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BIBFRAME: Libraries can lead Linked Data

Libraries are increasingly exchanging data with other cultural heritage institutions



OTTO MÜLLER: BRUSTLEID MASCHKE, 1912



... „ich kann nur lieben, was ich liebe.“ ist wohl eines der bekanntesten Zitate Otto Müllers. Demgemäß wählte er Frauen als seine große und wichtigste Liebe: aber wie Maria Maschke, genannt Maschke, die der Künstler 1908 heiratete, so war es nach der Scheidung im Jahre 1921 und zwei weiteren Ehen, seine engste Vertraute und jüngste von Berlin aus die er für geliebt hält. Das gemeinsame Freundeskreisverhältnis schloß sich nach der öffentlichen Scheidung Maschkes, einvernehmlich endigend, Müller, Otto Müller (1874-1958)

Lebensdaten (aktuell)
 Geburtsort: Berlin
 Geburtsdatum: 1874
 Sterbedatum: 1958
 Todesursache: Herz-Kreislauferkrankung
 Begräbnisort: Berlin, Städtischer Friedhof

Wichtige Werke
 Maschke, Maria (Maschke) Maschke (1912)

Personenbeziehungen
 Wilhelm Lehmbruck (1881-1929) (1912)

Personenbeziehungen
 Bernhard Lahn (1892-1945) (1912)

Personenbeziehungen
 Søren Kierkegaard (1813-1855) (1912)

Wörter



← java 13 items

Grundkurs JAVA : Von den Grundlagen bis zu Datenbank Netzanwendungen
 Damaris Alts

Masterkurs Client/Server-Programmierung mit Java : Anwendungen entwickeln mit Standard-Technologien [JDBC, LL
 Damaris Alts

Java-Grundkurs für Wirtschaftsinformatiker : Die Grundlagen verstehen - Objektorientierte Programmierung - Forge...
 Klaus-Georg Deck

Grundkurs Computergrafik mit Java: Die Grundlagen verstehen und einfach umsetzen mit
 Frank Kleemann

Versuchsplanung - Produkte und Prozesse optimieren
 Wilhelm Klappmann

A Concise and Practical Introduction to Programming Algorithms in Java
 Frank Nelson

Konzepte objektorientierter Programmierung: Mit einer Einführung in Java
 André Persch-Walter

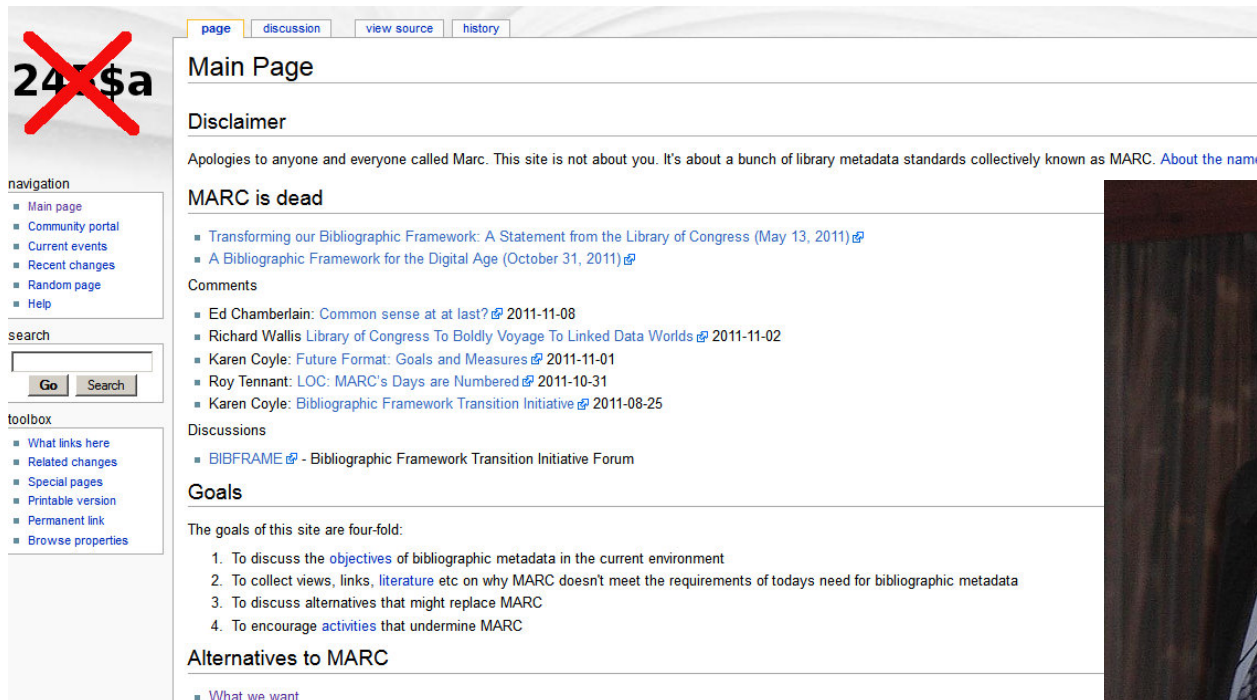


**Everyone here knows that this is both
an opportunity and a challenge**

**“It is not the strongest of
the species that survives,
nor the most intelligent,
but rather the one most
adaptable to change”**

Paraphrase of Darwin by
Leon C. Megginson

Non-libraries have a problem with data encoded in MARC (and so do some librarians...)



The screenshot shows the 'Main Page' of the 'MARC is dead' website. At the top left, there is a logo with '24 \$a' crossed out by a large red 'X'. Below the logo is a navigation menu with links like 'Main page', 'Community portal', 'Current events', 'Recent changes', 'Random page', and 'Help'. There is also a search box and a toolbox with links like 'What links here', 'Related changes', 'Special pages', 'Printable version', 'Permanent link', and 'Browse properties'. The main content area includes a 'Disclaimer' section, a 'MARC is dead' section with a list of links to various articles and reports, a 'Comments' section with several entries, a 'Discussions' section with a link to 'BIBFRAME', and a 'Goals' section with a list of four goals. The goals are: 1. To discuss the objectives of bibliographic metadata in the current environment; 2. To collect views, links, literature etc on why MARC doesn't meet the requirements of today's need for bibliographic metadata; 3. To discuss alternatives that might replace MARC; 4. To encourage activities that undermine MARC. There is also an 'Alternatives to MARC' section with a link to 'What we want'.



Photo by Erin Kinney (CC BY-NC-ND): <http://www.flickr.com/photos/wyolibrarian/407875611/>

We need a format that allows for easier data reuse – inside and outside of libraries

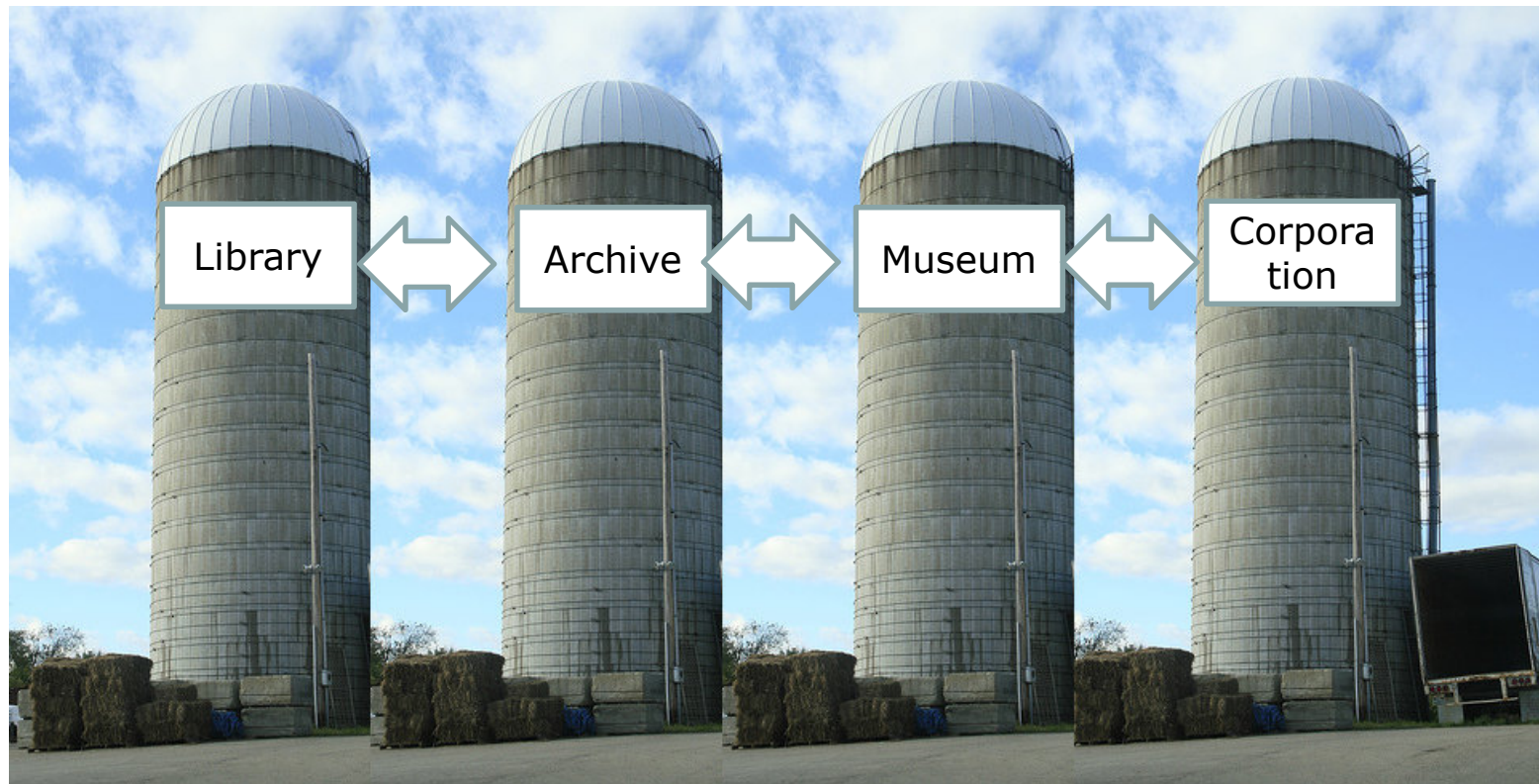


Foto von Doc Searis (CC BY):
<http://www.flickr.com/photos/docsearls/5500714140/>

BIBFRAME is an attempt to achieve that

There won't be any
Semantic Web that
any mortal can
understand until
librarians help build it!

Uche Ogbuji on Twitter, 2013-01-27

BIBFRAME will determine a transition path from MARC 21 to an exchange format based on linked data principles

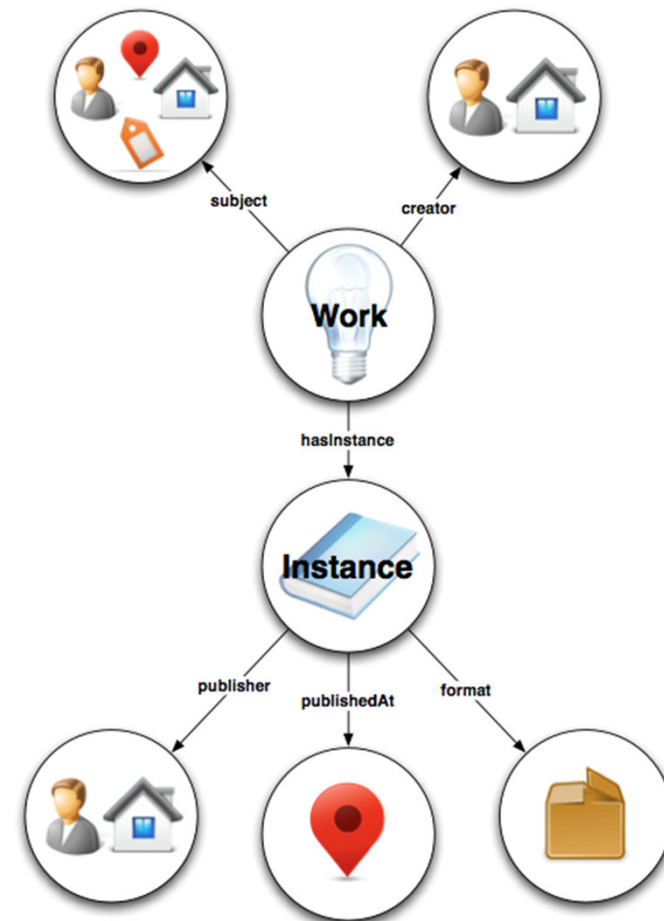


Important requirements are:

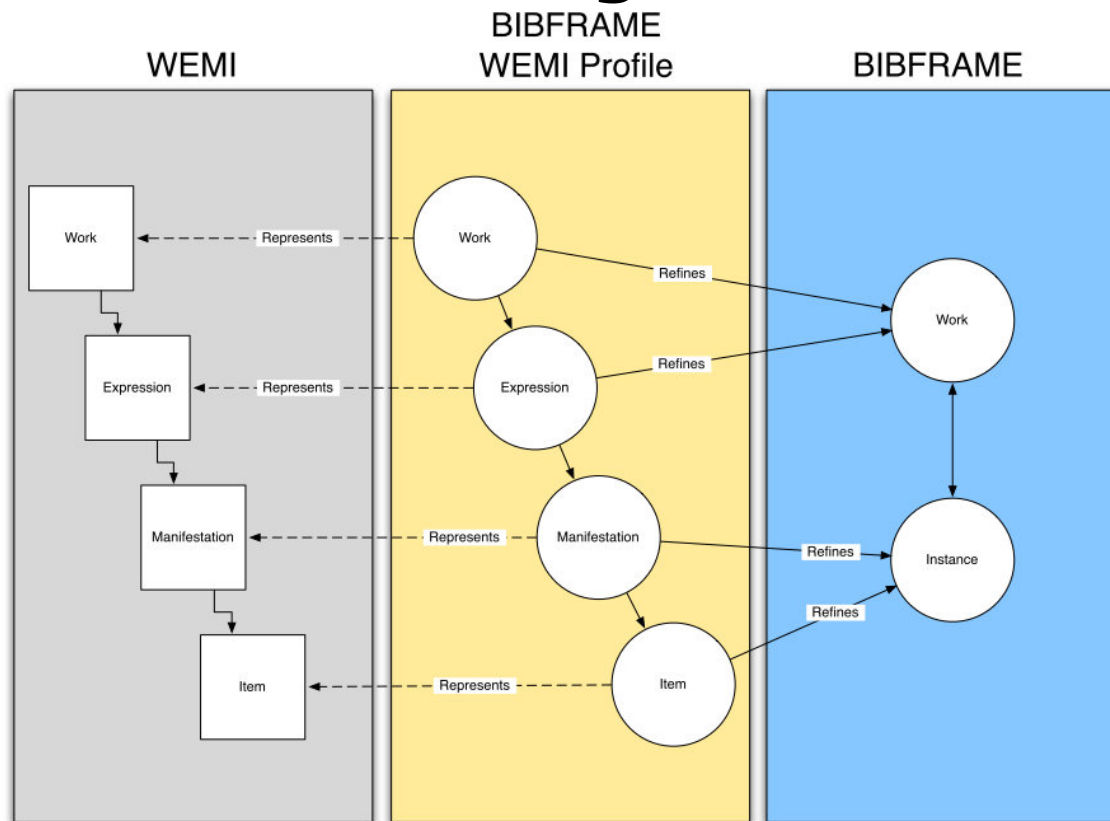
- Model agnostic
- Support RDA, and other cataloging rules
- Extensible for new kinds of library material

The model is based on four core classes:

- Work
- Instance
- Authority
- Annotation



Interoperability with other models is achieved through community profiles



<http://de.slideshare.net/zepheiraorg/alabibframe-l20130630> Slide 21

The DNB has an experimental implementation of the BIBFRAME model

	
Link zu diesem Datensatz	http://d-nb.info/102239648X
Titel	Hamburg-Wilhelmsburg / Peter Beenk und Uwe Wetzner
Person(en)	Beenk, Peter ; Wetzner, Uwe
Verleger	Erfurt : Sutton
Erscheinungsjahr	2012
Umfang/Format	127 S. : zahlr. Ill., Kt. ; 24 cm, 310 g
Gesamttitle	Die Reihe Archivbilder
ISBN/Einband/Preis	978-3-86680-247-6 kart. : EUR 18.95 (DE), EUR 19.50 (AT)
EAN	9783866802476
Sprache(n)	Deutsch (ger)
Schlagwörter	Hamburg-Wilhelmsburg ; Geschichte 1890-1980 ; Bildband
DDC-Notation	943.515087 [DDC22ger]
Sachgruppe(n)	943 Geschichte Deutschlands
Links	Inhaltsverzeichnis

-  In meine Auswahl übernehmen
-  Druckansicht
-  RDF/XML-Repräsentation dieses Datensatzes
-  Dokumentation Linked Data
-  **BIBFRAME-Repräsentation dieses Datensatzes**
-  Projekt BIBFRAME
-  @ Korrekturanfrage

-  Lieferbar bei [buchhandel.de?](#)

The instance data is mainly based on strings



```
<bf:Instance rdf:about="http://d-nb.info/102239648X">
  <bf:modeOfIssuance>Einbändiges Werk</bf:modeOfIssuance>
  <bf:instanceOf rdf:resource="http://d-nb.info/bf_temp/work_102239648X" />
  <bf:isbn13>9783866802476</bf:isbn13>
  <bf:ean>9783866802476</bf:ean>
  <bf:nbn>12,N22</bf:nbn>
  <bf:nbn>12,A36</bf:nbn>
  <bf:local>
    <bf:identifierScheme>VLB / Netzpublikationen</bf:identifierScheme>
    <bf:identifierValue>4039423</bf:identifierValue>
  </bf:local>
  <bf:responsibilityStatement>
    Peter Beenk und Uwe Wetzner
  </bf:responsibilityStatement>
  <bf:extent>127 S.</bf:extent>
  <bf:dimensions>24 cm, 310 g</bf:dimensions>
  <bf:illustrativeContentNote>zahlr. Ill., Kt.</bf:illustrativeContentNote>
  <bf:title>Hamburg-Wilhelmsburg</bf:title>
  <bf:providerEntity>
    <bf:providerName>Sutton</bf:providerName>
    <bf:providerPlace>Erfurt</bf:providerPlace>
    <bf:providerDate>2012</bf:providerDate>
  </bf:providerEntity>
  <bf:frequency rdf:resource="http://marc21rdf.info/terms/continuingfre%23/u" />
</bf:Instance>
```

The information about the work is more linked to other entities

```
<bf:Work rdf:about="http://d-nb.info/bf_temp/work_102239648X">
  <rdf:type rdf:resource="LanguageMaterial" />
  <bf:hasInstance rdf:resource="http://d-nb.info/102239648X" />
  <bf:associatedAgent>
    <bf:Person>
      <bf:hasGNDLink rdf:resource="http://d-nb.info/gnd/1025471474"/>
      <bf:label>Beenk, Peter</bf:label>
      <bf:resourceRole
        rdf:resource="http://id.loc.gov/vocabulary/relators/ctb" />
    </bf:Person>
  </bf:associatedAgent>
  <bf:associatedAgent>
    <bf:Person>
      <bf:hasGNDLink rdf:resource="http://d-nb.info/gnd/132364107"/>
      <bf:label>Wetzner, Uwe</bf:label>
      <bf:resourceRole
        rdf:resource="http://id.loc.gov/vocabulary/relators/ctb" />
    </bf:Person>
  </bf:associatedAgent>
  <bf:subject rdf:resource="http://d-nb.info/gnd/4094661-7" />
  <bf:class-ddc>943.515087</bf:class-ddc>
  <bf:class-ddc>943.087</bf:class-ddc>
  <bf:title>Hamburg-Wilhelmsburg</bf:title>
</bf:Work>
```

For full integration into the linked data service we need to create profiles

```
GET /102239648X HTTP 1.1
```

```
Host: d-nb.info
```

```
Accept: application/rdf+xml
```

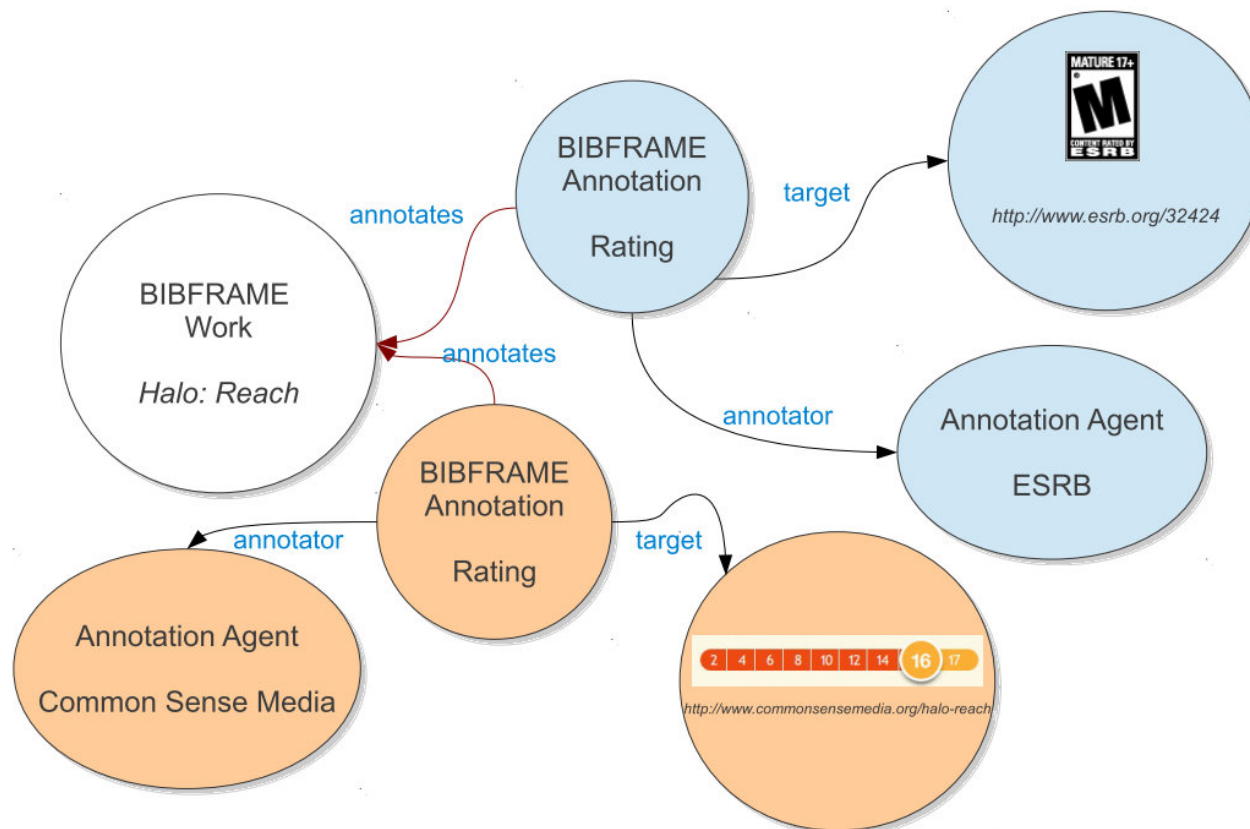
```
Link: <http://d-nb.info/standards/profiles/bibframe>;  
rel="profile"
```

Possible
solution

Much work remains to be done

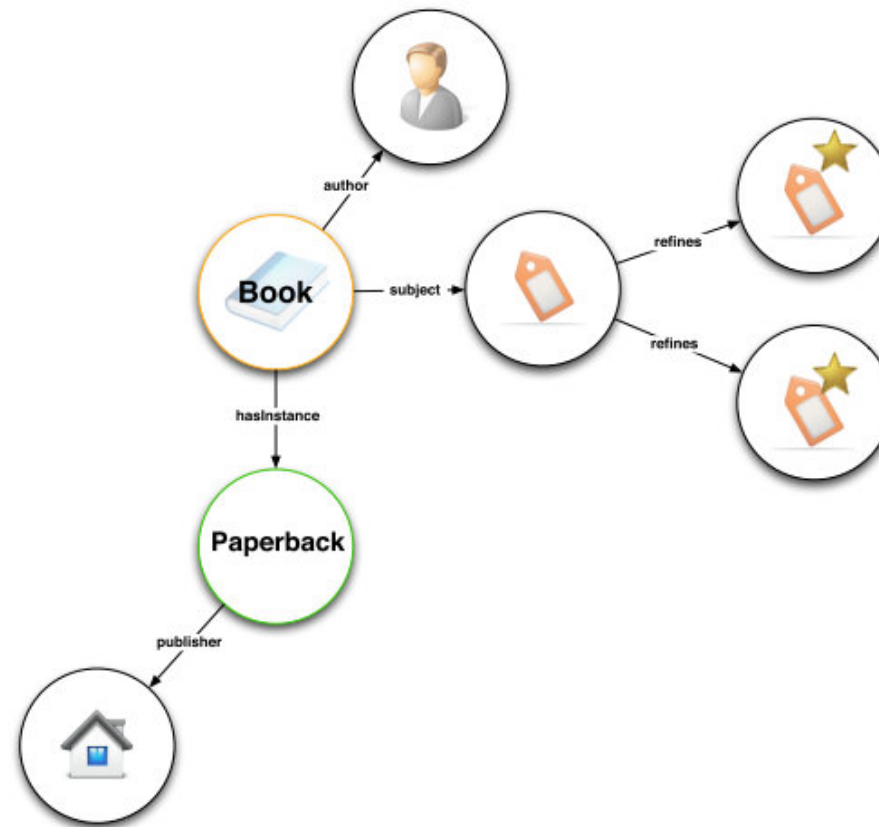


The BIBFRAME vocabulary must be enriched and then stabilised



Graphic by Kevin Ford

The model will be continually developed



Graphic by Eric Miller

The new BIBFRAME editor shall assist cataloguers working with the model



BIBFRAME Editor

Safy Notices 3 Settings Help Logout

Article:

- Electronic Article
- Physical Article

Book:

- Electronic Book
- Hardcover Book
- Paperback Book

Work:

- Image**

Title Set

Alternative Title Set

Creator Type to search +

Subject Type to search +-

Language Type to search +

Begin Date Set

Consecrated Date Set

Description Set

Inscription Set

Location Type to search +

Material Type to search +

Measurement Set

Relation Type to search +

Rights Set

Source Type to search +

State Edition Set

Style / Period Type to search +

Technique Type to search +

Reference Set

Work Type Type to search +

Image

Drop files here to upload

Clear Export

DNB will continue to update its service



RDA
FRBR

Photo by The Hamster Factor (CC BY-NC-ND): http://www.flickr.com/photos/disaster_area/3454110496/

So can BIBFRAME replace MARC?



We need a format that allows for easier data reuse and MARC is a problem

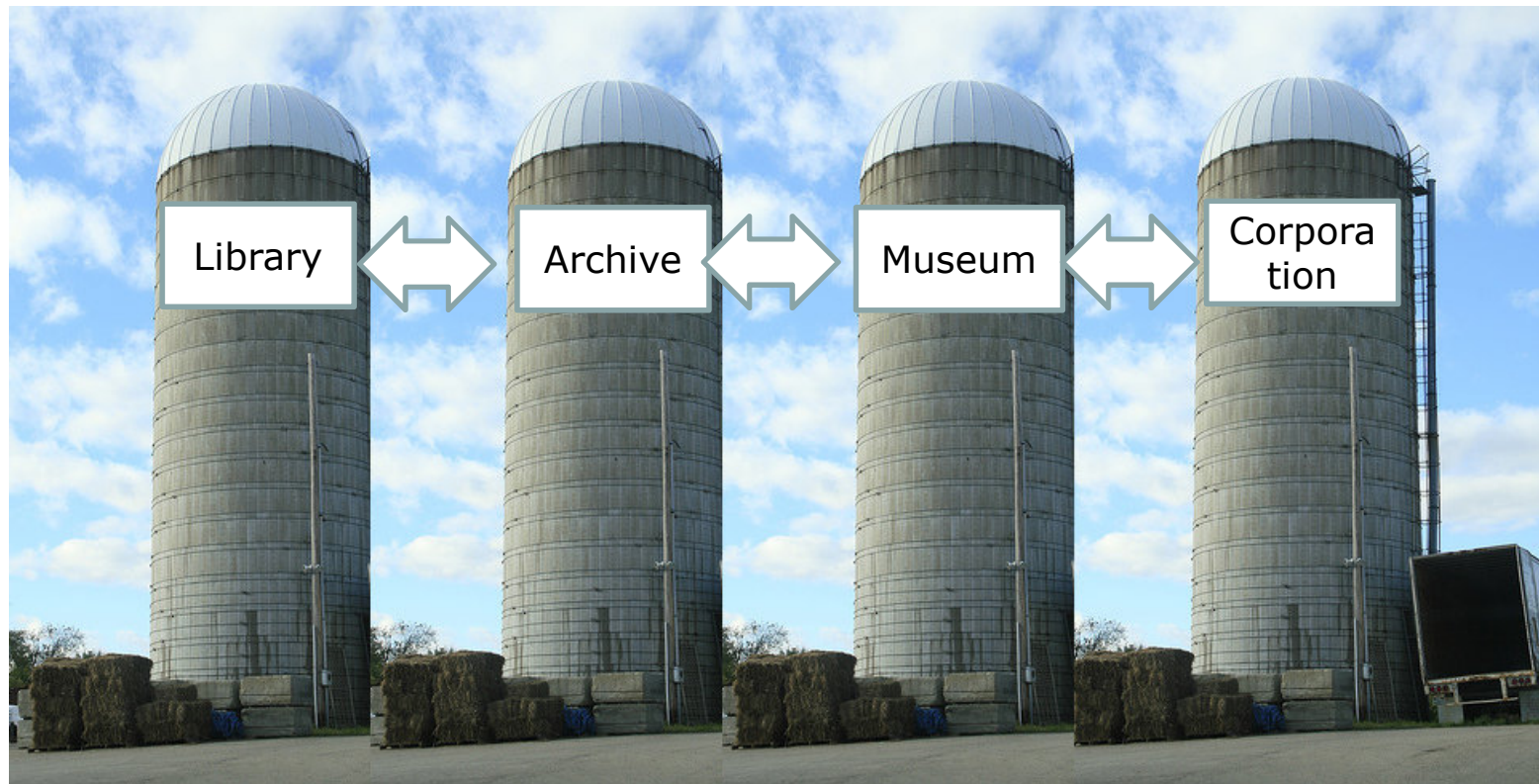


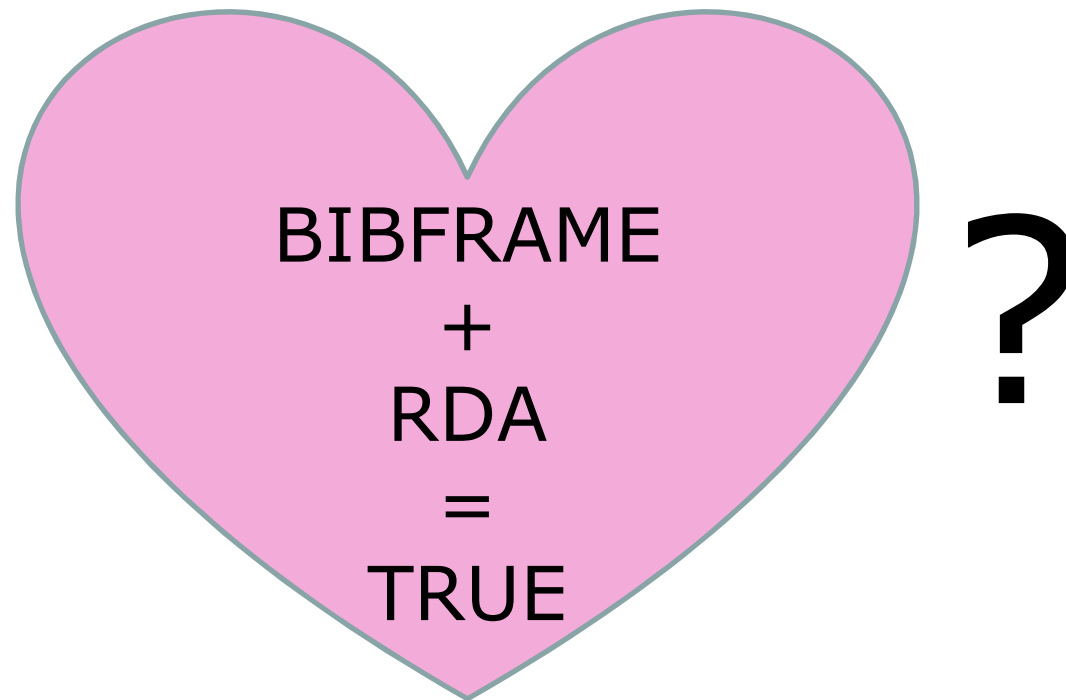
Foto von Doc Searis (CC BY):
<http://www.flickr.com/photos/docsearls/5500714140/>

BIBFRAME is an attempt to achieve that



<http://www.gedankenkonsum.de/wp-content/uploads/2011/03/the-future.jpg>

The DNB will continue to explore the format and its possibilities



BIBFRAME – Making library data more linked



More information at

- <http://bibframe.org/>
- <http://www.dnb.de/EN/bibframe>
- Mailing list:
<http://listserv.loc.gov/listarch/bibframe.html>