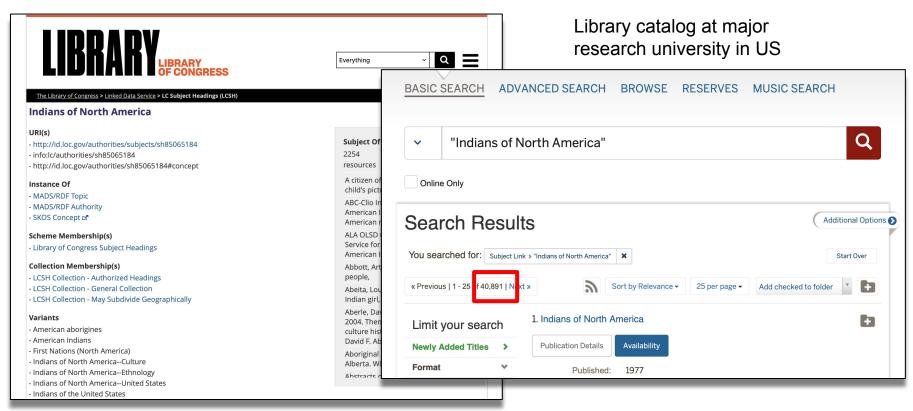
# Using Linked Data Relationships to Enhance Discovery and Mitigate Bias

Juliet L. Hardesty
Metadata Analyst
Indiana University Libraries

Semantic Web in Libraries 2021 December 3, 2021

# **Problem**

#### LCSH



# Proposal & Approach

- Controlled vocabularies from communities
- Multiple front doors to collections
- Linked Data connections
  - As defined by community

# Turn the lens



Prism flat rainbow.jpg, Kelvinsong, CC0, via Wikimedia Commons

# **Application**

- Proof of concept
- JavaScript and HTML
- Interface design inspired by IHLIA LBGTI Heritage

#### https://github.com/jlhardes/metadataBias

# **Inclusivity in Metadata**

#### Homosaurus v3 terms

Select a term below from Homosaurus.org to see search options for finding results in Indiana University's online library catalog (IUCAT). Use the Homosaurus terms to find expanded and more current result sets based on this controlled vocabulary designed for discovery of LGBTQ resources.

> Adoptive parents Age of consent

AIDS Activists

AIDS memorial quilts

AIDS phobia

Amazons

Anal sex

Anti-discrimination law

Anti-feminism

Asexual people

Autoeroticism

Aversion therapy

Bears Behavioural therapy

Biphobia

Birth certificates

Birth parents

Bisexual Jews

Bisexual men

Bisexual parents

Bisexual women Bisexual youth

Blindfolds

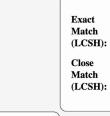
Blogs

Boys

The Homosaurus is an international linked data vocabulary of LGBTQ terms that supports improved access to LGBTQ resources within cultural institutions. Designed to serve as a companion to broad subject term vocabularies, the Homosaurus is a robust and cutting-edge vocabulary of LGBTO-specific terminology that enhances the discoverability of LGBTQ resources.

This interface design is based on the design of the search aid provided at IHLIA LGBTI Heritage.

Click here to reset.



Narrower:

Preferred:

Broader:

Use For:

Related:

homosaurus.org Vocabulary About Contact Search Releases

AN INTERNATIONAL LGBTQ+ LINKED DATA VOCABULARY



https://homosaurus.org





## About us

IHLIA is *the* heritage organisation with a socially relevant and indispensable collection. IHLIA is continuously involved in collecting information about the LGBTI community and making it accessible. LGBTI stands for lesbian, gay, bisexual, transgender, intersexe person.

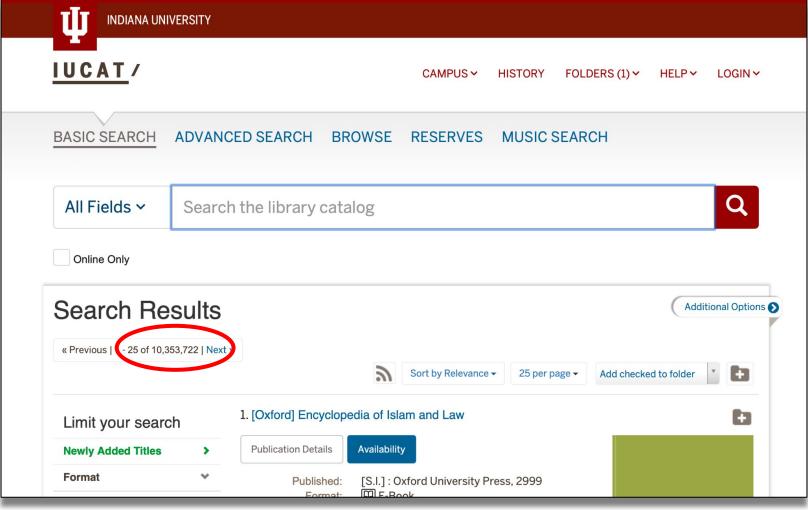
# HOMOSAURUS

ABOUT -

CONTACT

AN INTERNATIONAL LGBTQ+ LINKED DATA VOCABULARY

https://homosaurus.org



https://iucat.iu.edu

homosaurus.org Home Vocabulary Search Releases About Contact

# Homosaurus Vocabulary Terms

#### **Graphical Views**

- Tree View
- Indented Bars View

#### **Current Term List**

- 5-alpha reductase deficiency
- Acault
- · Adoptive parenthood
- Adoptive parents
- · Adult Children of Alcoholics
- Ae/Aer/Aerself (Pronouns)
- · Age of consent
- Agender people
- Ageplay
- Agi
- AIDS activists
- AIDS awareness
- AIDS education
- AIDS information centres
- · AIDS memorial quilts
- AIDS memorials
- AIDS organisations
- AIDS periodicals
- AIDS phobia
- Akaya'ine
- Al-Anon
- Alcoholics
- Alcoholics Anonymous
- Alcoholism
- Ali

homosaurus.org Home Vocabulary Search Releases About Contact

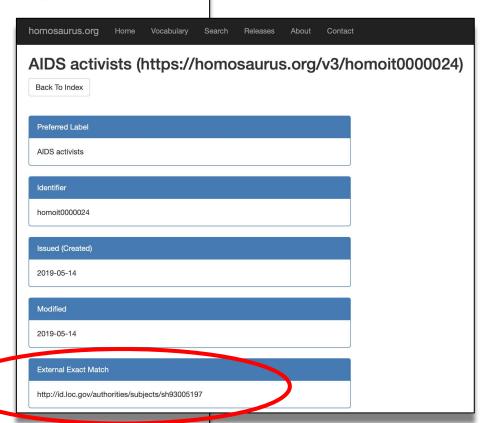
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homosaurus.org Home Vocabulary Search Releases About Contact

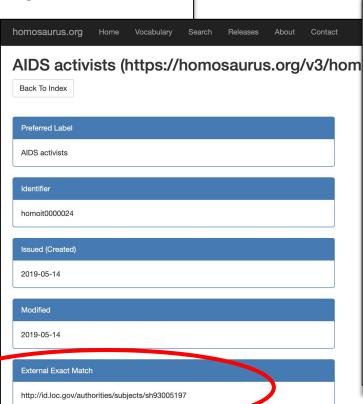
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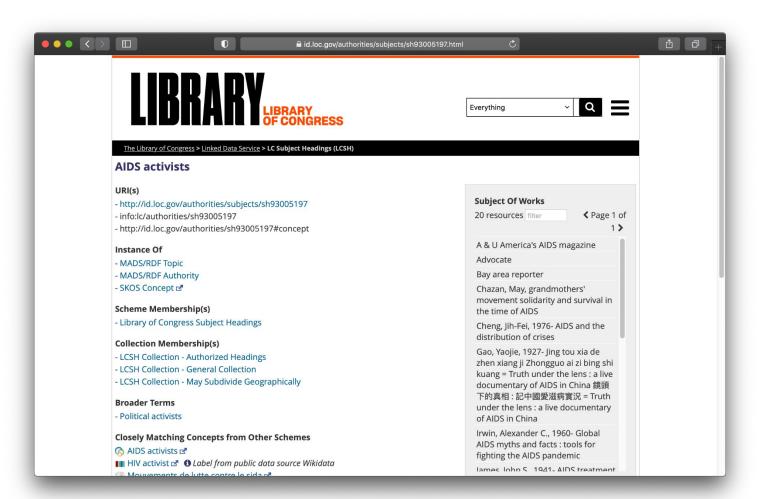
#### **Current Term List**

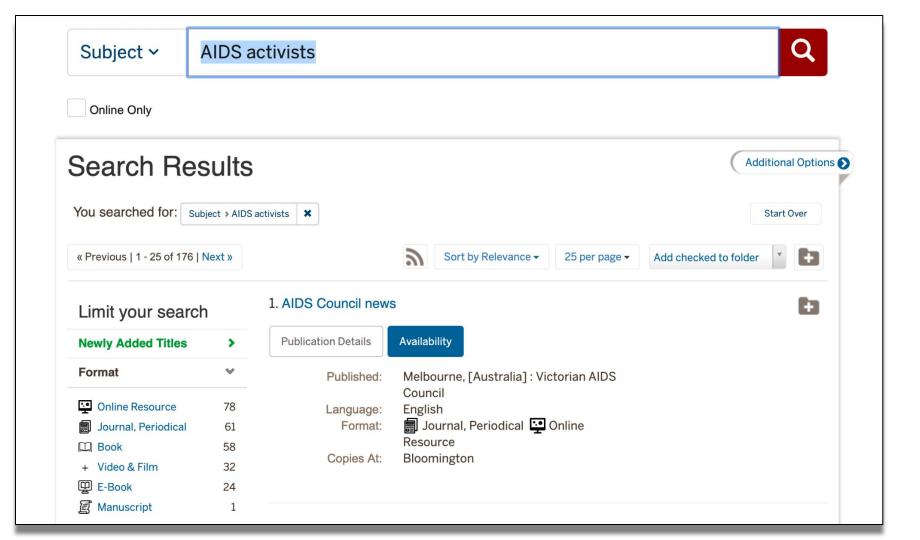
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- Ali



#### **JSON-LD**

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  "skos": "http://www.w3.org/2004/02/skos/core#",
  "xsd": "http://www.w3.org/2001/XMLSchema#"
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"dc:identifier": "homoit0000024",
"dc:issued": {
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  "@type": "xsd:date"
"dc:modified": {
  "@value": "2019-05-14",
  "@type": "xsd:date"
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"skos:broader": {
  "@id": "http://homosaurus.org/v3/homoit0000007"
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"skos:prefLabel": "AIDS activists",
"skos:related": [
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    "@id": "http://homosaurus.org/v3/homoit0000030"
    "@id": "http://homosaurus.org/v3/homoit0001026"
```





# **Inclusivity in Metadata**

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Select a term below from <u>Homosaurus.org</u> to see search options for finding results in <u>Indiana University's online library catalog (IUCAT)</u>. Use the Homosaurus terms to find expanded and more current result sets based on this controlled vocabulary designed for discovery of LGBTQ resources.

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Age of consent AIDS Activists

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Amazons Anal sex

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Behavioural therapy

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Birth certificates

Birth parents

Bisexual Jews

Bisexual men

Bisexual parents Bisexual women

Bisexual youth

Blindfolds

Blogs

Boys

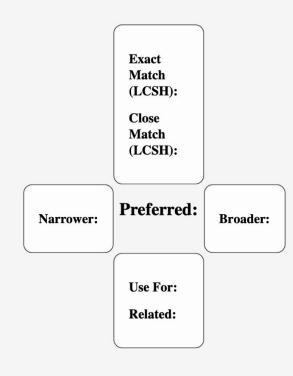
Breasts

**Brothels** 

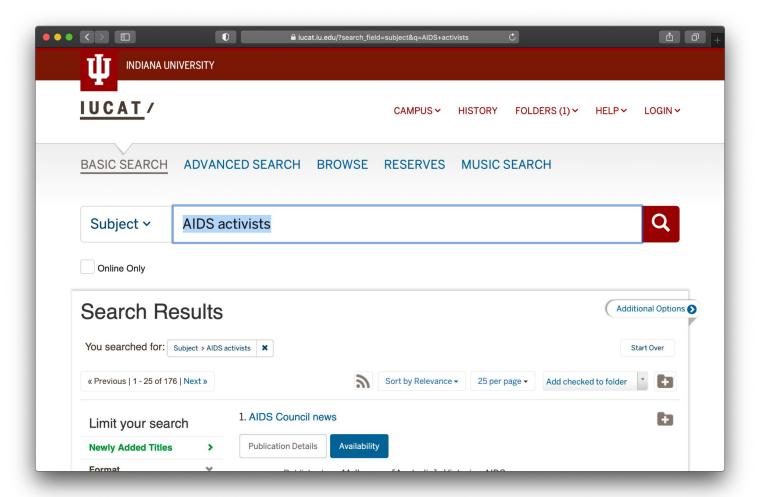
The <u>Homosaurus</u> is an international linked data vocabulary of LGBTQ terms that supports improved access to LGBTQ resources within cultural institutions. Designed to serve as a companion to broad subject term vocabularies, the Homosaurus is a robust and cutting-edge vocabulary of LGBTQ-specific terminology that enhances the discoverability of LGBTQ resources.

This interface design is based on the design of the search aid provided at IHLIA LGBTI Heritage.

Click here to reset.

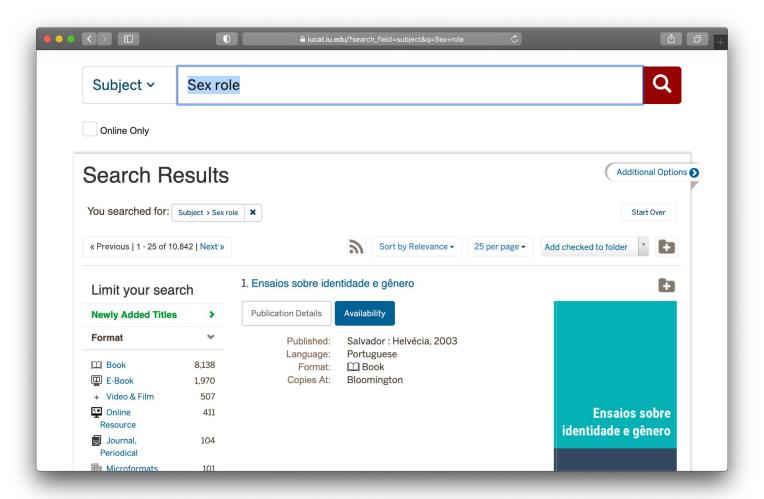


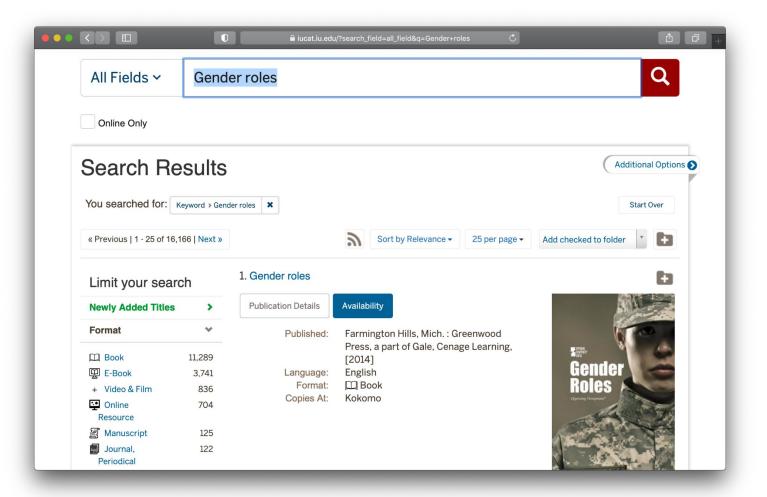
skos:exactMatch **Exact Match (LCSH):** AIDS activists **Close Match (LCSH): Preferred: Broader:** Narrower: **AIDS** activists http://homosaurus.org/v3/homoit0000007 **Use For: Related:** http://homosaurus.org/v3/homoit0000005 http://homosaurus.org/v3/homoit0001026 http://homosaurus.org/v3/homoit0000030



	Exact Match (LCSH):  Sex role  Close Match (LCSH):	
Narrower:	Preferred:	Broader:
http://homosaurus.org/v3/homoit0000655 http://homosaurus.org/v3/homoit0001479 http://homosaurus.org/v3/homoit0000105 http://homosaurus.org/v3/homoit0001313 http://homosaurus.org/v3/homoit0001374 http://homosaurus.org/v3/homoit0001508 http://homosaurus.org/v3/homoit0000231 http://homosaurus.org/v3/homoit0000440	Gender roles	http://homosaurus.org/v3/homoit0001241
	Use For: Related: http://homosaurus.org/v3/homoit0000047	

http://homosaurus.org/v3/homoit0000562





**Exact Match (LCSH):** 

Gender-noncomforming people

**Close Match (LCSH):** 

Gender nonconformity

skos:closeMatch

Narrower:

**Preferred:** 

Non-binary people

**Broader:** http://homosaurus.org/v3/homoit0001378

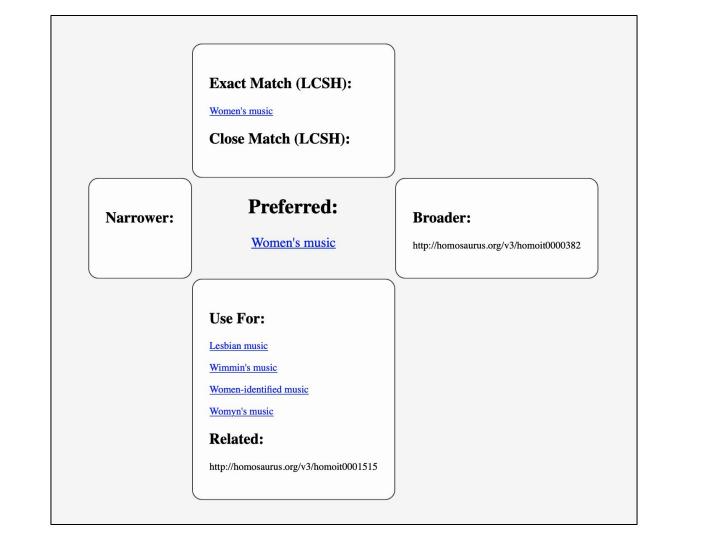
Use For: Nonbinary people

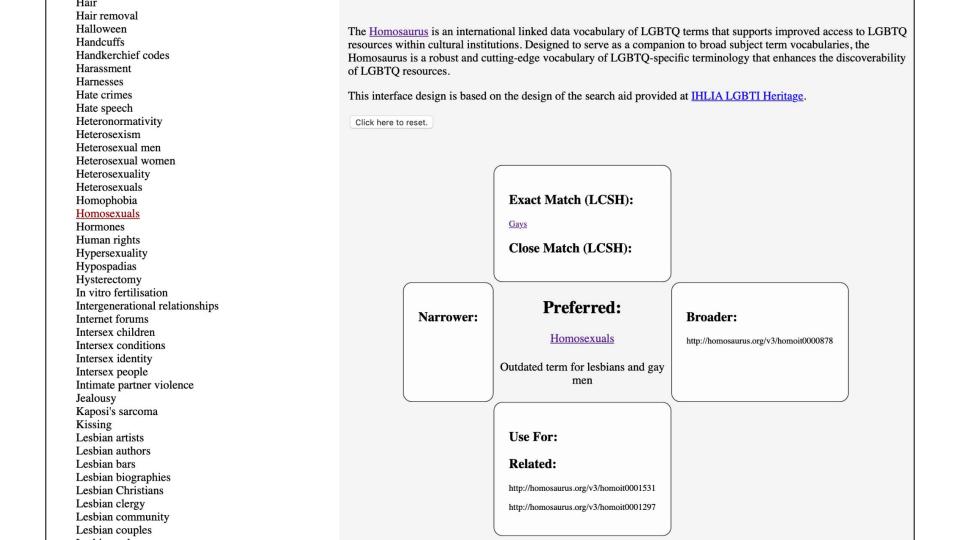
**Enbies** 

NB-ies

**Related:** 

http://homosaurus.org/v3/homoit0000021





Lesbian Jews Lesbian libraries Lesbian Muslims The Homosaurus is an international linked data vocabulary of LGBTQ terms that supports improved access to LGBTQ Lesbian parents resources within cultural institutions. Designed to serve as a companion to broad subject term vocabularies, the Lesbian rights Homosaurus is a robust and cutting-edge vocabulary of LGBTQ-specific terminology that enhances the discoverability Lesbian separatism of LGBTQ resources. Lesbian studies Lesbian youth This interface design is based on the design of the search aid provided at IHLIA LGBTI Heritage. Lesbianism Lesbians Click here to reset. Lesbophobia LGBTO+ employment LGBTO+ mistresses LGBTQ+ movement LGBTQ+ museums **Exact Match (LCSH):** LGBTQ+ parents LGBTQ+ poetry Male impersonators LGBTQ+ porn films LGBTQ+ press **Close Match (LCSH): LGBTQ+ Protestants** LGBTQ+ slang Libido Lingerie Preferred: Love triangles **Broader:** Narrower: Lubricants Masochism Male impersonators http://homosaurus.org/v3/homoit0001363 Male impersonators Male prostitutes Historical term describing a Male prostitution performer, often a female-identified Males person, who enacts a male persona Marital status for the purpose of entertainment, Marriage typically for straight audiences; use Marriage law only in historical contexts Marriage licenses Married people Masculinity Massage Use For: Mastectomy Masturbation Related: **MDMA** Medical care httm://hamasaumia.am/s/2/hama:t00000272

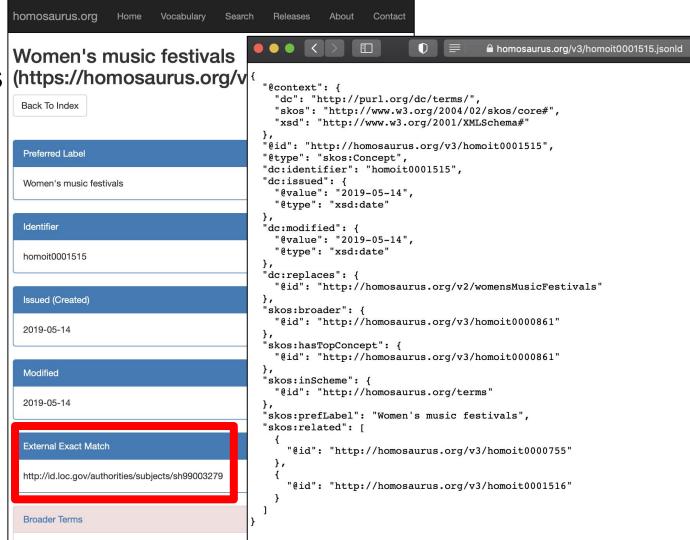
Kaposi's sarcoma Kissing The Homosaurus is an international linked data vocabulary of LGBTO terms that supports improved access to LGBTO Lesbian artists resources within cultural institutions. Designed to serve as a companion to broad subject term vocabularies, the Lesbian authors Homosaurus is a robust and cutting-edge vocabulary of LGBTQ-specific terminology that enhances the discoverability Lesbian bars of LGBTO resources. Lesbian biographies Lesbian Christians This interface design is based on the design of the search aid provided at IHLIA LGBTI Heritage. Lesbian clergy Lesbian community Click here to reset. Lesbian couples Lesbian culture Lesbian erotic literature Lesbian feminism Lesbian Jews Lesbian libraries **Exact Match (LCSH):** Lesbian Muslims Gay liberation movement Lesbian parents Lesbian rights **Close Match (LCSH):** Lesbian separatism Lesbian studies Lesbian youth Lesbianism Lesbians **Preferred:** Narrower: **Broader:** Lesbophobia LGBTQ+ employment LGBTQ+ movement http://homosaurus.org/v3/homoit0001187 http://homosaurus.org/v3/homoit0001322 LGBTQ+ mistresses LGBTQ+ movement http://homosaurus.org/v3/homoit0000162 LGBTQ+ museums http://homosaurus.org/v3/homoit0000510 LGBTQ+ parents LGBTQ+ poetry http://homosaurus.org/v3/homoit0001423 LGBTQ+ porn films http://homosaurus.org/v3/homoit0000753 LGBTQ+ press **LGBTO+ Protestants** LGBTQ+ slang Libido Lingerie Use For: Love triangles Lubricants Related: Masochism Male impersonators http://homosaurus.org/v3/homoit0000523 Male prostitutes

# **Current Status**

Linked Data helps define but not implement

Nothing automated yet

This use case still developing



# **Evaluation**

Librarian view: Learning tool for researchers new to or outside community V



**Need:** Evaluate with researchers new to or outside community

**Need:** Evaluate with researchers familiar with or inside community



# Additional Work (Opportunities!)

- Other community vocabularies
  - Linked Data vocabularies?
  - o BC First Nations Subject Headings, Xwi7xwa Library, University of British Columbia
  - Classification Schemes and CVs vocabularies from various communities

## Automating

- Is API needed from Linked Data vocabulary?
- Possible to switch out vocabulary and/or discovery system (offer configuration)?

# **Questions? Comments!**

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<u>ilhardes@iu.edu</u>

https://github.com/jlhardes/metadataBias

Thank you to those who have contributed and helped along the way with this proof of concept information retrieval aid: **Justina Kaiser** at Miami University of Ohio, **Allison Nolan** at Tarleton State University, **Bri Watson** at University of British Columbia, and **K.J. Rawson** at Northeastern University and the Digital Transgender Archive