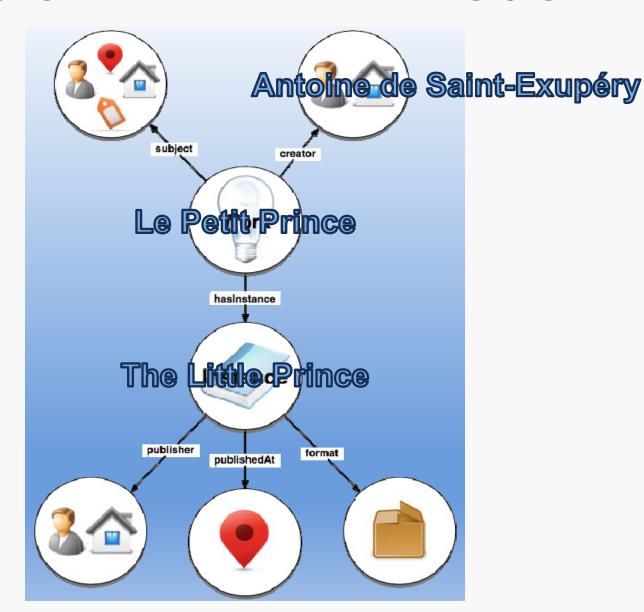


BIBFRAME Overview

Topics to cover:

- What is BIBFRAME?
- What does linked data have to do with BIBFRAME?
- How does BIBFRAME fit into the standards and best practices discussed earlier?
- How will I actually use BIBFRAME in my daily work?

Basic BIBFRAME Model



State of progress

- Vocabulary 2.0 coming soon!
- New Core class: Items
- New core class: Events
- No more Authority layer will go straight to Subject, Person, etc.
- More information here: <u>http://www.loc.gov/bibframe/docs/in</u> dex.html

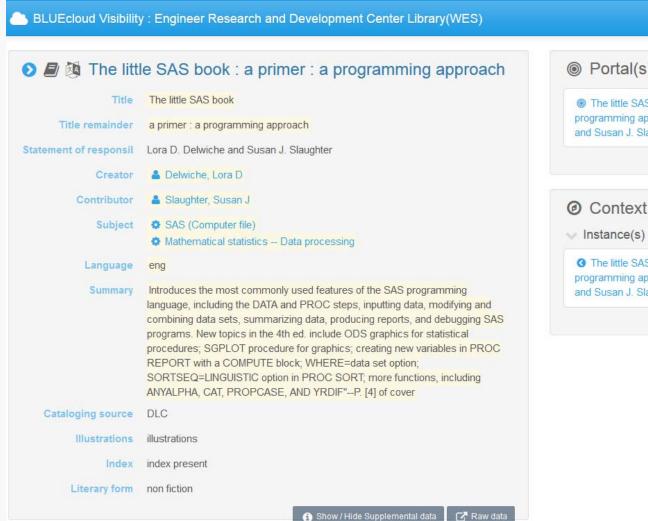
BIBFRAME and Linked Data

- How do these two concepts connect?
 - BIBFRAME plays on the ideas of linked data to connect bibliographic data across the web.
 - Use of URIs instead of strings
 - Often shown/visualized/serialized in RDF triples
 - -Not just a replacement for MARC!

BIBFRAME in the Wild

So what does it really look like when someone uses BIBFRAME?

```
C:\Users\eebaus\AppData\Local\Temp\extract-1 - Notepad++
File Edit Search View Encoding Language Settings Macro Run Plugins Window ?
extract-1
      @prefix bf: <http://bibfra.me/vocab/lite/> .
     @prefix cc: <http://creativecommons.org/ns#> .
      @prefix dc: <http://purl.org/dc/terms/> .
  4 @prefix ll: <http://library.link/vocab/> .
  5 @prefix ns1: <http://schema.org/>
      @prefix ns2: <http://bibfra.me/vocab/marc/>
  7 @prefix ns3: <http://purl.org/dc/elements/1.1/> .
     @prefix ns4: <http://bibfra.me/vocab/marcext/> .
  9 @prefix ns5: <http://bibfra.me/purl/versa/> .
 10 @prefix ns6: <http://www.w3.org/ns/rdfa#> .
 11 @prefix ns7: <http://www.w3.org/1999/xhtml/vocab#>
 12 @prefix og: <http://oqp.me/ns#> .
 13 @prefix rdfs: <http://www.w3.org/2000/01/rdf-schema#> .
 15 <a href="http://engineerradcc.library.link/resource/aYnrI7j2a00/">http://engineerradcc.library.link/resource/aYnrI7j2a00/</a> a bf:Instance;
          bf:instantiates <a href="http://engineerradcc.library.link/resource/iPMwRfewp70/">fwwRfewp70/</a>;
          bf:label "The little SAS book : a primer : a programming approach, Lora D. Delwiche and Susan J. Slaughter"@en;
          ns1:name "The little SAS book : a primer : a programming approach, Lora D. Delwiche and Susan J. Slaughter"@en .
 20 <http://engineerradcc.library.link/portal/The-little-SAS-book--a-primer--a-programming/aYnrI7j2a00/> a bf:Instance .
     <a href="http://engineerradcc.library.link/resource/iPMwRfewp70/">http://engineerradcc.library.link/resource/iPMwRfewp70/</a> a bf:Work,
              ns2:Books,
          rdfs:label "The little SAS book : a primer : a programming approach"@en;
 26
          ns5:type "http://bibfra.mc/vocab/lite/Work"@en,
               "http://bibfra.me/vocab/marc/Books"@en,
 28
               "http://bibfra.me/vocab/marc/LanguageMaterial"@en;
 29
          bf:contributor <http://engineerradcc.library.link/resource/ZFV-ZGV-oxo/>;
          bf:creator <http://engineerradcc.library.link/resource/kTacdMJfLNO/>;
          bf:language "eng"@en;
 32
          bf:subject <a href="http://engineerradcc.library.link/resource/9pMtzzoj241/">http://engineerradcc.library.link/resource/9pMtzzoj241/</a>,
              <http://engineerradcc.library.link/resource/n6JS3XfembM/>;
 34
          bf:title "The little SAS book"@en.
              "The little SAS book : a primer : a programming approach"@en;
 36
          ns2:catalogingSource "DLC"@en;
          ns2:illustrations "illustrations"@en;
 38
          ns2:index "index present"@en;
 39
          ns2:literaryForm "non fiction"@en:
 40
          ns2:summary "Introduces the most commonly used features of the SAS programming language, including the DATA and PROC steps, inputting data, modifying and combining data sets, summarizing data,
          producing reports, and debugging SAS programs. New topics in the 4th ed. include ODS graphics for statistical procedures; SGPLOT procedure for graphics; creating new variables in PROC REPORT
          with a COMPUTE block; WHERE-data set option; SORTSEQ-LINGUISTIC option in PROC SORT; more functions, including ANYALPHA, CAT, PROPCASE, AND YRDIF\"--P. [4] of cover"@en;
          ns2:titleRemainder "a primer : a programming approach"@en;
 42
          ns2:titleStatement "Lora D. Delwiche and Susan J. Slaughter"@en;
 43
          ns4:tag-003 "OCoLC"@en;
          ns4:tag-008 "090715s2008 ncua 001 0 eng"@en;
 44
 45
          ns4:tag-019-XX-a "244443196"@en;
          ns4:tag-020-XX-a "1599947250"@en,
               "9781599947259"@en;
          ns4:tag-596-XX-a "3"@en;
 48
 49
          cc:attributionName "Engineer Research and Development Center Library(WES)"@en;
          cc:attributionURL <a href="http://engineerradcc.library.link/resource/iPMwRfewp70/">http://engineerradcc.library.link/resource/iPMwRfewp70/</a>;
 51
          cc:license <http://creativecommons.org/licenses/by/4.0/>;
          ll:portalLink <a href="http://engineerradcc.library.link/portal/The-little-SAS-book--a-primer--a-programming/aYnrI712a00/">http://engineerradcc.library.link/portal/The-little-SAS-book--a-primer--a-programming/aYnrI712a00/</a>;
          11:source <http://engineerradcc.library.link/#engineerradcc>;
```





The little SAS book: a primer: a programming approach, Lora D. Delwiche and Susan J. Slaughter

3 The little SAS book: a primer: a programming approach, Lora D. Delwiche and Susan J. Slaughter

BLUEcloud Visibility: Engineer Research and Development Center Library(WES)

♦ The little SAS book : a primer : a programming approach, Lora D. Delwiche and Susan J. Slaughter

Title The little SAS book

Title remainder a primer: a programming approach

Statement of responsil Lora D. Delwiche and Susan J. Slaughter

Note Includes index

Contents note Getting started using SAS software -- Getting your data into SAS -- Working with

your data -- Sorting, printing, and summarizing your data -- Enhancing your output with ODS [Output delivery system]-- Modifying and combining SAS data sets -- Writing flexible code with the SAS macro facility -- Using basic graphical and statistical procedures -- Exporting your data -- Debugging your SAS programs -- Where to go from here -- Coming to SAS from SPSS -- Coming to SAS from a

programming language -- Coming to SAS from SQL

Control code ocn233543543

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Other physical details ill.

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> (OCoLC)233543543

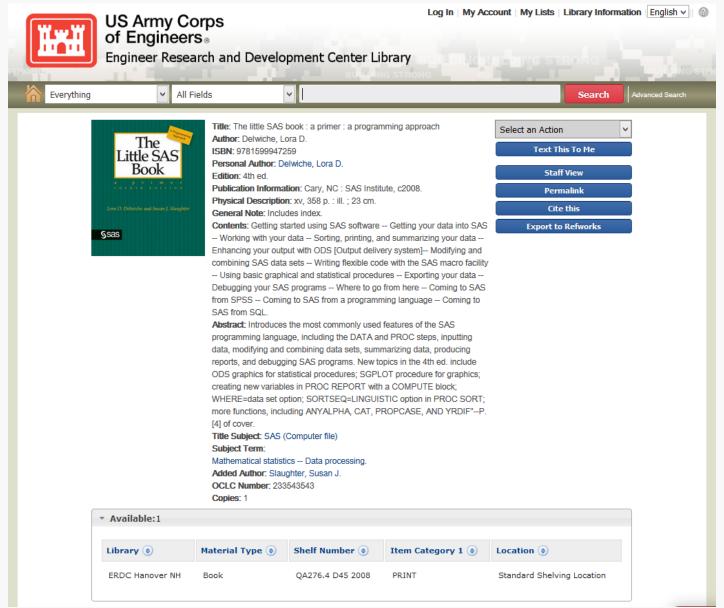
@ Portal

The little SAS book: a primer: a programming approach, Lora D. Delwiche and Susan J. Slaughter

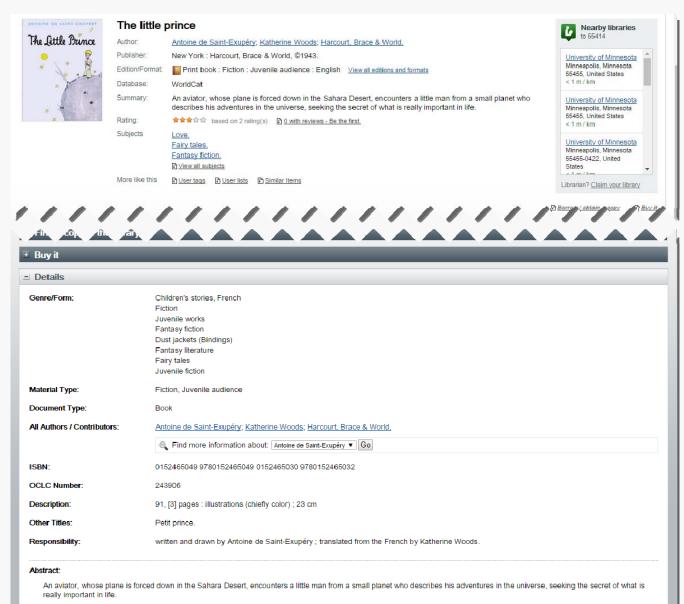
O Context

Work

◆ The little SAS book: a primer: a programming approach



Modeling Exercise



Modeling Exercise

Work Data:

- Title
- Author
- Subjects
- Date of creation

Instance Data:

- Publisher
- Date of printing
- Pagination
- Cover art

What does it mean for my library?

- Workload/workflow changes
- Connectivity
- What will the catalog/cataloging look like?

Workflow Example: BIBFRAME Editor

BIBFRAME.ORG

Home / Tools / Editor Demo

Create Resource

Monograph ▼

Instance

Work

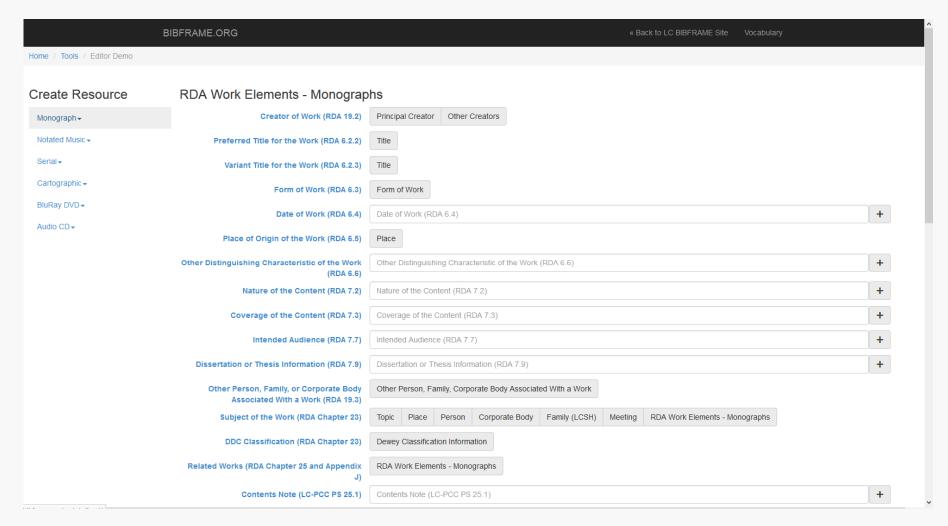
Work, Instance

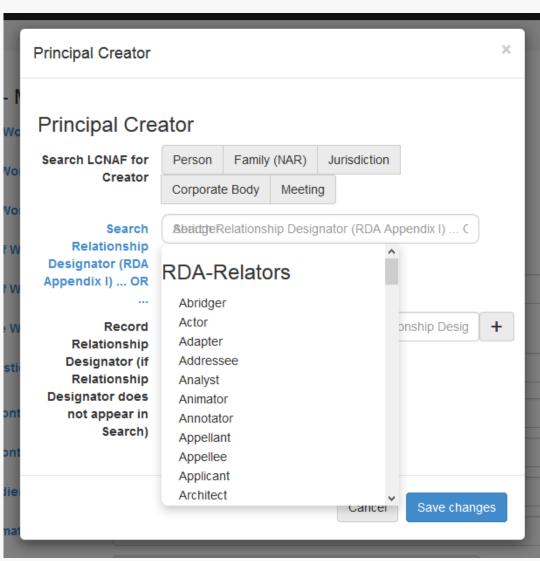
Cartographic -

BluRay DVD▼

Audio CD ▼

Workflow Example: BIBFRAME Editor





Person		×
Person Search LCNAF in id.loc.gov for	saint-exupery	
Authorized Access Point OR Record Authorized Access Point (if added to LCNAF but does not yet appear in id.loc.gov)		
	Record Authorized Access Point (if added to LCNAF b	+
	Cancel Save change	ges
	Applicant Architect Cancel Save change	ges

RDA Work Elements - Monographs			
Creator of Work (RDA 19.2)	Principal Creator	Other Creators	
	Saint-Exupéry, Antoine	de, 1900-1944 🖍 💼	
Preferred Title for the Work (RDA 6.2.2)	Title		
	The little prince 🧪 🧰		
Variant Title for the Work (RDA 6.2.3)	Title		
Form of Work (RDA 6.3)	Form of Work		
,	Fiction / iii		
Date of Work (RDA 6.4)	Date of Work (RDA	(6.4)	
,		,	
Place of Origin of the Work (RDA 6.5)	Place Paris (France)		
	Paris (France)		
Other Distinguishing Characteristic of the Work (RDA 6.6)	Other Distinguishin	g Characteristic of the Work (RDA 6.6)	
Nature of the Content (RDA 7.2)	Nature of the Conte	ent (RDA 7.2)	
Coverage of the Content (RDA 7.3)	Coverage of the Co	ontent (RDA 7.3)	
Intended Audience (RDA 7.7)	Intended Audience	(RDA 7.7)	
Dissertation or Thesis Information (RDA 7.9)	Dissertation or The	esis Information (RDA 7.9)	
Other Person, Family, or Corporate Body Associated With a Work (RDA 19.3)	Other Person, Fam	nily, Corporate Body Associated With a Work	

LCCN				
Your Cataloger Code and Comments				
RDA Expression Elements - Monograph				
RDA Work Elements - Monographs				
http://bibframe.org/resources/works/vtR1				
Content Type (RDA 6.9)				
text in				
Language of Expression (RDA 6.11)				
Other Distinguishing Characteristic of the Expression (RDA 6.12)				
Summary of Content (RDA 7.10)				
Language of the Content (RDA 7.12)				
Script (RDA 7.13.2)				
Illustrative Content (RDA 7.15)				
Supplementary Content (RDA 7.16)				

RDA Work Elements - Monographs				
RDA Work Elements - Monographs				
Lookup	Lookup			
	Save chan	ges		
OR				
Creator of Work (RDA 19.2)	Principal Creator Other Creators _:bnodeHYx1457985914			
Preferred Title for the Work (RDA 6.2.2)	_:bnodezmp1457986211			
Variant Title for the Work (RDA 6.2.3)	Title			
Form of Work (RDA 6.3)	Form of Work	~		
Date of Work (RDA 6.4)	Date of Work (RDA 6.4)	+		
Place of Origin of the Work (RDA 6.5)	Place Paris (France) / fill			
Other Distinguishing Characteristic of the Work (RDA 6.6)	Other Distinguishing Characteristic of the Work (RDA	+		

Instance/Manifestation - Monograph		
Lookup	Lookup	
Instance of	RDA Work Elements - Monographs http://bibframe.org/resources/works/SaQ1	
Title Proper (RDA 2.3.2)	Title	
Parallel Title Proper (RDA 2.3.3)	Title	
Other Title Information (RDA 2.3.4)	Enter Other Title Information	
Variant Title (RDA 2.3.6)	Title	
Statement of Responsibility Relating to Title Proper (RDA 2.4.2)	Statement of Responsibility Relating to Title Proper (RDA 2.4.2)	
Designation of Edition (RDA 2.5.2)	Designation of Edition (RDA 2.5.2)	
Statement of Responsibility Relating to the Edition (RDA 2.5.4)	Statement of Responsibility Relating to the Edition (RDA 2.5.4)	
Publication Statement (RDA 2.8)	Enter Publication Information	
Distribution Statement (RDA 2.9)	Enter Distribution Information	
Manufacturer Statement (RDA 2.10)	Enter Manufacturer Information	
Copyright Date (RDA 2.11)	Copyright Date (RDA 2.11)	

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Preview

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ID: http://bibframe.org/resources/works/vtR1457985791
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       bf:workTitle
               _:bnodezmp1457986211
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                :bnodeYdl1457986221
        bf:originPlace
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       bf:label
                Author
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Example Workflow UNLV

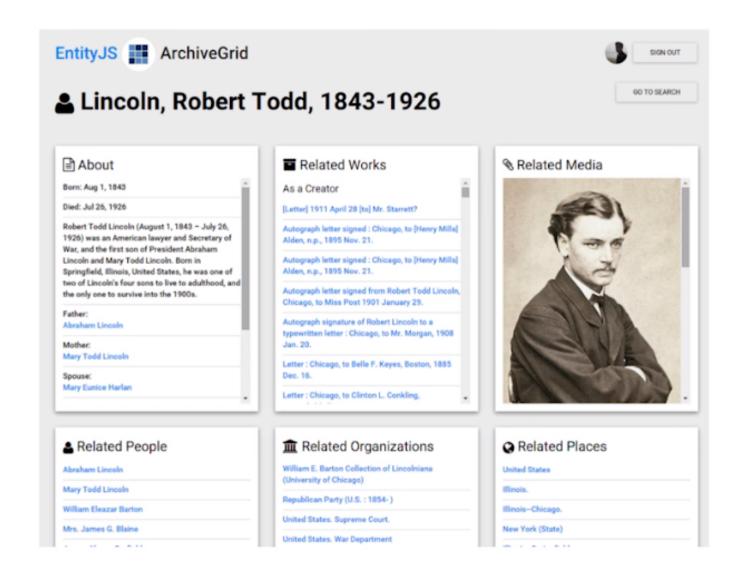
- Exported records from CONTENTdm
- Imported data into Open Refine. Cleaned it up, created triples, and exported it as RDF.
- Used Mulgara and OpenLink Virtuoso Pivot Viewer to store and visualize their data (open source)

FUTURE GOAL: To publish all digital collections as linked data

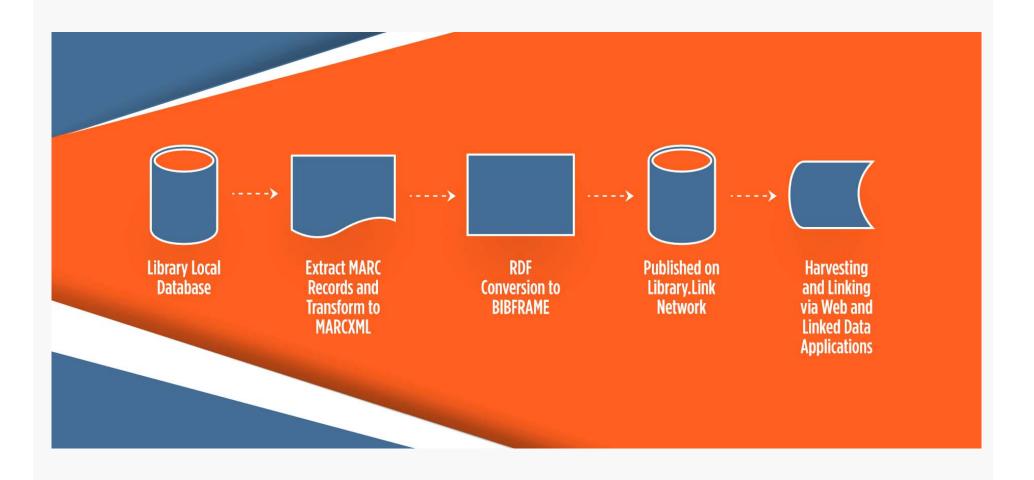
Example Case Study OCLC

- OCLC has been publishing bibliographic linked data since 2012
- How make use of data and demonstrate how it adds value to librarians and users?
 - Looking at Google Research Knowledge Vault model
- The Knowledge Vault will contain triples that can be used by next-generation library services and apps

Show related entities



Example Case Study Innovative Linked Data



Thank You!

Lizzy Baus eebaus@umn.edu

Sara Ring ring0089@umn.edu

All handouts/resources http://z.umn.edu/14cy