

Decentralizing Knowledge

Open Source and Open Data in Libraries



Tamir Borensztajn | tamirb@ebSCO.com

EBSCO



Dissemination of information
Open Linked Data



Software applications
Library Services Platform

The challenge

Applications

Less choice,
dependency on
single vendors



Photo by [Dušan veverkolog](#) on [Unsplash](#)

Information

Catalogs locked in
place

Library Services Platform



IR

OA

Ordering

Discovery

DISCOVERY

CIRCULATION

ACQUISITIONS / SERIALS

CATALOGING

REPORTING



Decentralizing Knowledge

“OSS ...represents a pool of knowledge, which is accessible and usable by all companies and individuals worldwide, and is therefore a public good in its purest form.”

Open Source in libraries



LibreCat/
Catmandu



DSPACE

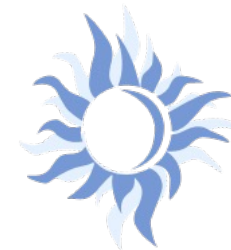


ReadMETRICS



hyku

folio



blacklight



Service providers | EBSCO FOLIO Services

SERVICES

ILS functionality & ERM

Interoperability

Extensibility & innovation

PLATFORM

Circulation, acquisition, cataloging, OPAC, ERM

APIs / integrations

Apps OSS or proprietary		

COMMUNITY



collaboration of libraries, developers and vendors

Library Technology Newsletter

Features, News and Analysis

A monthly publication of Library Technology Guides

[subscription options](#)

FOLIO: Momentum building with new wave of implementations

“The FOLIO [LSP] ... has made rapid gains in library implementations... the major modules of FOLIO are complete, and implementations are well underway.”



ZBW Leibniz-Informationszentrum
Wirtschaft
Leibniz Information Centre
for Economics



UNIVERSITÄT
LEIPZIG



Caltech Library



TEXAS A&M
UNIVERSITY.



DUKE UNIVERSITY
LIBRARIES



COLLEGE OF THE
Holy Cross



University
of Colorado
Boulder



WENTWORTH
INSTITUTE OF TECHNOLOGY



AUBURN
UNIVERSITY

THE UNIVERSITY OF
ALABAMA®



WARNER
UNIVERSITY

Amherst
College

Missouri
State
UNIVERSITY



MOUNT HOLYOKE.

Smith College

Community structure

Development & services

Product Council (PC)

defines the community roadmap

Technical Council (TC)

an advisory group that helps define best practices

Special Interest Groups (SIG)

provide subject matter expertise across domains (e.g., circulation, acquisitions, etc.)

Product management

guides the product roadmap, 'sprint' demos, feature requirements and community development

Development

EBSCO & libraries

Services

Different organizations provide implementation and support services - so you don't need to hire additional staff

EBSCO FOLIO Services

What we provide

Implementation

- EBSCO FOLIO readiness assessment (analysis of existing workflows)
- Implementation of EBSCO ERM
- Full EBSCO FOLIO implementation and training
- Integrations with EBSCO solutions and third-party applications

Hosting

- Global high availability and performance
- Software updates and backups
- Security and privacy
- Monitoring and alerting

Support

- Global and local support via EBSCO and partners in your language and time zone
- Dedicated online community and forums
- Testing and release procedures

Integrations

Connecting disparate data sources to deliver key insights with **Panorama**



Panorama Features



A self-service
platform for data
discovery



Default and
custom visual
dashboards



Automated data
connections



Customizable
data sources

Library Overview

Start Date: 1/1/2020 End Date: 12/31/2020 Info

Refreshed on Feb 24, 2021 07:26 AM

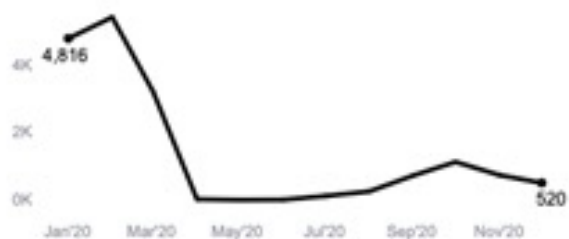
LOANS for Selected Time Period

17,122

of Loans

6,367

of Renewals



PHYSICAL COLLECTION for Selected Time Period

2,849,997

Selected Time Period

0.006

Turnover rate

A default dashboard showing high-level metrics about the library

E-RESOURCES USAGE from COUNTER Reports

362,469

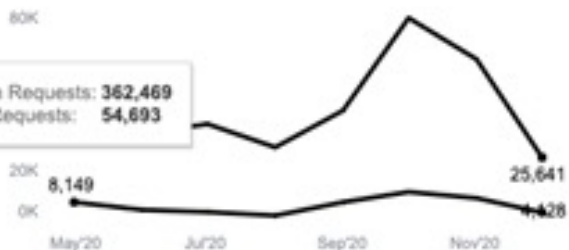
eJournal Total Item Requests

54,693

eBook Total Item Requests

eJournal Total Item Requests: **362,469**

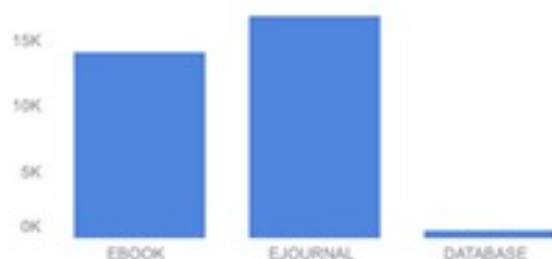
eBook Total Item Requests: **54,693**



TOTAL E-RESOURCES from COUNTER Reports

31,476

of E-resources Accessed



UNIQUE PATRONS by Patron Group

139,260

Total # of Patrons

1,224

of Active Patrons



EXPENDITURES for Selected Time Period

\$5,910,633

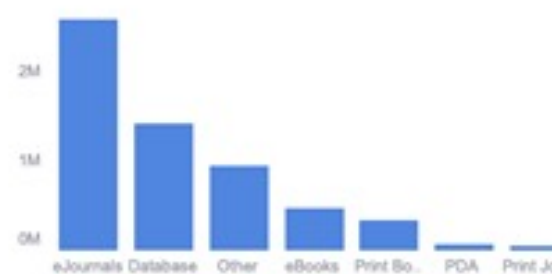
Selected Time Period

9,586

Physical Items Purchased

1,955

Electronic Items Purchased





Decentralizing knowledge Open Data & BIBFRAME

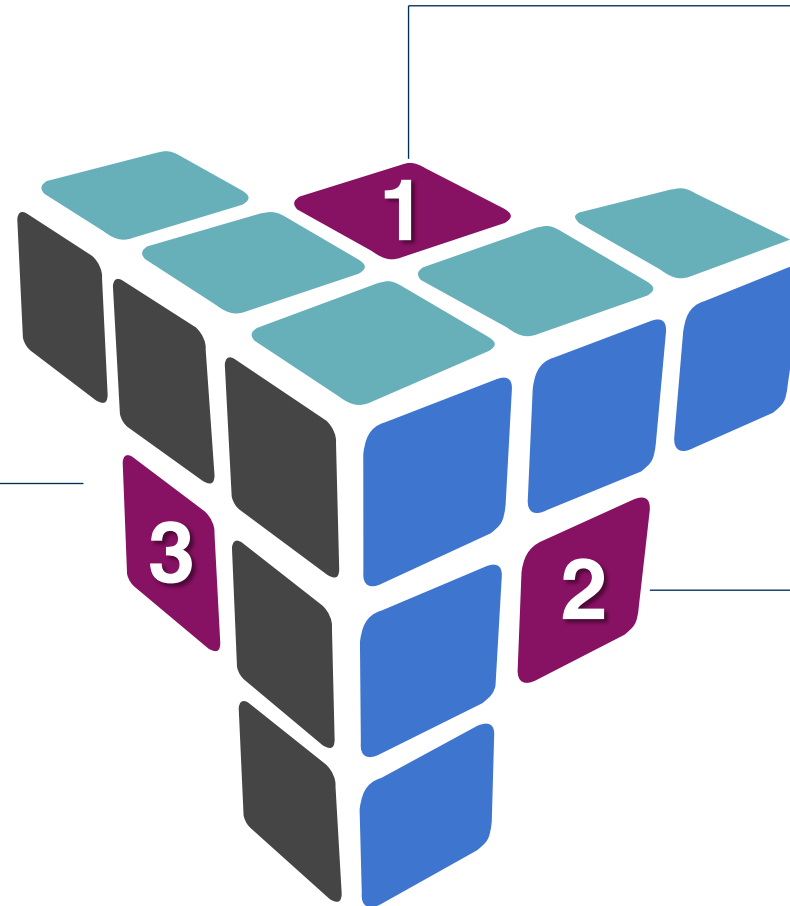
Library.Link is an EBSCO service, based on BIBFRAME, that connects and enriches library resources with open data and publishes resources anywhere on the web.

The library's mission



Provide access to relevant, rich information for any user, anywhere.

The challenge



The catalog is not visible outside of the OPAC or discovery service

MARC bibliographic records are full of rich but unconnected data (e.g., connections to people, places, genres, etc.)

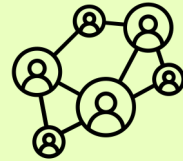
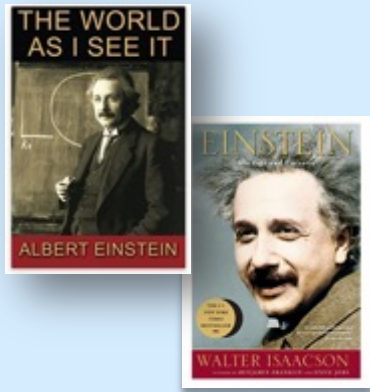
Freeing the catalog and creating new connections helps users explore, find, and use the most relevant resources anywhere on the web

Addressing the challenge



Use

item(s) within the library's catalog



Connect

- all works by and about an author / researcher / faculty
- works within a genre,
- works about a place, etc.



Enrich

with information about the author / researcher / faculty:
alternative names, date of birth, occupation, areas of study, political affiliations, etc.

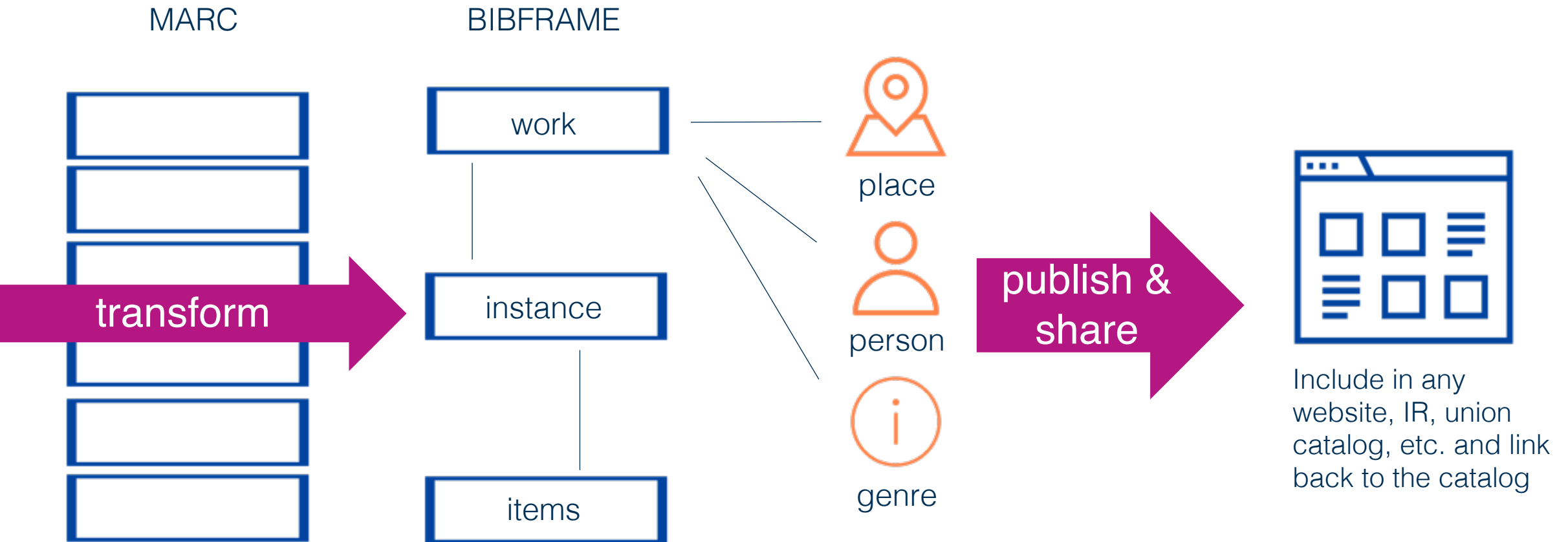


Publish

anywhere on the World Wide Web:

- Learning Management System,
- IR,
- department website,
- And many more

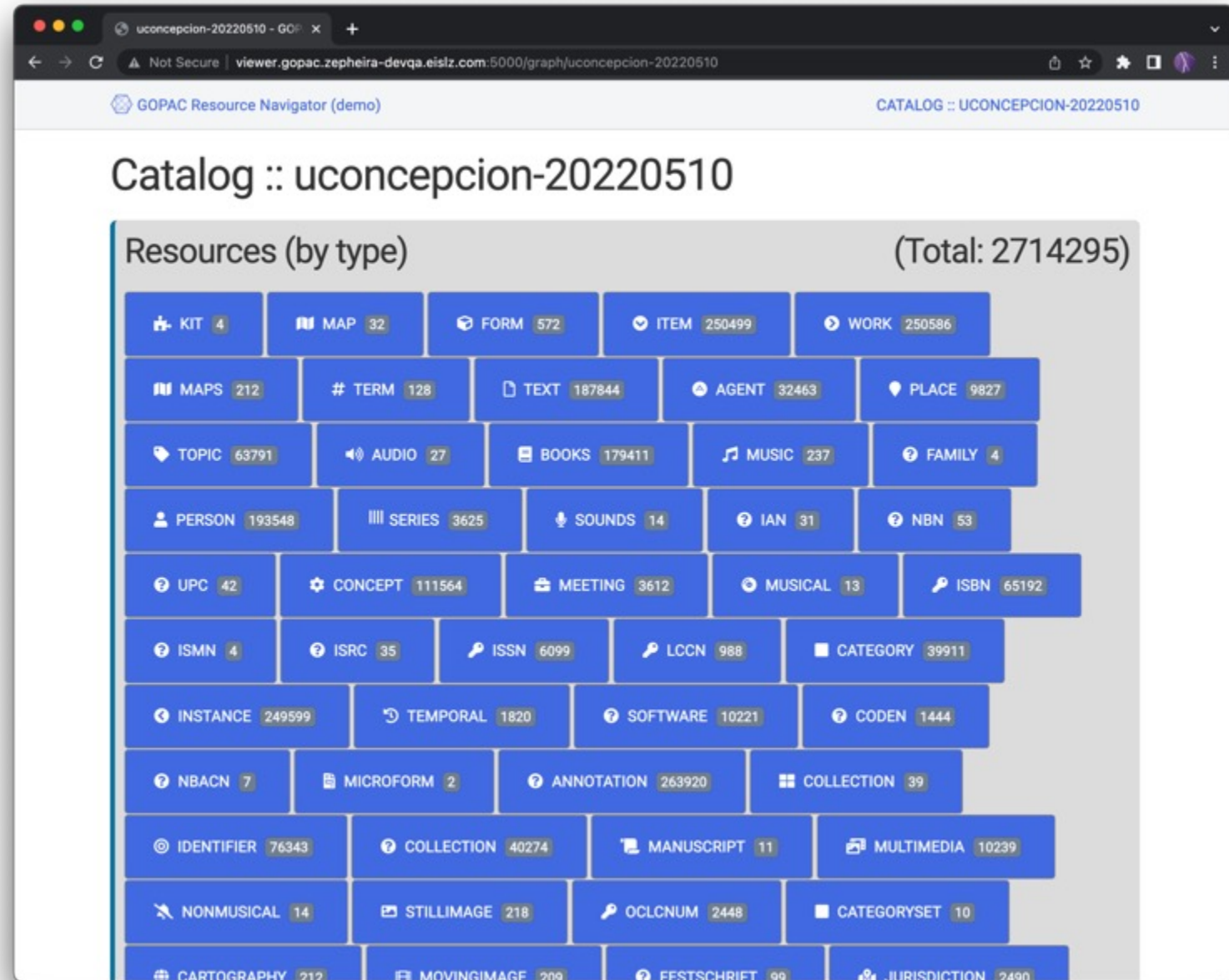
Making the catalog portable and visible with BIBFRAME



Transforming MARC to BIBFRAME resources.
each resource becomes a link that serves as a **unique identifier**

Bibliotecas de la Universidad de Concepción

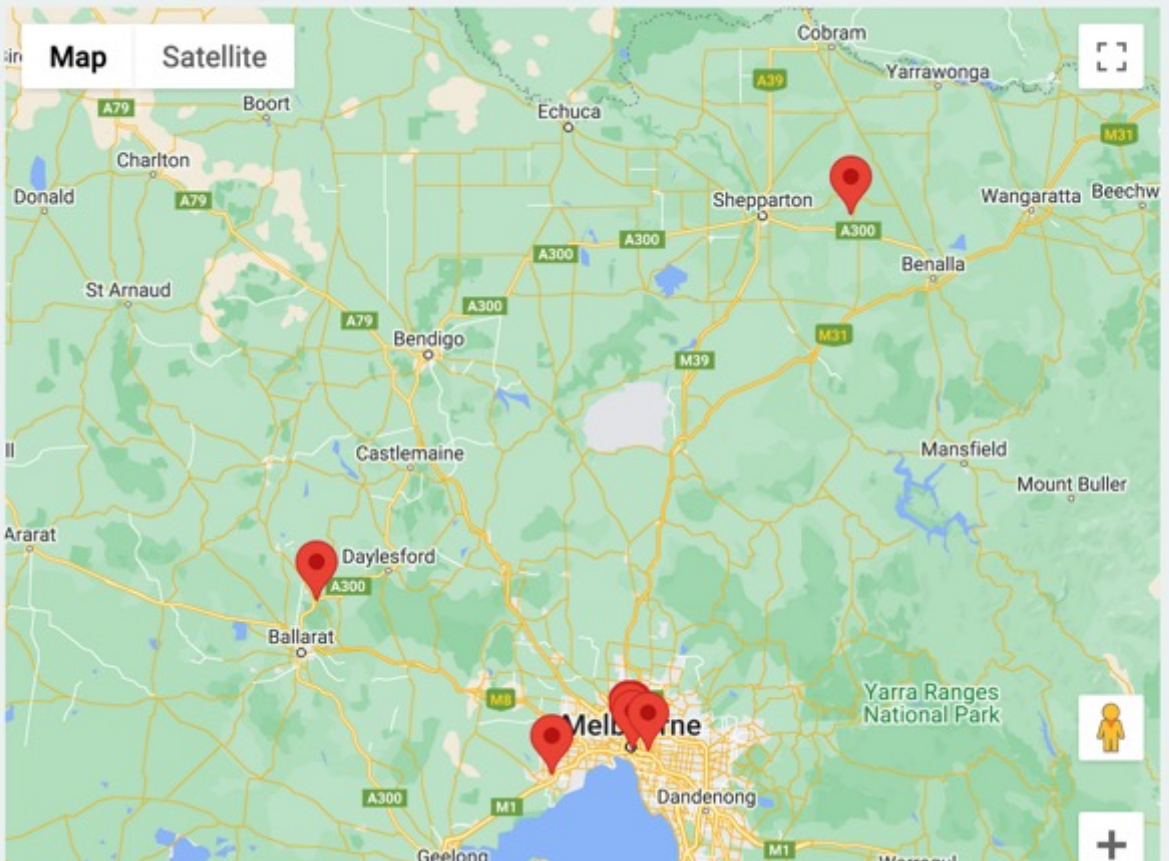
- 247K catalog records transformed into 2.7M BIBFRAME resources




















University of Melbourne Library

Social   
Address Melbourne, VIC

Map Details



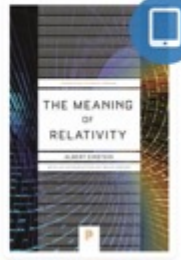
Resources

-  Agent **594704**
-  Category **211**
-  Collection **371242**
-  Concept **2337144**
-  CopyrightEvent **3647**
-  Family **4024**
-  Form **69037**
-  Instance **4852226**
-  List **2096**
-  Meeting **82659**
-  Organization **323762**
-  Person **2640137**
-  Place **146537**
-  ProviderEvent **1473307**
-  Series **1137307**
-  Temporal **8419**
-  Topic **258786**


88 Items by Albert Einstein at the University of Melbourne Library



Die Grundlagen der Einsteinschen Gravitationstheorie, von Erwin Freundlich : mit



The meaning of relativity : including the relativistic theory of the non-




The genesis of general relativity : the promise of mathematics, Volume 4.



The Meaning of relativity, Albert Einstein, (electronic resource)



Sidelights on Relativity, Albert Einstein, (electronic resource)

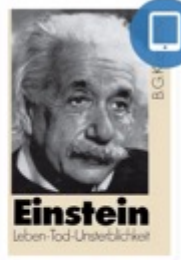


Geome Erfahrung erweite Fassur Festvo

192 Items about Albert Einstein at the University of Melbourne Library



Einstein 1905 : the standard of greatness, John S. Rigden, (electronic




Einstein : Leben, Tod, Unsterblichkeit, B.G. Kuznecov ; in



Einstein : his life and works, K.A.I.L. Wijewardena Gamalath



Einstein Symposium, Berlin : aus Anlass der 100. Wiederkehr



Einstein Symposium, Berlin : aus Anlass der 100. Wiederkehr



Einstein : aus Anlass der 100. Wiederkehr


Library.Link
Create and publish 'living' collections anywhere on the web.



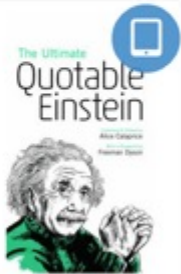
</> Embed

13 Items by the Person Einstein, Albert


Navigation arrows: < >

- 

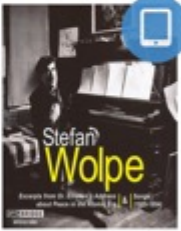
Annual report of the Board of Regents of the Smithsonian

Borrow it
- 


The ultimate quotable Einstein, Albert Einstein ;

Borrow it
- 


Through the Wormhole with Morgan Freeman : Is Time Travel

Borrow it
- 

WOLPE, S.: Edition, Vol. 3 - Excerpt from Dr. Einstein's

Borrow it
- 

Albert Einstein, The Human Side, Einstein, Albert, (electronic)

Borrow it
- 

Albert Einstein, the Human Side : Glimpses from His Archives,

Borrow it

</> Embed

Context

Creator of

- Albert Einstein, the Human Side : Glimpses from His Archives
- Albert Einstein, Mileva Maric : The Love Letters
- Albert Einstein, The Human Side
- Einstein on Politics : His Private Thoughts and Public Stands on Nationalism, Zionism, War, Peace, and the Bomb

Contributor of

- WOLPE, S.: Edition, Vol. 3 - Excerpt from Dr. Einstein's Address about Peace in the Atomic Era / Songs (Arnold, Summers, Mason, Sewailam)
- Through the Wormhole with Morgan Freeman : Is Time Travel Possible? - Series 1 - Ep 3
- Annual report of the Board of Regents of the Smithsonian Institution showing the operations, expenditures, and condition of the Institution for

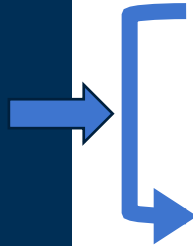
Author of

Using BIBFRAME for resource enrichment

Our service intelligently maps links (local identifiers) to equivalent identifiers **in other graphs.**

We use these mappings to pull in additional data about the person, item, etc.

Example: enriching the 'person' with **WikiData.**



Link Analysis

Person: Einstein, Albert, 1879-1955

Local Identifier <http://link.dclibrary.org/resource/Rh5lkqhCBU8/>

Network Identifier <http://library.link/resource/Rh5lkqhCBU8/>

Alternative Identifiers

- <http://library.link/resource/R5unDpiqiTw>
- <http://library.link/resource/7U2AFUyIFPc>

Equivalent Identifiers <https://www.wikidata.org/wiki/Q937>

Example: Using BIBFRAME for resource enrichment

Item Discussion

Albert Einstein (Q937)

German-born theoretical physicist; developer of the theory of relativity (1879–1955)
Einstein | A. Einstein

▼ In more languages

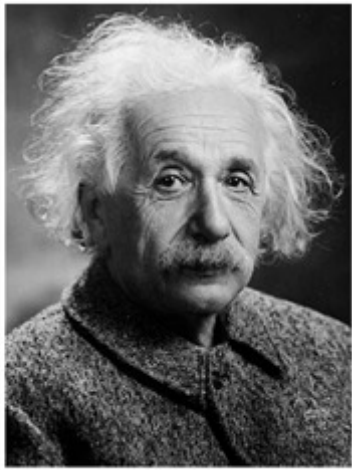
Configure

Language	Label	Description	Also known as
English	Albert Einstein	German-born theoretical physicist; developer of the theory of relativity (1879–1955)	Einstein A. Einstein
Spanish	Albert Einstein	físico alemán	Einstein Einstein, Albert A. Einstein
Traditional Chinese	阿爾伯特·愛因斯坦	德裔美國物理學家，相對論創立者	愛因斯坦 阿爾伯特·愛因斯坦 愛恩斯坦 艾爾伯特·愛因斯坦 艾因斯坦 愛恩思坦 愛恩思坦

Use services like WikiData to add additional context

Enrichments – e.g., Wikidata

 Einstein, Albert, 1879-1955 *German-born theoretical physicist; developer of the theory of relativity (1879-1955)*



 Albert Einstein Head

Albert Einstein



German-born theoretical physicist; developer of the theory of relativity (1879-1955)

Name:	Albert Einstein
AKA:	Einstein, A. Einstein
Born:	March 13, 1879 in Ulm
Died:	April 17, 1955 in Princeton
Cause of death:	Natural causes (Abdominal aortic aneurysm)
Remains:	National Museum of Health and Medicine
Occupation(s):	Writer, Teacher, Scientist, Professor, Physicist, Inventor, Philosopher, Pedagogue, Mathematician, Patent examiner, Science writer, University teacher, Theoretical physicist, Philosopher of science, Non-fiction writer
Citizenship:	Cisleithania
Gender:	Male
Politics:	German Democratic Party

Learn more about Albert Einstein at

 [Wikipedia](#)

 [Open Library](#)

 [IMDb](#)

 [Encyclopædia Britannica](#)

22 Items by Albert Einstein at the Federal University of Rio Grande do Sul (UFRGS)



Ideas and opinions by Albert Einstein, Based on Mein Weltbild, Edited by Carl



Introduction to the theory of relativity, By Peter Gabriel Bergmann ; With a Foreword by



Como veo el mundo, Albert Einstein ; Traducción por Nathan Caolan



A Evolução da física, Albert Einsteins e Leopold Infeld ; tradução Giasone



The collected papers of Albert Einstein, Anna Beck, translator



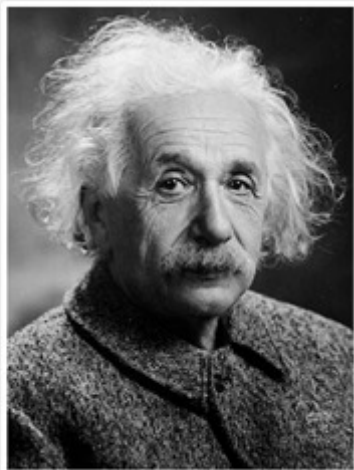
El significado de la relatividad, Albert Einstein ; Traducido Carlos E. Prelat



Como vejo o mundo, Albert Einstein ; Tradução de H. P. de Andrade

22 Items about Albert Einstein at the Federal University of Rio Grande do Sul (UFRGS)

Einstein, Albert, 1879-1955 German-born theoretical physicist; developer of the theory of relativity (1879-1955)



Albert Einstein Head

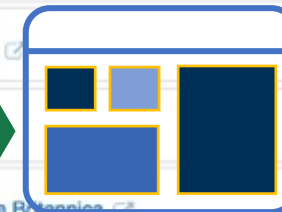
Albert Einstein

German-born theoretical physicist; developer of the theory of relativity (1879-1955)

Name: Albert Einstein
AKA: Einstein, A. Einstein
Born: March 13, 1879 in Ulm
Died: April 17, 1955 in Princeton
Cause of death: Natural causes (Abdominal aortic aneurysm)
Remains: National Museum of Health and Medicine
Occupation(s): Writer, Teacher, Scientist, Professor, Physicist, Inventor, Philosopher, examiner, Science writer, University teacher, Theoretical physicist, P
Citizenship: Cisleithania
Gender: Male
Politics: German Democratic Party

Learn more about Albert Einstein at

Wikipedia



Publish on the web
and embed on any
website.

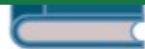
22 Items by Albert Einstein at the Federal University of Rio Grande do Sul (UFRGS)



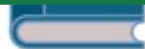
Ideas and opinions by Albert Einstein, Based on Mein Weltbild, Edited by Carl



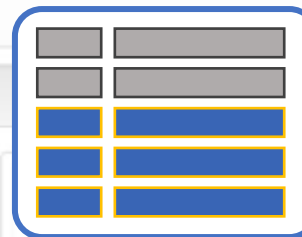
Introduction to the theory of relativity, By Peter Gabriel Bergmann ; With a Foreword by



Como veo el mundo, Albert Einstein ; Traducción por Nathan Caolan



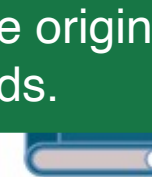
A Evolução da física, Albert Einsteins e Leopold Infeld ; tradução Giasone



The collected papers of Albert Einstein, Anna Beck, translator



El significado de la relatividad, Albert Einstein ; Traducido Carlos E. Prelat



Como vejo o mundo, Albert Einstein ; Tradução de H. P. de Andrade

Using 'borrow actions', users can request items from the library.

Enrichments can also be sent back to the library's FOLIO catalog and added to the original records.



Selected Online Reading on Artificial Intelligence and Law

Find a list of selected books, electronic books and articles, online databases, newswires, and training sessions to enhance your knowledge from home.

- Home
 - Books on the topic
 - Overview
 - Aspects of Artificial Intelligence
 - Access to sources
- E-books
- E-articles
- Databases and Newsletters
- Online training
- EPRS publications
- Related guides

KATE CRAWFORD

Atlas of AI

RESEARCH HANDBOOK ON THE
Law of Artificial
Intelligence

Edited by
Woodrow Barfield • Ugo Pagallo

Research Handbook on the Law of Artificial Intelligence

Artificial Intelligence
and the Law

Jan De Brugne and Cedric Vanleenhove (eds.)

Artificial Intelligence and the Law

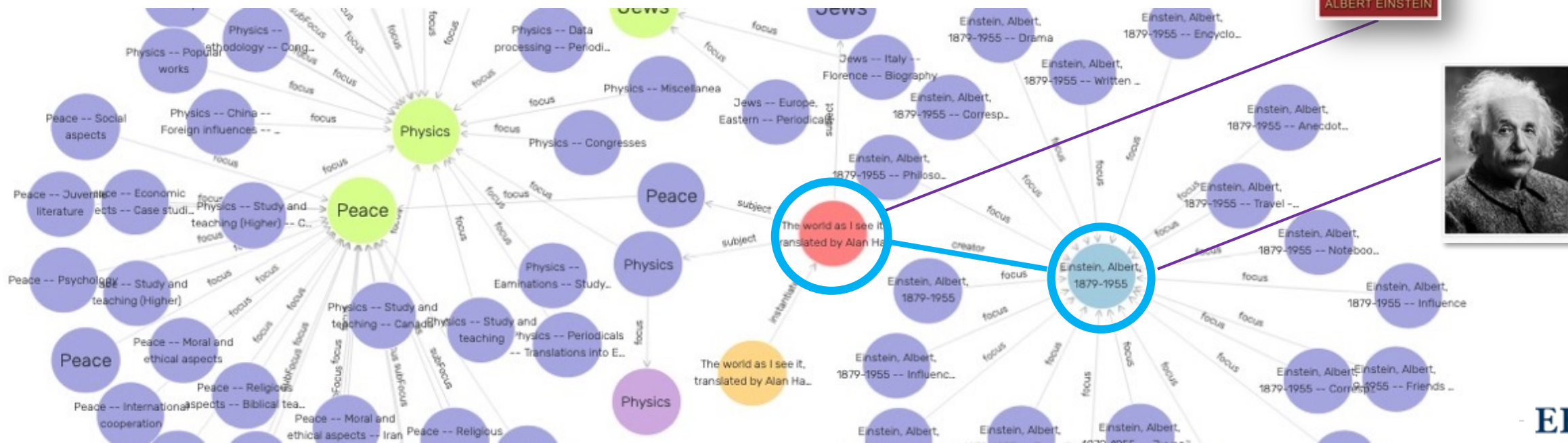
Aviv H. Gaoon

The Future of Copyright
in the Age of Artificial
Intelligence

The Future of Copyright in the Age of Artificial Intelligence

Published collections are “living” lists

The Library.Link graph represents data from connected catalogs and other authoritative data sources



Open data and open standards



Open-source software

With Library.Link:

- Unlock the catalog
- Meet users where they are, anywhere on the web

With FOLIO:

- Work with a service provider for hosting, implementation and support
- Integrate with different services, including Panorama from EBSCO

Thank you



Tamir Borensztajn | tamirb@ebSCO.com

EBSCO