# Linked Data for Libraries (LD4L) and VIVO: Researcher Profiling

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## Linked Data for Libraries (LD4L)

- In Dec. '13, the Andrew W. Mellon Foundation made a two-year \$999K grant to Cornell, Harvard, and Stanford starting Jan. '14
- Partners will assemble an ontology and linked data sources that provide relationships, metadata, and broad context for Scholarly Information Resources
- Leverages existing work by both the VIVO project and the Hydra Partnership

## Vision: Create a LOD standard to exchange all that libraries know about their resources





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Library » Cornell University Library Guides » Feminist, Gender, and Sexuality Studies: A Research Guide Admin Sign In Feminist, Gender, and Sexuality Studies: A Research Guide Tags: feminism, gender, research\_guides, sexuality\_studies, women A guide to discovering the extensive FGSS resources available in the Cornell University Library and beyond. Click on the PURPLE TABS to access each section in this guide. URL: http://guides.library.cornell.edu/fgss ☐ Print Guide ☐ RSS Updates ☑ Email Alerts Last Updated: Apr 1, 2014 Introduction The Classic Periodical Catalogs Statistical Encyclopedias, Dictionaries Atlases Biographical & Almanacs Catalog Indexes & Bibliographies Sources Sources **Primary Sources:** Free Online Directories Primary Sources: Need Databases & Microforms Physical Access Resources Online Help? Encyclopedias, Dictionaries Search: This Guide ▼ Search & Almanacs 🖃 **Encyclopedias, Dictionaries and Almanacs** American Masculinities: A Historical Encyclopedia. Ed. Bret E. Carroll. Thousand Oaks, CA: Sage Publications, 2003. (online and Olin Reference HQ 1090.3 .A453x 2003) "[R]eference guide and an introduction to the many ways in which men have defined, imagined, and experienced male identity in the social, cultural, and political contexts of the United States." [Introduction]

Andermahr, Sonya. Concise Glossary of Feminist Theories. New York: Arnold, 1977.

#### (Olin Reference HQ 1115 .A543 1997)

"The main aim of the glossary is to identify the concepts that have structured feminist theory in the period of the second wave, from about 1968, indicating their provenance in travelling theory from this time.... The glossary aims to trace the variety of ways in which these concepts have been transformed as they were critiqued and appropriated." [Introduction] Liberally cross-referenced. Extensive bibliography of works cited.

Dictionary of Feminist Theologies. Ed. Letty M. Russell and J. Shannon Clarkson. Louisville: Westminster John Knox Press, 1996.

#### (Olin Reference BT 83.55 .D53x 1996)

"The Dictionary covers standard topics of Christian theological studies, as well as topics of other religions that are important for the continuing feminist dialogue among many different religious, cultural, and racial groups (e.g., see Islam). There are also entries on topics of particular interest to those engaged in feminist studies. There are no entries on persons...." [Preface] The Bibliography of Works Cited is comprehensive for English-language publications on feminist theologies in the U.S. context.

Encyclopedia of Feminist Literary Theories. Ed. Elizabeth Kowaleski-Wallace. New York: Garland, 1997.

#### (Olin Reference PN 98 .W64 E53x 1997)

"The mission of this encyclopedia is to map out the vast intellectual territory that has arisen mostly since the 1970s, due to the efforts of feminist literary scholars and critics in the United States and Great Britain." [Preface] Definitions of important terms, summaries of critical ideas, and essays on theoretical movements and ideas in feminist literary scholarship and thought.

Encyclopedia of Feminist Theories, Ed. Lorraine Code, New York; Routledge, 2000.

#### (Olin Reference HQ 1190 .E63x 2000)

Succinct entries on major individuals, theories, developments, and terms in feminist history and thought. Bibliographies.

Encyclopedia of Gender and Society, Ed. Jodi O'Brien, 2 volumes, Thousand Oaks, CA: Sage Publications, 2009.

#### (online and Olin Reference HQ 1115 .E54 2009 +)

"Gender is so significant in the ways it shapes individuals and societies that it isn't possible to cover every aspect of gender scholarship in a single venue. Our intent with this encyclopedia is to provide users with a "gender lens" on society by focusing on significant gender scholarship within commonly recognized areas of social

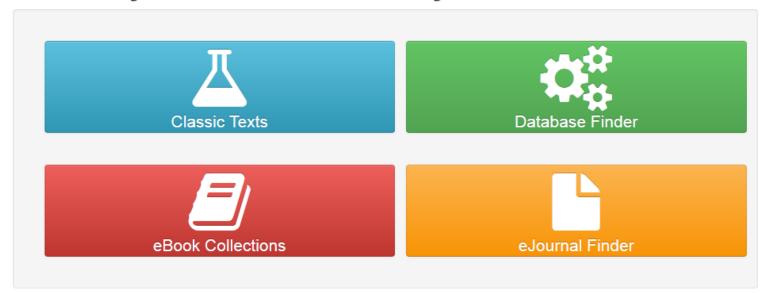


Clark Physical Sciences Library

Clark Learning Suite FAQ

**CU Library Web Site** 

#### **Clark Physical Sciences Library**





Use our feedback forum to discuss these tools and others you'd like to see.

#### **Announcements**

- ♠ ASCE ebooks new in the Engineering eLibrary
- Math Library Exhibit History of the Mathematics Department

#### Librarians

☑ Dianne Dietrich 👊

(Physics & Astronomy Librarian)

☑ Leah McEwen 👊

(Chemistry Librarian)

#### **Library Guides**

- ♣ Resources in the physical sciences
- Finding chemical properties and data

#### **Essentials**

- ☆ Passkey Off-campus Access
- ☆ Annex Request Annex/ILL
- ☆ Classic Catalog Classic Catalog
- ☆ SciFinder Chemical Abstracts
- ☆ Reaxys Beilstein & Gmelin
- ☆ Web of Science Scientific Abstracts
- ☆ PubMed Biomedical Abstracts
- ☆ arXiv Physics Preprints
- ☆ ADS Astrophysics Data System

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#### **Classic Texts**

ΑII

Astronomy

Chemistry

**Physics** 

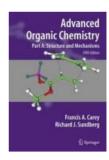
Alphabetical by Author

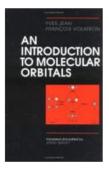
Alphabetical by Title

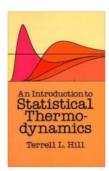
**Section** Grid View **■List View** 

Advanced inorganic chemistry

Advanced inorganic chemistry 5th edition Cotton, F. Albert Advanced inorganic chemistry: a comprehensive text 4th edition. Cotton, F. Albert

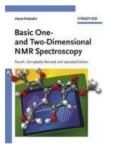












Chemical applications of group theory 2nd edition.
Cotton, F. Albert



Chemical applications of group theory 1st edition. Cotton, F. Albert

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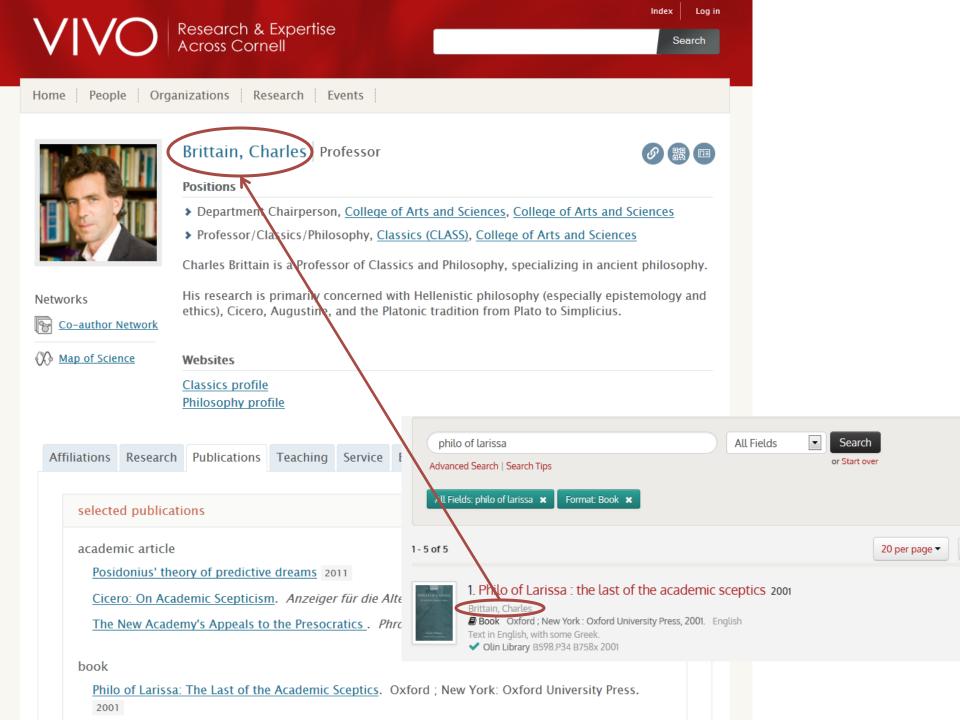






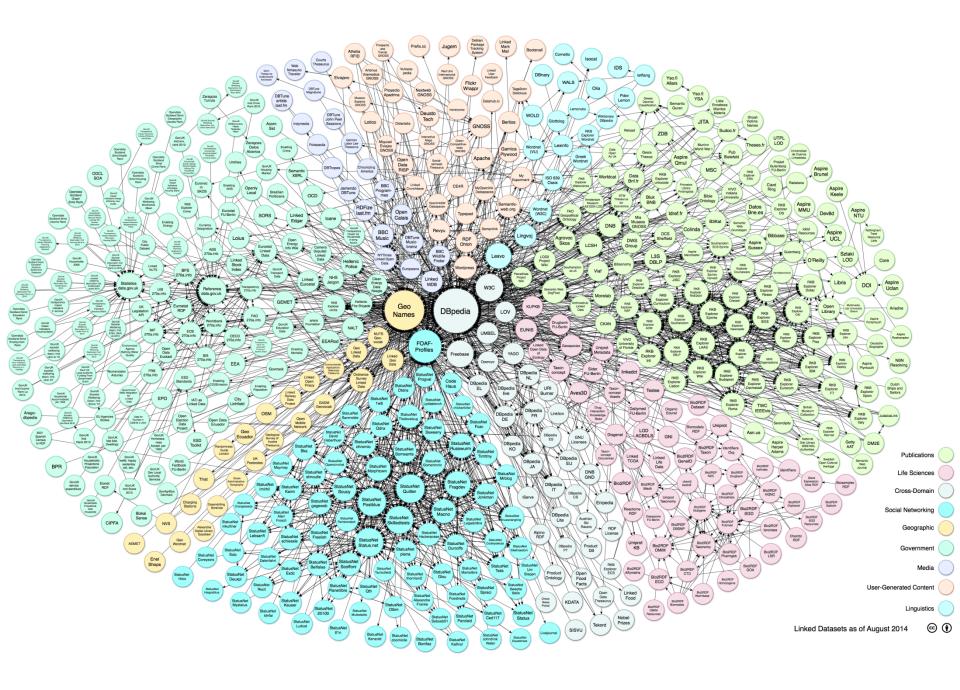


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## Why Linked Data

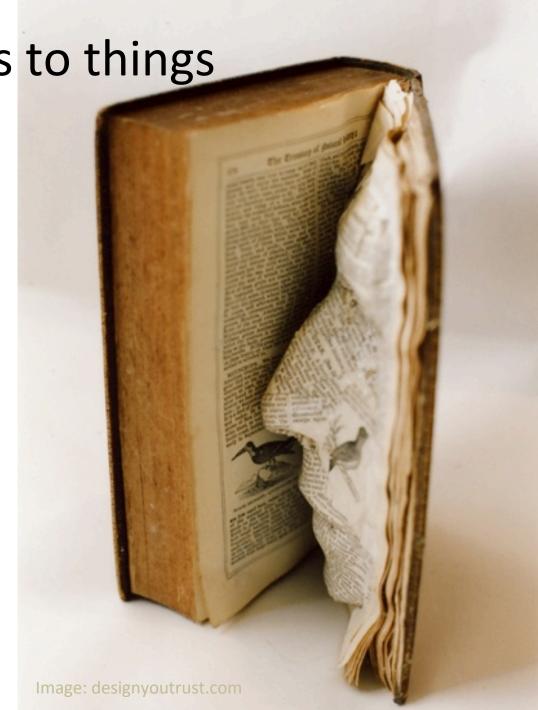
- It is a flexible and extensible framework that libraries can use to describe, organize, and relate scholars, scholarship, and the scholarly context
- There are a wide range of tools, systems, ontologies, and vocabularies already available
- It is a growing ecosystem of developers, standards, and sources of relevant Linked Open Data



Linking Open Data cloud diagram 2014, by Max Schmachtenberg, Christian Bizer, Anja Jentzsch and Richard Cyganiak. http://lod-cloud.net/"

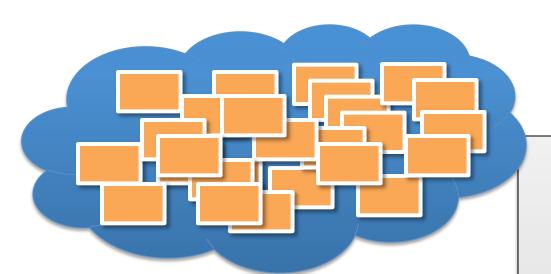
Goal: from strings to things

- People
- Organizations
- Places
- Subjects
- Events
- Works
- Datasets



## Getting concrete with LD4L: Stories as the Basis of Use Cases

As a \_\_\_\_\_, I want to \_\_\_\_\_, so that I can <realize this benefit>. **Potential Demonstrations:** A. Demo 1 B. Demo 2 C. Demo 3 Data Sources Needed: **Ontology Requirements: Engineering Work:** 



42 Raw Use Cases





12 Refined Use Cases (in 6 clusters...

#### LD4L Use Case Clusters

- 1. Bibliographic + curation data
- 2. Bibliographic + person data
- 3. Leveraging external data including authorities
- 4. Leveraging the deeper graph (via queries or patterns)
- 5. Leveraging usage data
- 6. Three-site services, e.g. cross-site search

### LD4L Data Sources

Person Data Bibliographic Data VIVO MARC ORCID MODS ISNI EAD VIAF Usage Data Circulation Citation Curation • Exhibits Research Guides Syllabi Tags

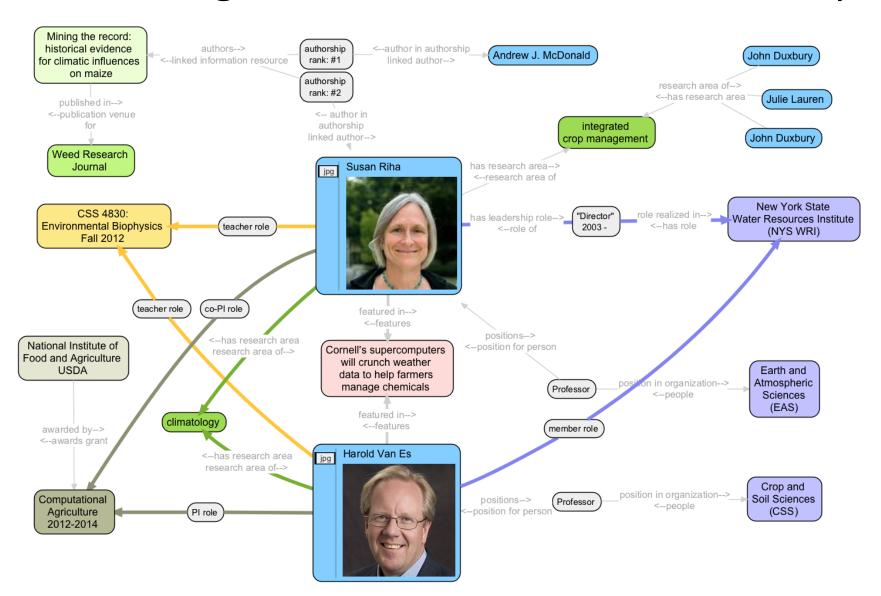
# How will LD4L connect scholarly resources to the LOD web?

- By mapping bibliographic data to BIBFRAME\*
- By using ontologies commonly found in linked data (FOAF, SKOS, OAI-ORE, FaBiO, PAV, etc.)
- By connecting with Cornell VIVO/Stanford CAP/ Harvard Profiles information
- By using persistent, stable local URI IDs
- By linking stable local identifiers to global identifiers (ORCID, VIAF, ISNI)
- By linking to external sources of networked relationships: Dbpedia, MusicBrainz, OCLC

### What is VIVO?

- Software: An open-source semantic-web-based researcher and research discovery tool
- Data: Institution-wide, publicly-visible information about research and researchers
- Standards: A standard ontology (VIVO-ISF) that interconnects researchers, communities, and campuses using Linked Open Data
- Community: An open community with strong national and international participation

# VIVO connects scientists and scholars with and through their research and scholarship



## VIVO is a Semantic Web application

- Provides RDF data readable by machines, as well as HTML pages for humans
- Provides self-describing data via shared ontologies with defined types and relationships
- Provides search & query augmented by relationships
- Underlying Vitro code supports generic edit/ display of ontology and instances

### How LD4L builds on VIVO

- LD4L brings the relationship and identifierbased architecture of VIVO to mainstream library use cases and applications
- The LD4L ontology will draw on VIVO-ISF ontology design patterns (among others)
- LD4L will link to existing VIVO data in addition to Harvard Faculty Finder and Stanford CAP data

# LD4L goal: Enhancing discovery and understanding with linked data

Library descriptions of information resources will:

- Refer to identified works, people, organizations, places, events, and subject headings
- Be discoverable in concert with other explicit and implicit library metadata of all types
- Join with local personal and organizational profile data to form a coherent, richer local authority picture
- Interoperate across libraries
- Interoperate with any other linked data via common, global identifiers and shared ontologies

### For More Information

LD4L: <a href="http://ld4l.org">http://ld4l.org</a>

VIVO: <a href="http://vivoweb.org">http://vivoweb.org</a>