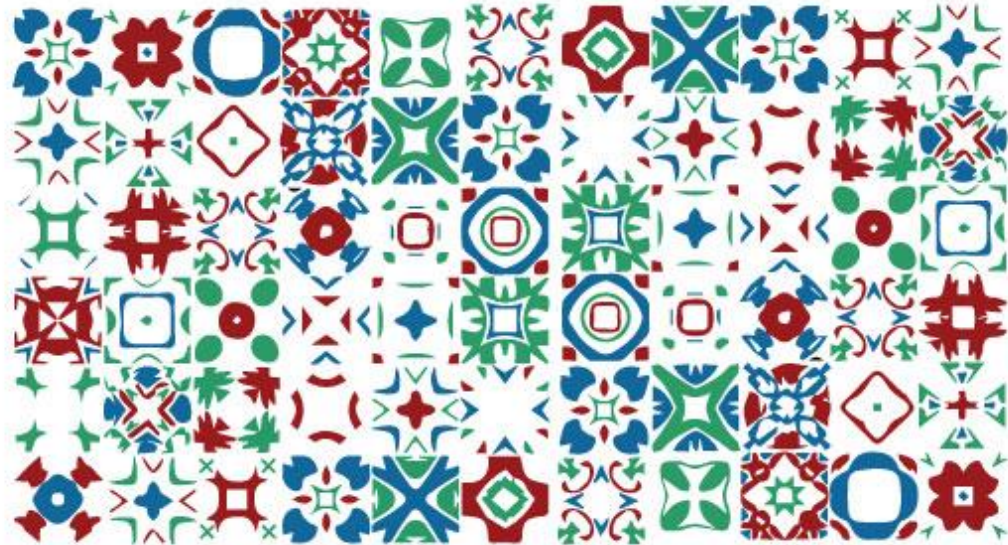


WikiData Days 2019

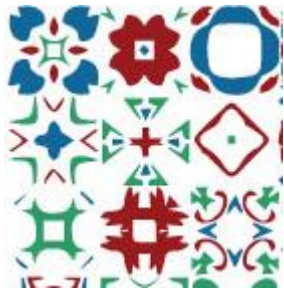
*Share,
Collaborate,
Transform:
shaping data
in a changing world*

JUNE 7-8



Semantic Web, Linked Data and Wikidata

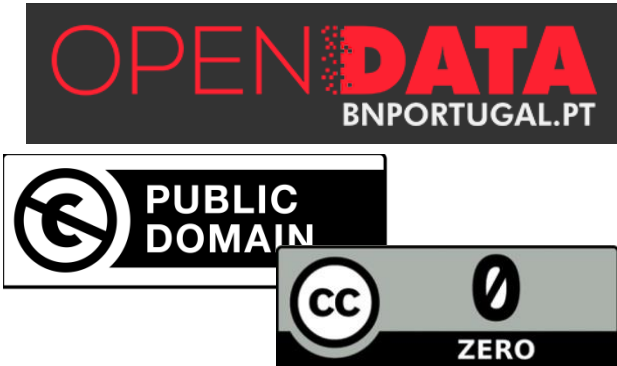
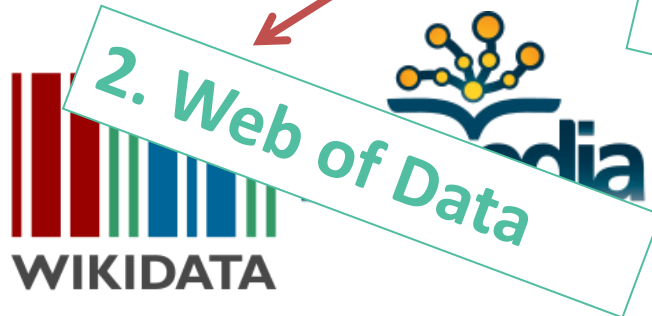
Helena Patrício

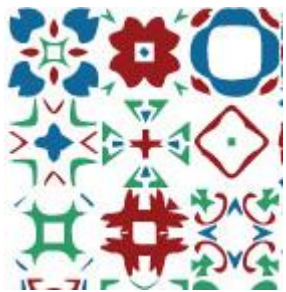


National Library of Portugal Strategic Goals 2015-2020

To foster digital collection growth and impact on the Internet:

- Consolidate NLP **Open Data** policies
- Expand data reuse through **new platforms** and data services
- Promote **digital content re-use**





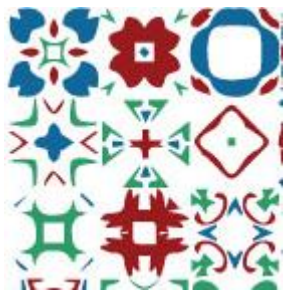
1. A new paradigm: Open World Assumption (OWA)

Content creation ➤ Inside-out model

New high-value uses of digital content

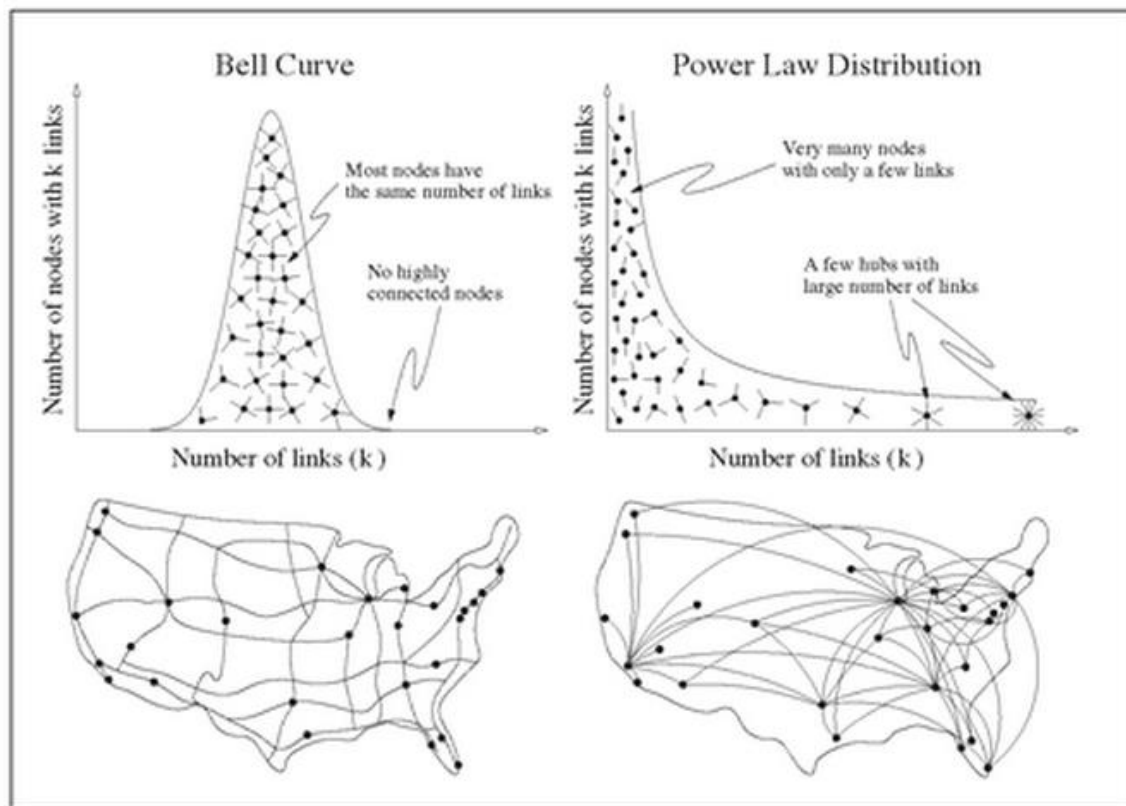
Constant **growth of online and onsite access**

➤ **Value increases** as more content is available online

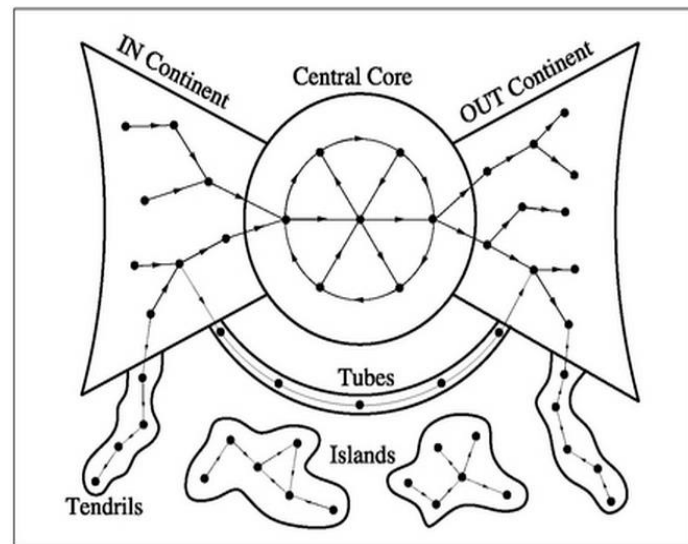


1. A new paradigm: Open World Assumption (OWA)

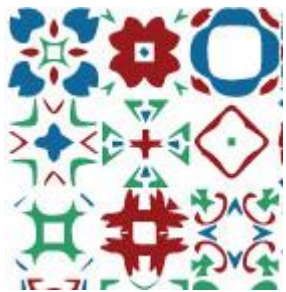
➤ Attractiveness Principle (HUBS)



➤ Heterogeneous net



Barabási, 2002



1. A new paradigm: Open World Assumption (OWA)

Libraries are:

- A network **node**

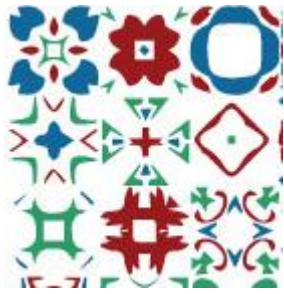
- A **platform to:**

- Access information
- Navigate through information environments
- Connect to **broader networks**

Palfrey, 2015

7 JUNHO 2019 - SBE





1. A new paradigm: Open World Assumption (OWA)

2018 - Wikidata pilot

2019-2020 WikiCommons

Object

Colecção de Pintura da BNP [editar | editar código-fonte]

Imagem	Título	Descrição
--------	--------	-----------

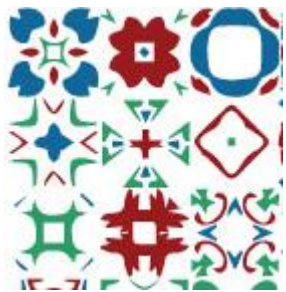


Padre Pedro Alvares	
Artist	Attributed to Portuguese painter
Title	Português: Padre Pedro Alvares
Object type	painting
Genre	portrait
Description	Português: Retrato em busto do clérigo secular (1674-1739) da Congregação do Oratório de São Filipe de Neri
Date	presumably between 1700 and 1750
Medium	oil on canvas
Dimensions	Height: 42 cm (16.5 '); Width: 32 cm (12.5 ')
Collection	Colecção de Pintura da BNP Galeria dos Padres Oratorianos
Accession number	Inv. 14481 (Colecção de Pintura da BNP)
Object history	<ul style="list-style-type: none">1834: unknown event: Dissolution of the monasteries in Portugal1834: restored1854: acquired by
Credit line	Biblioteca Nacional de Portugal



Padre Manuel Bernardes	retrato em busto de Padre Manuel Bernardes
------------------------	--

https://pt.wikipedia.org/wiki/Lista_de_pinturas_da_Biblioteca_Nacional_de_Portugal



2. Semantic Web

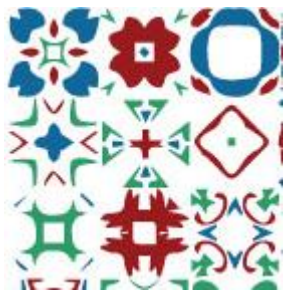
Traditional Web = Web of documents

- ✓ Human understandable
- ✓ Processed by machines only for display

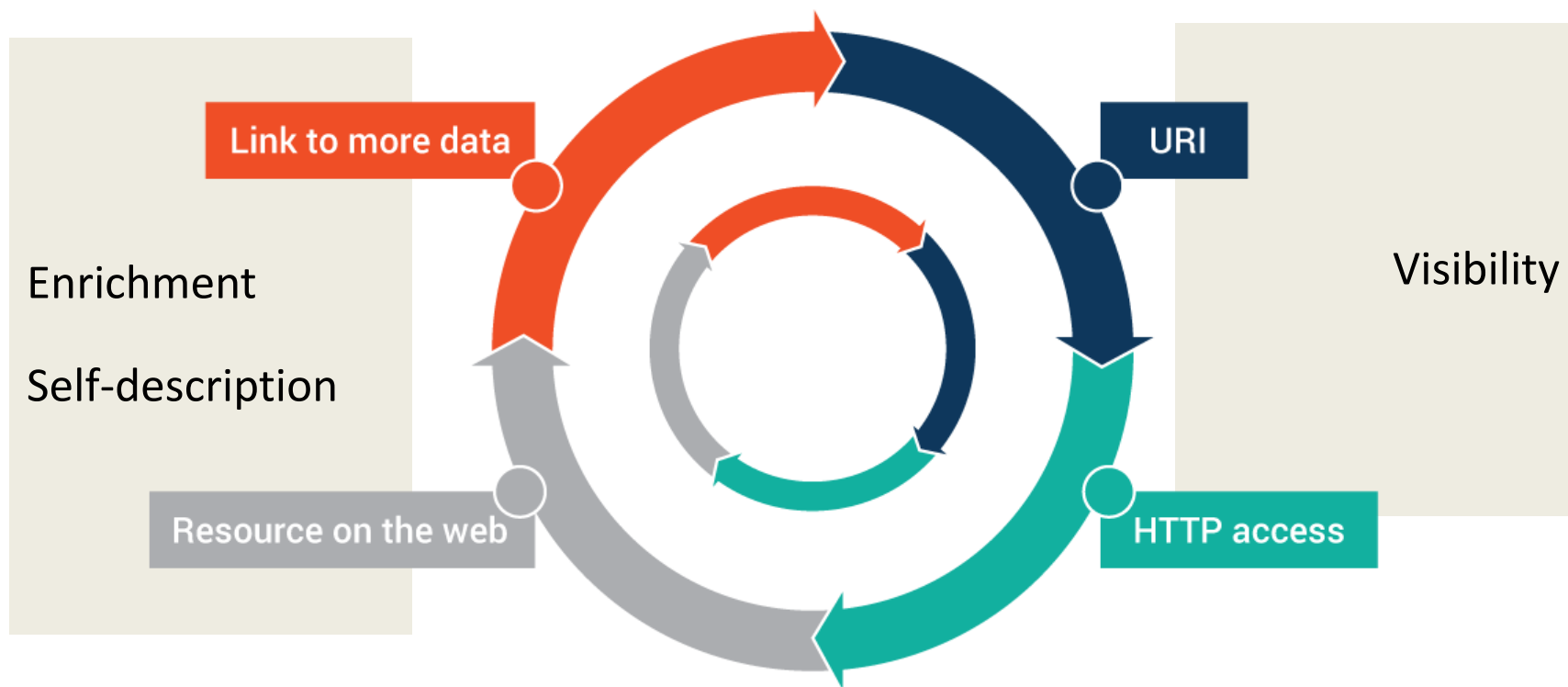
Semantic Web = Web of data

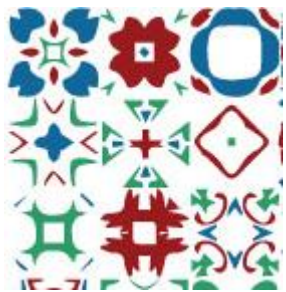
- ✓ Processable by application – structured meaning
- ✓ Coded to be actionable by machines

Data in documents is identified and re(used)



2. Semantic Web





2. Semantic Web

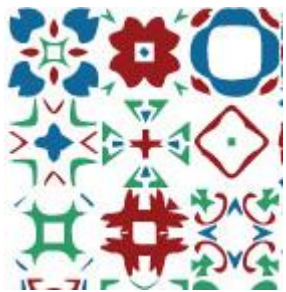
Semantic Web advantages

≠ Databases ≠ XML

- ✓ Previous knowledge of field/tags meaning
- ✓ Data elements blocks

≠ APIs

- ✓ No standards, structures diversity
- ✓ Low degree of personalization



2. Semantic Web

Semantic Web advantages

≠ Databases ≠ XML ≠ APIs

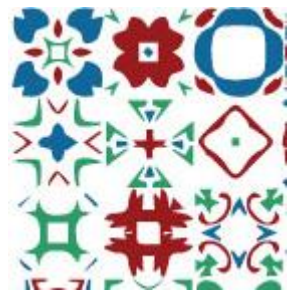
- ✓ Lack of bibliographic data integration with web resources
- ✓ Formats that do not enable relations inside and outside the bibliographic catalogue
- ✓ Poor metadata context



LIBRARY CATALOGUE

Your Online Access to our Collections

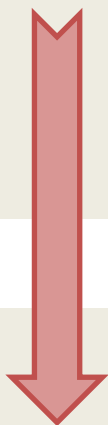
BNP BIBLIOTECA
NACIONAL
DE PORTUGAL



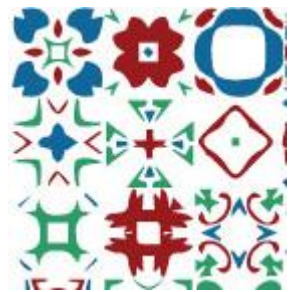
3. Linked bibliographic data

A new paradigm

AAA – Anyone can say Anything about Any topic



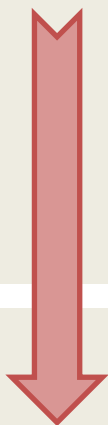
- ✓ Multiple points of view, multiple information sources
- ✓ Inconsistency, contradiction, absence of meaning
- ✓ There is not an ideal or unique record
- ✓ Multiple ways to agregate data
- ✓ Constant change of user requirements



3. Linked bibliographic data

A new paradigm

OWA: Open-World Assumption



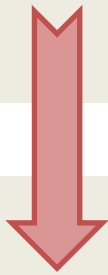
- ✓ The absence of statements does not mean that something does not exist
- ✓ Information is, by its very nature, incomplete
- ✓ The catalogue is never complete
- ✓ The catalogue is never complete
- ✓ The bibliographic world is part of a bigger Universe



3. Linked bibliographic data

A new paradigm

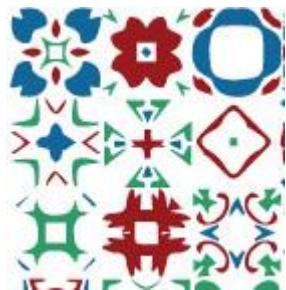
NUNA: Non-Unique Naming Assumption



- ✓ The same resource may have multiple URIs
- ✓ Data redundancy
- ✓ Equivalente resources

*“The pastoral role of the cataloguer is that of a
metadata herder, not a gatekeeper”*

Mirna Willer & Gordon Dunsire

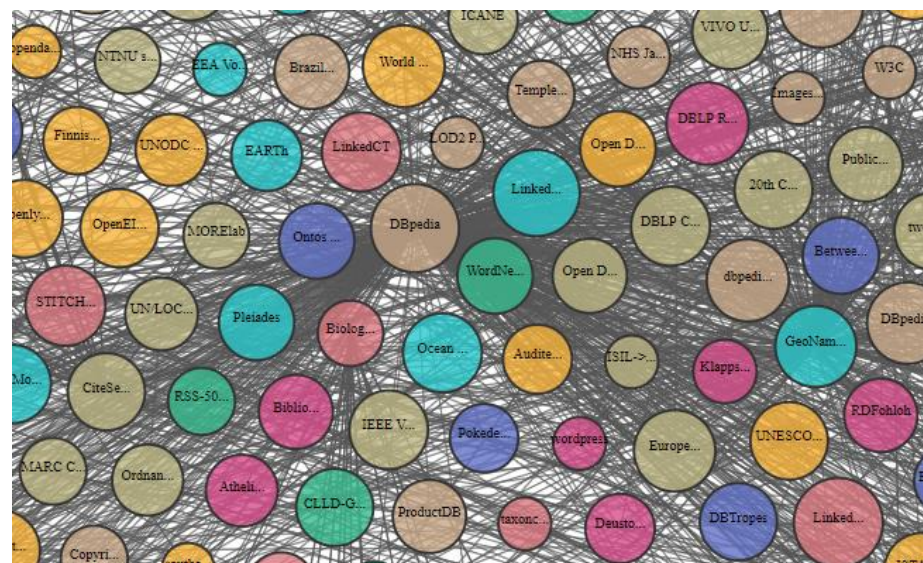
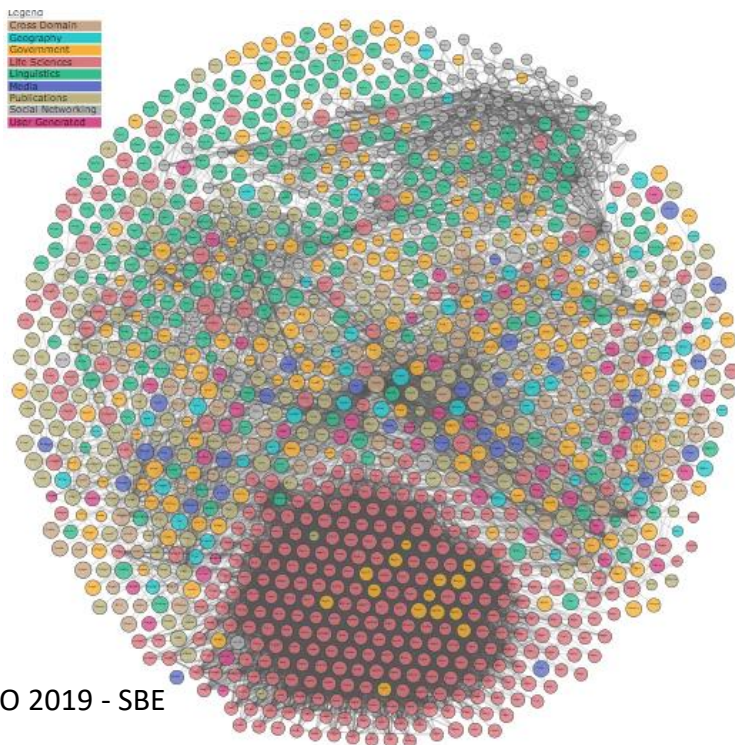


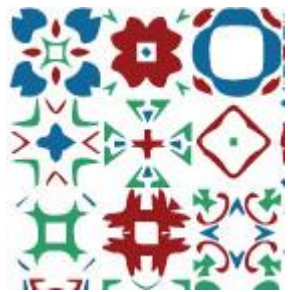
Wikipedia data in the Semantic Web



2007

Wikipedia infoboxes extracted as structured information and published in RDF





Wikipedia data in the Semantic Web

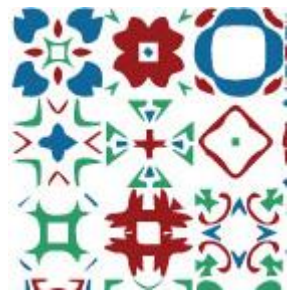


2012

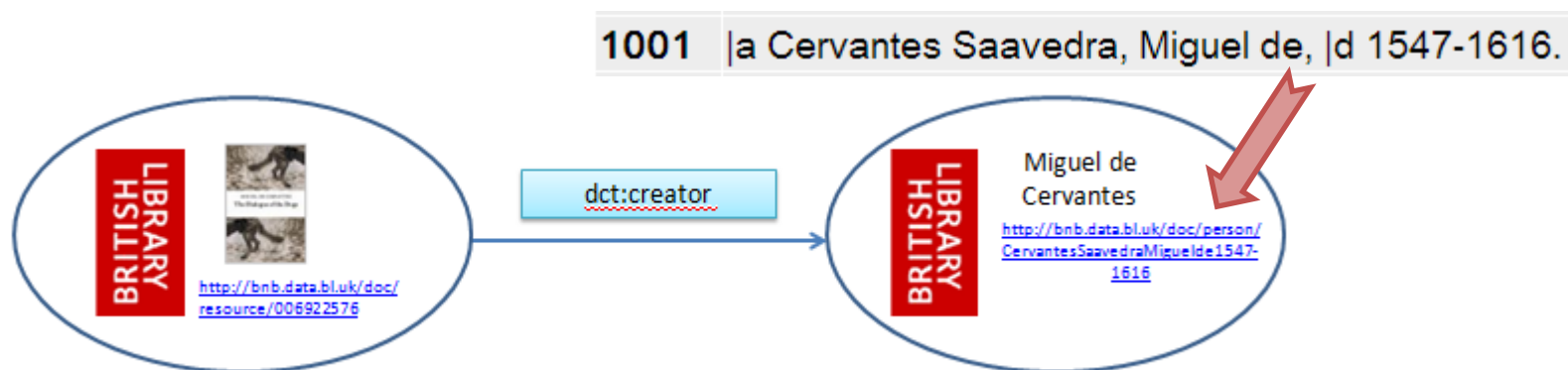
Provides structured data that anyone can edit.

Instead of extracting information from Wikipedia infoboxes, enables the creation of infoboxes from Wikidata

Datasets published in RDF



Bibliographic data interlinking - example



✓ Focus in the statement, not the record

Elements can be used outside the catalogue and linked to other data

EXAMPLE

At this time, this dataset is not guaranteed to be stable; its content may change without notice.

Cervantes Saavedra, Miguel de, 1547-1616

<http://bnb.data.bl.uk/id/person/CervantesSaavedraMiguelde1547-1616>

The deceitful marriage and The dialogue of the dogs / Miguel de Cervantes Saavedra

<http://bnb.data.bl.uk/id/resource/006922576>

alternative title	Dialogue of the dogs Coloquio de los perros. English
bnb	GBA3V5887
description	"The deceitful marriage first published in English ... in 1613 ; The dialogue of the dogs first published in Spanish ... in 1613" - t.p. verso. Translated from the Spanish.
extent	xv, 86 p.
isbn 10	1843910659
title	The deceitful marriage and The dialogue of the dogs
type	BibliographicResource Book
creator	Cervantes Saavedra, Miguel de, 1547-1616
is part of	Hesperus classic
language	eng
publication event	London : Hesperus, 2004
same as	GBA3V5887
see also	1843910659
subject	863.3

event	1547 1616
family name	Cervantes Saavedra
given name	Miguel de
has contributed to	Don Quixote / Ian Fraser Milne Don Quixote de la Mancha Don Quixote of the Mancha / Edward Abbott Parry
name	Miguel de Cervantes Saavedra
type	Agent Agent Person
same as	17220427

`< dct:creator rdf:resource="http://bnb.data.bl.uk/id/person/CervantesSaavedraMiguelde1547-1616" />`

Cervantes Saavedra

<http://bnb.data.bl.uk/id/person/Cervantes Saavedra>

event 1547
1616

family name Cervantes Saavedra

given name Miguel de

has contributed to Don Quixote / Ian
Don Quixote de la Mancha
Don Quixote of the

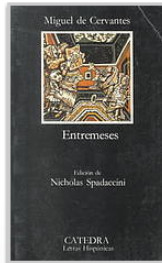
name Miguel de Cervantes Saavedra

type Agent
Agent
Person

same as 17220427

Search

Select Field: Select Index: All VIAF Search Terms:



Cervantes Saavedra, Miguel de 1547-1616

Cervantes Saavedra, Miguel de

Cervantes, Miguel de, 1547-1616

De Cervantes Saavedra, Miguel

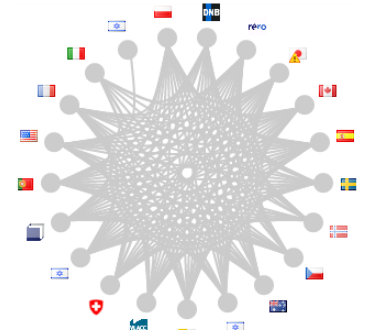
Сервантес Сааведра, Мигель Де, 1547-1616

1547-1616 מִיגֵל דֵה סַוּוֹנְטֵס

VIAF ID: 17220427 (Personal)
Permalink: <http://viaf.org/viaf/17220427>

Preferred Forms

- 100 1 _1a_Cervantes Saavedra, Miguel de, td_1547-1616
- 100 1 _1a_Cervantes Saavedra, Miguel de, td_1547-1616
- 100 1 _1a_Cervantes Saavedra, Miguel de, td_1547-1616
- 100 1 _1a_Cervantes Saavedra, Miguel de
- 100 1 _1a_Cervantes Saavedra, Miguel de, td_1547-1616
- 100 1 _1a_Cervantes Saavedra, Miguel de, td_1547-1616
- 100 2 _1a_Cervantes Saavedra, Miguel de, td_1547-1616
- 100 1 _1a_Cervantes Saavedra, Miguel de, td_1547-1616
- 100 1 _1a_Cervantes Saavedra, Miguel de



```
<rdfs:label>Cervantes Saavedra, Miguel de, 1547-1616</rdfs:label>  
<owl:sameAs rdf:resource="http://viaf.org/viaf/17220427"/>
```

Search

Select Field: Select Index: Search Terms:

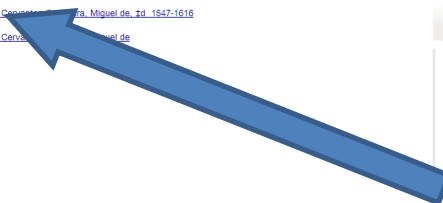
All VIAF



Cervantes Saavedra, Miguel de 1547-1616
Cervantes Saavedra, Miguel de
Cervantes, Miguel de, 1547-1616
De Cervantes Saavedra, Miguel
Сервантес Сааведра, Мигель де, 1547-1616
1547-1616, מִיגֵל דֵּה סֵרְוַנְטֵס
VIAF ID: 17220427 (Personal)
Permalink: <http://viaf.org/viaf/17220427>

Preferred Forms

- 100 1 _ 1a_Cervantes Saavedra, Miguel de, td_1547-1616
- 100 1 _ 1a_Cervantes Saavedra, Miguel de, td_1547-1616
- 100 1 _ 1a_Cervantes Saavedra, Miguel de, td_1547-1616
- 100 1 _ 1a_Cervantes Saavedra, Miguel de
- 100 1 _ 1a_Cervantes Saavedra, Miguel de, td_1547-1616
- 100 1 _ 1a_Cervantes Saavedra, Miguel de, td_1547-1616
- 100 2 _ 1a_Cervantes Saavedra, Miguel de, td_1547-1616
- 100 1 _ 1a_Cervantes Saavedra, Miguel de, td_1547-1616
- 100 1 _ 1a_Cervantes Saavedra, Miguel de



About: [Miguel de Cervantes](#) [Permalink](#)

an Entity references as follows:

Miguel de Cervantes Saavedra (Alcalá de Henares, 29 de setembro de 1547, um romancista, dramaturgo e poeta castelhano. A sua obra-prima, Dom Quixote de La Mancha, é um clássico da literatura ocidental e é regulado por leis. O seu trabalho é considerado entre os melhores romances já escritos. O seu trabalho é considerado entre os mais importantes da literatura ocidental e é regulado por leis. A sua influência sobre a língua castelhana tem sido tão grande que o castelhano é conhecido como La lengua de Cervantes (A língua de Cervantes).

[Subject of Sentences In Document](#)

[Object of Sentences In Document](#)

[Explicit Coreferences](#)

Identifier (URI)

- [dbr:Miguel de Cervantes](#)
- <http://d-nb.info/gnd/11851993X>
- <http://viaf.org/viaf/17220427>

[birth place](#)

[Habsburg Spain](#)
[Alcalá de Henares](#)

[influenced](#)

[José Saramago](#)
[Voltaire](#)
[Mark Twain](#)
[Charles Dickens](#)
[Henry Fielding](#)
[»more»](#)

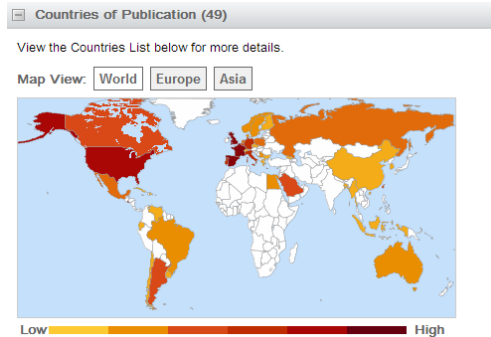
[influenced by](#)

[Rinascença italiana](#)
[Romance de cavalaria](#)
[Garcilaso de la Vega \(desambiguação\)](#)
[Boccaccio](#)



Bibliographic datasets with external LOD links to VIAF

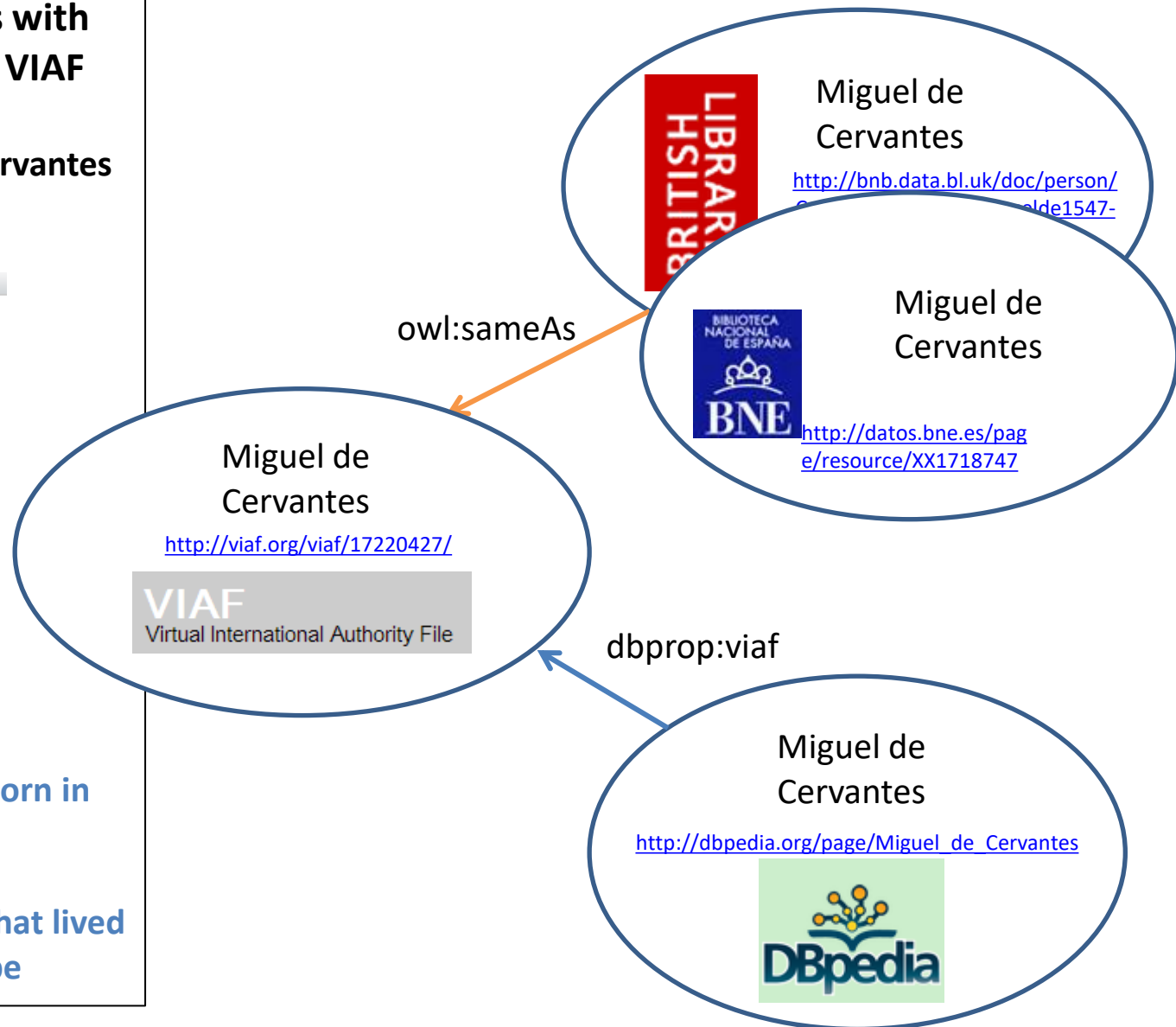
All the books written by Cervantes

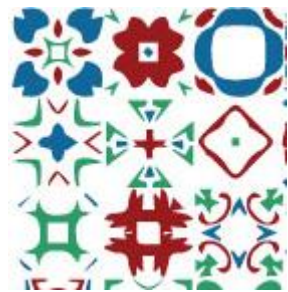


Books written by authors influenced by Cervantes

Books written by authors born in Alcalá de Henares

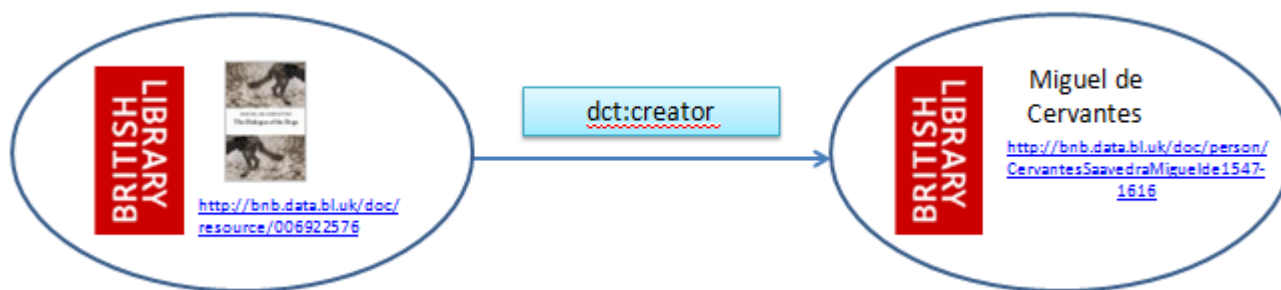
Books written by authors that lived in the XVI century, in Europe





Bibliographic data interlinking - example

Other advantages for libraries



- ✓ Bibliographic entities as first class objects
- ✓ Isolated elements are easier to process

Can be searched and used for new services creation

EXAMPLE

Log in / Sign Up

OPEN LIBRARY

One web page for every book.

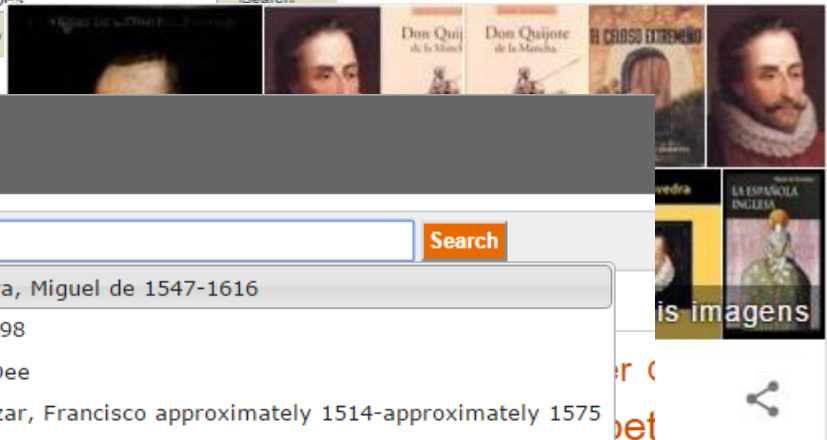
SUBJECTS

AUTHORS ADD A BOOK

LISTS RECENTLY HELP

camões Search

Only



WorldCat Identities

Name:

Cervantes Saavedra, Miguel de 1547-1616

Cervantes 1823-1898

Cervantes, Lorna Dee

Cervantes de Salazar, Francisco approximately 1514-approximately 1575

Top 100 Identities

- Aristotle Asimov Augustine Austen Bach Balzac Beethoven
- Conrad Dante Alighieri Debussy Dickens Disney Dostoyevsky
- Haydn Hegel
- Lewis Lincoln
- Plato Poe Puschkin
- Voltaire Wagn

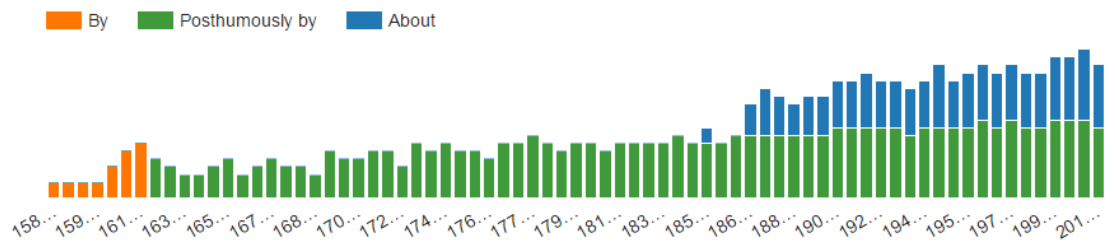
WorldCat Identities

Cervantes Saavedra, Miguel de 1547-1616

Overview

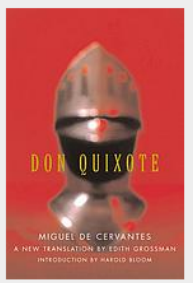
Works:	16,600 works in 51,984 publications in 52 languages and 394,762 library holdings
Genres:	Fiction Picaresque literature History Action and adventure fiction Romances Picaresque fiction Biography Criticism, interpretation, etc Juvenile works Novels
Roles:	Author, Bibliographic antecedent, Other, Honoree, Librettist, Contributor, Creator, Author in quotations or text abstracts, Dedicatee, Lyricist, Attributed name, Artist, Editor, Dubious author, Performer, Originator, Adapter, Author of introduction, Composer, Dedicator
Classifications:	PQ6329, 863.3

Publication Timeline



Most widely held works about Miguel de Cervantes Saavedra

- Cervantes : a collection of critical essays** by Lowry Nelson (Book)
- Lives of the writers : comedies, tragedies (and what the neighbors thought)** by Kathleen Krull (Book)
- Cervantes** by Manuel Durán (Book)



Alternative Names

- Cerbantes, Miguel de 1547-1616
- Cervantes Saavedra, Miguel 1547-1616
- Cerbantes Saavedra, Miguel de 1547-1616
- Ceruantes Saauedra, Miguel de
- Cervantes Saauedra, Miguel de 1547-1616
- Cervantes.
- Cervantes 1547-1616

En la RNF Obras en las que participa

Bu:

C

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sobr
Infor

A Cervantes : La Real Academia
de Medicina y ...
1905

Libro Disponible en digital



A Cervantes en su tercer
centenario homenaje del ...
[1916]

Libro Disponible en digital



Canciones clásicas españolas v. 2
Los graciosos
Obradors, Fernando J.
1930

Música impresa

Disponible en digital



Cervantes : (homenaje a España
en el tercer ...

Pérez Petit, Víctor
1905

Libro Disponible en digital



Cervantes en Costa-Rica
homenaje al escritor ...
1916

Libro Disponible en digital



Cervantes en Lepanto : Relación
de la batalla
Arrieta, Emilio
[1876]

Música impresa

Disponible en digital



Cervantes y Alcalá : homenaje de
la ciudad de ...

1916

Libro Disponible en digital



Comedia de la Soberana Virgen
de Guadalupe, y ...
1868

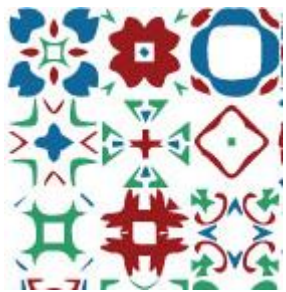
Libro Disponible en digital



Documentos de Cervantes

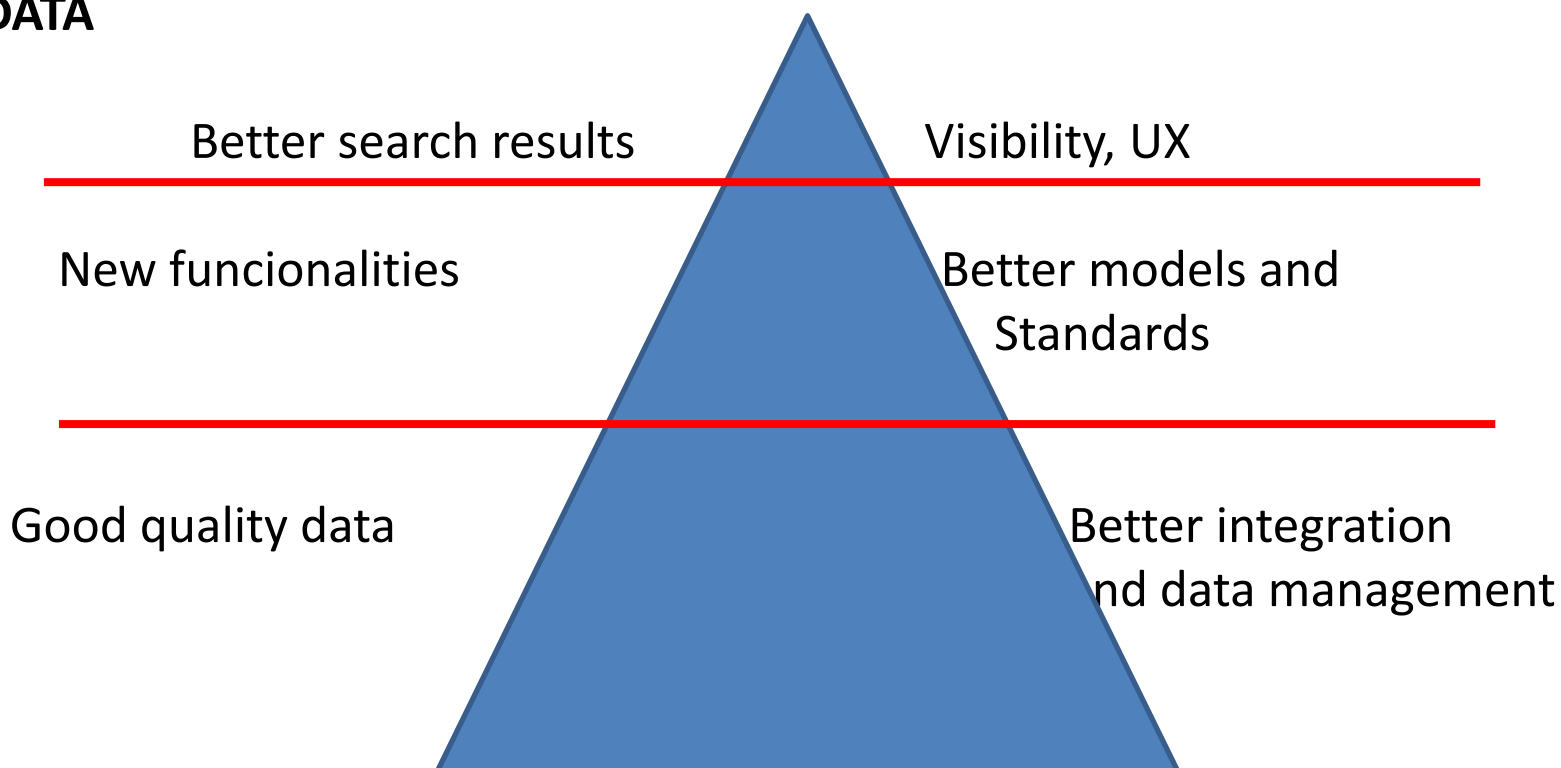
Manuscrito Disponible en digital





Conclusions

LINKED DATA



Source: OCLC