

Using  
**Linked Library Data**  
in  
**Working Research Notes**

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University of North Carolina at Chapel Hill

# Our goal

is to provide a “medium by which much valuable information may become a sort of **common property** among those who can appreciate and use it”

Thoms, William J. 1849.

“Notes and Queries.” *Notes and Queries* s1-I(1):1–3.

<http://nq.oxfordjournals.org/content/s1-I/1/1.full.pdf+html>

# Common property

**zotero**

bibliographic data

Open Annotation  
Collaboration



annotations



Journal of  
Digital Humanities

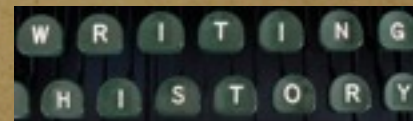
finished products



Transcribe  
Bentham

A Participatory Initiative

crowdsourcing



in the  
Digital Age

collaborative authoring

# NOTES AND QUERIES:

AG 305  
N 844  
v. 1-2

A MEDIUM OF INTER-COMMUNICATION  
FOR

LITERARY MEN, ARTISTS, ANTIQUARIES, GENEALOGISTS, ETC.

---

"When found, make a note of it." — CAPTAIN CUTTLE.

Focusing on **notes**

# Documentary editing

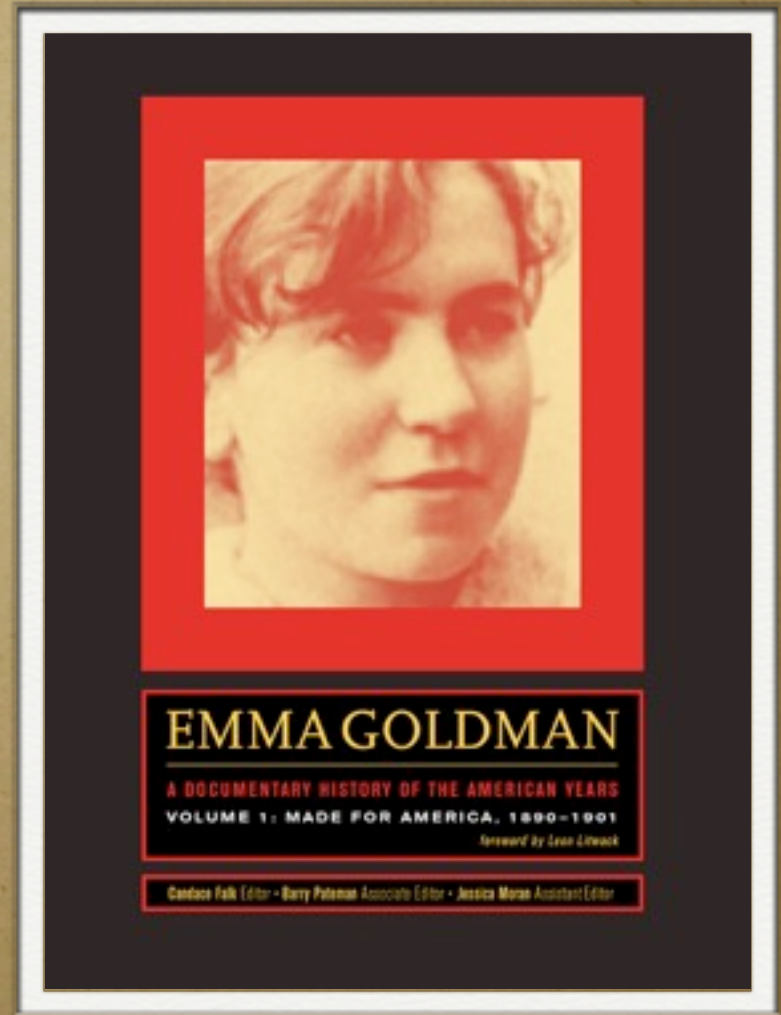
- Editors prepare collections of documents: letters, articles, diaries, essays, etc.
- Printed volumes provide **context** for better understanding subjects' experiences and general milieu through footnotes, images, chronologies, articles

# Documentary editing: workflow

1. Gather documents
2. Contextualize select items
3. Publish final product
4. Repeat as funding allows

Case study:

Emma  
Goldman  
Papers



**To WALTER CHANNING**

New York, 18 October 1902

DEAR SIR

I am in receipt of your note of the 18th inst. and in reply would like to say this, I do not know whether Czolgogz<sup>1</sup> was an Anarchist, nor have I the right to say that he was not. I have not known him sufficiently to be acquainted with his political Views. In fact no one has, including Mr Isaak and Mr Shilling<sup>2</sup> and if they have expressed opinions either for or against his being an Anarchist they have done an injustice to the young man, who died such a brave death, as you and you, dear Sir will be guilty of the same offence if you attempt to prove that Czolgogz was not or was an Anarchist. No one can with certainty say, that the man was an Anarchist, since he was but little known, and since he has never proff made a public statement to that affect. Still less can one prove that he was not one; there is nothing in his act by which one can deny him the right of being an Anarchist. It is true, the Philosophy of Anarchy does not teach Invasion, but it does teach self defence, and Czolgogz's act was an act of self-defence and nothing else. You may question this, since Czolgogz was not personally attack by McKinley, quite true, but Czolgogz belonged to the Oppressed, to the Exploited and Disinherited Millions, who lead a life of darkness and despaire owing to those, of whom McKinley was one, therefore he was personally attacked by the ex President, or rather he was one of the Victims of the McKinley regime and those McKinley catered to. The act of Czolgogz may have been impractical or inopportune, I will not argue this point now, but I insist it had nothing unanarchistic about it, since, as I said before Anarchism claims the right of Defence against Invasion and Aggression of every shape and form and no one, who has his eyes open will and can deny that those in Power are the Invadors, and McKinley certainly was one of them. I send you with this, 2 Articles<sup>3</sup>

1. Leon Czolgosz, who assassinated President McKinley at the world's fair in Buffalo in September 1901, was judged sane before his trial by three psychiatrists for the prosecution and two psychiatrists for the defense. Later, Tufts University Medical School psychiatrist Walter Channing assessed Czolgosz as mentally unstable, based strictly on the assassin's personal history, in a October 1902 article published in the *American Journal of Insanity*.
2. Cleveland anarchist Emil Schilling had been Czolgosz's first contact in the anarchist movement in May 1901, lending him reading materials and answering his questions. According to Schilling they were estranged even before Czolgosz's arrival in Chicago. Abe Isaak, editor of *Free Society*, introduced Czolgosz to EG in Chicago; Isaak found Czolgosz's behavior suspicious.









Name	Size	Type	Date Modified
Agnes	30 items	folder	2011-11-07 10:11:13
Athalia	6 items	folder	2010-09-27 13:50:28
Billy Sunday Bio.wpd	19.2 kB	WordPerfect document	2003-02-13 10:00:36
grosser2.wpd	34.8 kB	WordPerfect document	2003-04-24 12:07:34
Grosser.wpd	21.7 kB	WordPerfect document	2003-04-01 16:47:58
Table of Political Prisoners.wpd	135.0 kB	WordPerfect document	2006-08-02 13:28:48
The Dominant Idea by De Cleyre	59.8 kB	WordPerfect document	2004-01-08 10:59:00
Women Political Prisoners	4.3 kB	WordPerfect document	2003-07-31 11:28:40
Ben	6 items	folder	2010-09-27 13:50:27
Buford Deportee Bios.doc	49.2 kB	Microsoft Word Document	2008-05-01 20:29:14
Buford info request.doc	22.0 kB	Microsoft Word Document	2003-04-23 13:24:52
Buford leads.doc	22.5 kB	Microsoft Word Document	2003-04-15 13:40:16
Passengers on the Buford.doc	82.9 kB	Microsoft Word Document	2003-11-06 09:44:16
provincetownplayersChron.wpd	13.8 kB	WordPerfect document	2003-12-11 14:53:58
-WRD0000.tmp	33.3 kB	Microsoft Word Document	2003-03-12 13:32:34
Brittany	3 items	folder	2011-10-14 15:33:20
Carol	13 items	folder	2011-10-14 15:43:55
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castleton notes.wpd	22.3 kB	WordPerfect document	2004-04-13 11:48:54
Citizenship.wpd	11.5 kB	WordPerfect document	2003-04-15 10:42:42
Cora Bennett Stephenson.doc	20.0 kB	Microsoft Word Document	2004-10-04 11:32:48
Earle IMDB.wpd	54.7 kB	WordPerfect document	2004-03-29 15:00:50
Ferdinand P Earle Notes.wpd	16.6 kB	WordPerfect document	2004-04-01 13:02:42
joehill notes.wpd	2.4 kB	WordPerfect document	2004-04-22 12:11:28
Seagull Notes.wpd	5.7 kB	WordPerfect document	2004-04-05 13:48:12
The Blast.doc	22.0 kB	Microsoft Word Document	2003-03-05 15:14:12
What I believe versus Anarchism.wpd	4.3 kB	WordPerfect document	2003-02-05 14:14:20
What I believe versus other sources.wpd	3.3 kB	WordPerfect document	2003-02-12 13:52:40
WIBVSOTH.WPD	4.9 kB	WordPerfect document	2003-02-12 15:51:20
christie	4 items	folder	2010-09-27 13:50:26
Christina	3 items	folder	2010-09-27 13:50:26

# Problems

- Published volumes & necessary work are expensive
- Lack of space for all footnotes
- Much of research done is either glossed over in footnotes or not included at all
  - Fact checking
  - Falsification or dead ends
  - Tangential biographical details
- Preservation & legacy

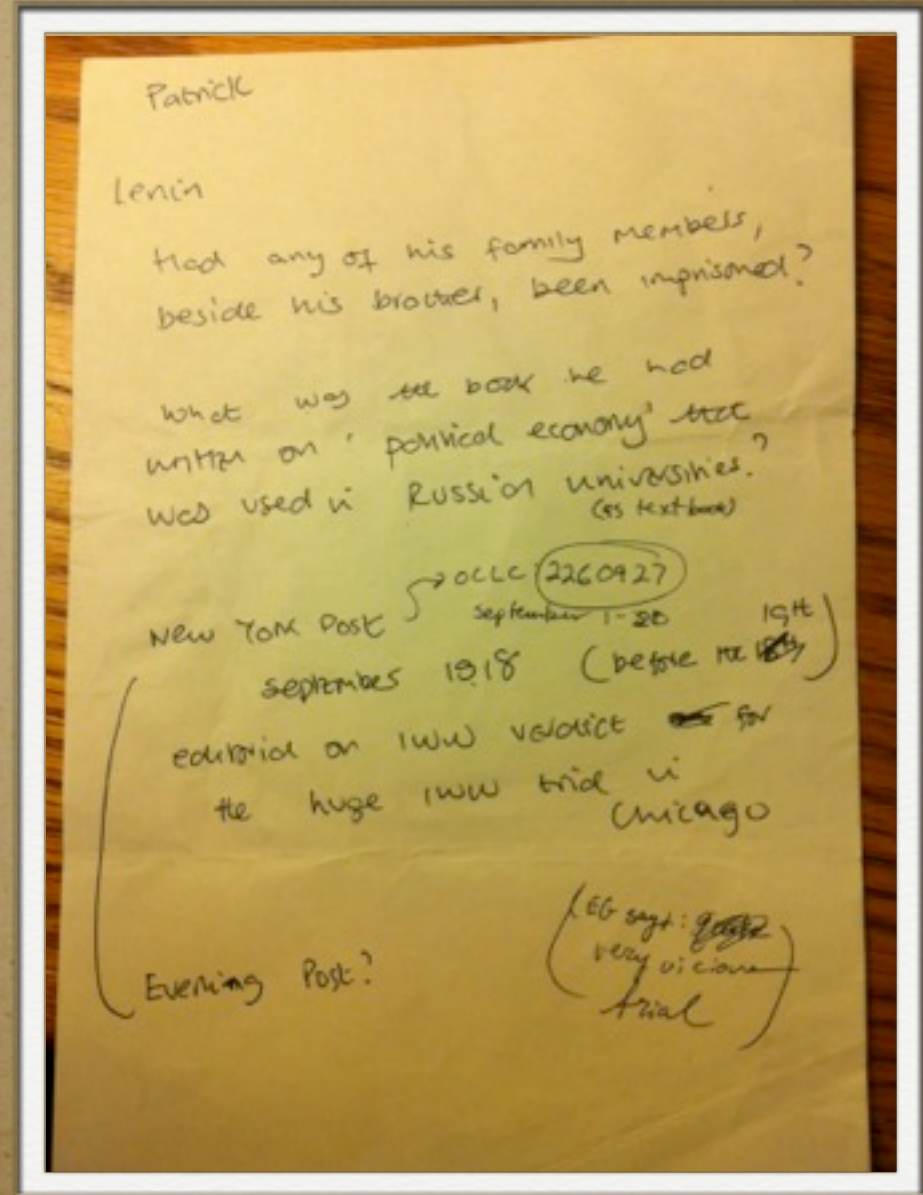
Patrick—

Lenin:

Had any of his family members beside his brother, been imprisoned?

What was the book he had written on 'political economy' that was used in Russian Universities?

New York (Evening?) Post, September 1918 editorial on IWW verdict for the huge IWW trial in Chicago.



Sources consulted,  
notes taken based on  
findings

Notes stored in a  
Word documents?  
Yellow notebook?  
Email?

Negative conclusion  
reached to question,  
but no one will ever  
know

Lenin, Vladimir Ilich [V.I. Ulyanov] (1870-1924) Russian revolutionary leader and founder of the Bolshevik party, a faction of the Russian Social Democratic Labor Party formed in 1903. Lenin grew up east of Moscow in the city of Simbirsk in a relatively wealthy family. When he was a teenager, his brother was executed for his role in plotting to kill Tsar Alexander III. While studying to become a lawyer, Lenin began his involvement in radical and Marxist circles in the late 1880s and 1890s. By the last years of the nineteenth century, he was a prolific writer and published many newspapers and articles encouraging revolution in Russia. To avoid being punished for his activities by the Tsarist police, Lenin spent much of the decades preceding the 1917 Russian revolution in exile in London, Paris, Geneva, Zurich, and other European cities, working with other émigrés to encourage revolution in Russia. After the overthrow of the Tsar in February 1917, Lenin planned his trip back to Russia, arriving in Petrograd in April. His return was controversial because his train from Switzerland was allowed to pass through Germany, one of Russia's enemies in World War I. This fact led many to believe that Lenin was

## Add note

### Title

Which members of Lenin's family were imprisoned?

### Description —

**B** *I* **P** H1 H2 H3   

Lenin's brother Aleksandr was famously jailed for attempting to assassinate Tsar Alexander III, but did any of his other family members ever face similar trouble?

### Status —

Open 

### Related topics —

Add topic (type to search)

### Assigned users —

- Patrick Golden
- Barry Pateman
- Annie Powers

Save note



## Add note

### Title

Which members of Lenin's family were imprisoned?

### Description —

**B***I***P**

H1

H2

H3

☰

☰

🔗

Lenin's brother Aleksandr was famously jailed for attempting to assassinate Tsar Alexander III, but did any of his other family members ever face similar trouble?

### Status —

Open



Open

Closed

Open

Hibernating

### Related topics —

Add topic (type to search)



Korolenko, Vladimir Galaktionovich, 1853-1921

Lenin, Vladimir Ilich (1870-1924)

Vlad|

### Assigned users —

- Patrick Golden
- Barry Pateman
- Annie Powers

Save note

## Which members of Lenin's family were imprisoned?

Lenin's brother Aleksandr was famously jailed for attempting to assassinate Tsar Alexander III, but did any of his other family members ever face similar trouble?

**Add section:**

Document citation

Save changes

## Which members of Lenin's family were imprisoned?

Lenin's brother Aleksandr was famously jailed for attempting to assassinate Tsar Alexander III, but did any of his other family members ever face similar trouble?

Add section:

Document citation

Save changes

 Type to search for a document, or add a new one by clicking the icon to the right. 

**B**

*I*

**P**

H1

H2

H3

☰

☰

↶

OK

## Add document



**B**

*I*

Generate citation



Zotero data:

Item Type

- Forum Post
- Map
- Video Recording
- Letter**
- Manuscript
- Radio Broadcast
- Blog Post
- Artwork
- Hearing
- Newspaper Article
- Thesis
- Dictionary Entry
- Report
- Podcast
- Audio Recording
- Instant Message
- Conference Paper
- Case
- Statute

Cancel

Save

## Add document



**B**

*I*

Generate citation

Vladkmir Lenin to Alexander Ulyanov, December 2, 1881, reel 3, frame 78, Vladimir Lenin Papers.

Author



Lenin



Vladkmir



Recipient



Ulyanov



Alexander



Abstract



Type



Date

December 2, 1881



Language



URL



Accessed



Archive

Vladimir Lenin Papers



Loc. in Archive

reel 3, frame 78



Cancel

Save







## Which members of Lenin's family were imprisoned?

Lenin's brother Aleksandr was famously jailed for attempting to assassinate Tsar Alexander III, but did any of his other family members ever face similar trouble?

Add section: Document citation

Save changes

 Vladimir Lenin to Alexander Ulyanov, December 2, 1881, reel 3, frame 78, Vladimir Lenin Papers.

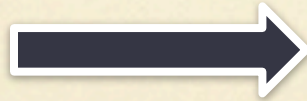
**B** *I* **P** H1 H2 H3   

Indicates that the other members of the Ulyanov family were not typically in any legal trouble, although there is mention of a shifty step-cousin.

OK

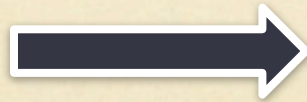
# What has changed for researchers?

Free text



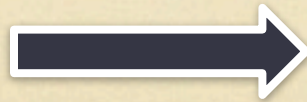
Structured blocks

Implicit people,  
places, events



Explicit linkable  
entities

Filing cabinets



Open access

# Benefits

- Connections linking topics are freed from the minds of editors & researchers and **indexed for anyone to see**
- **Standardized records of work** can easily be revisited from within a project or from outside
- **New way of seeing the outer edges** of humanities research
- **Evidence of intense, often messy, scholarship** behind concise, clean footnotes



**note**

**note**

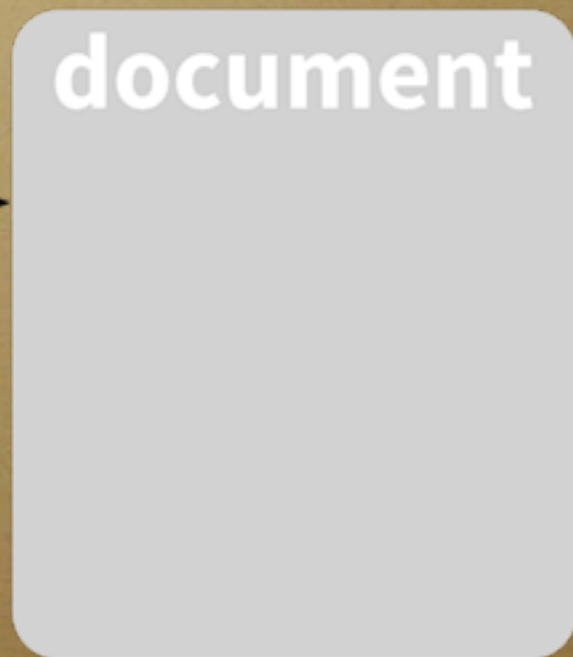
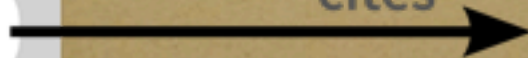
**section**

**section**

**section**

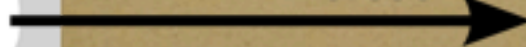



cites





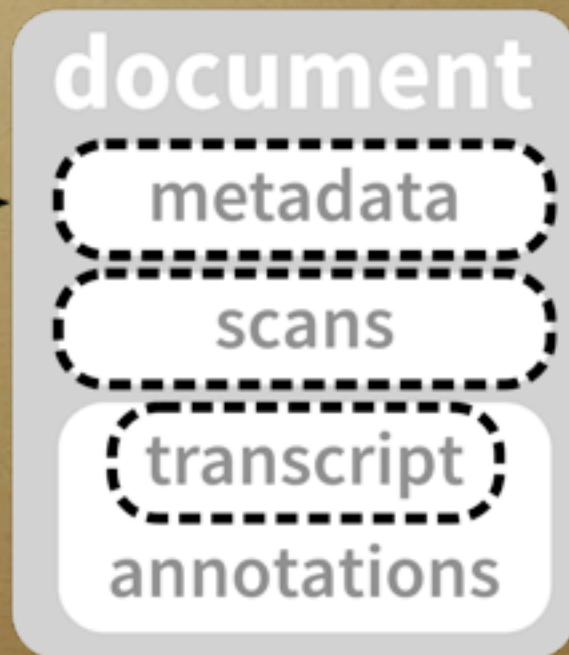
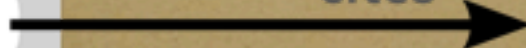
cites




 reused information



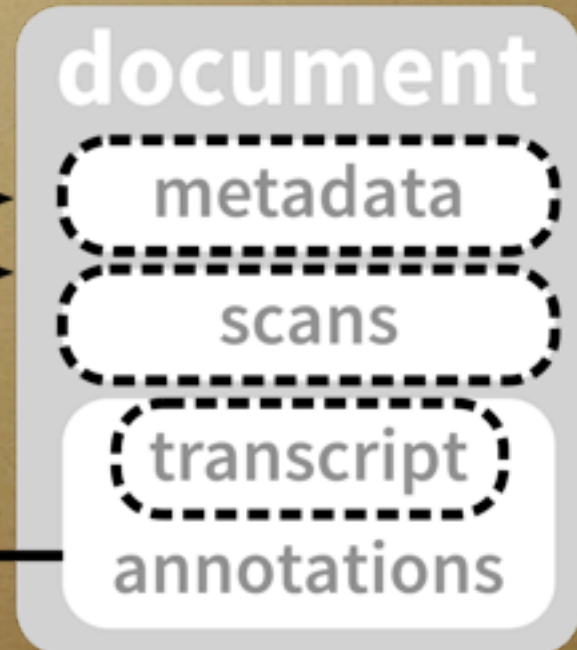
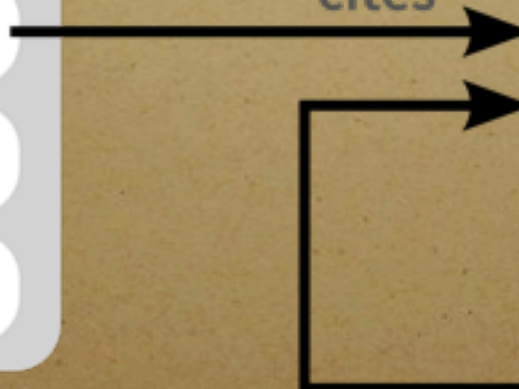
cites




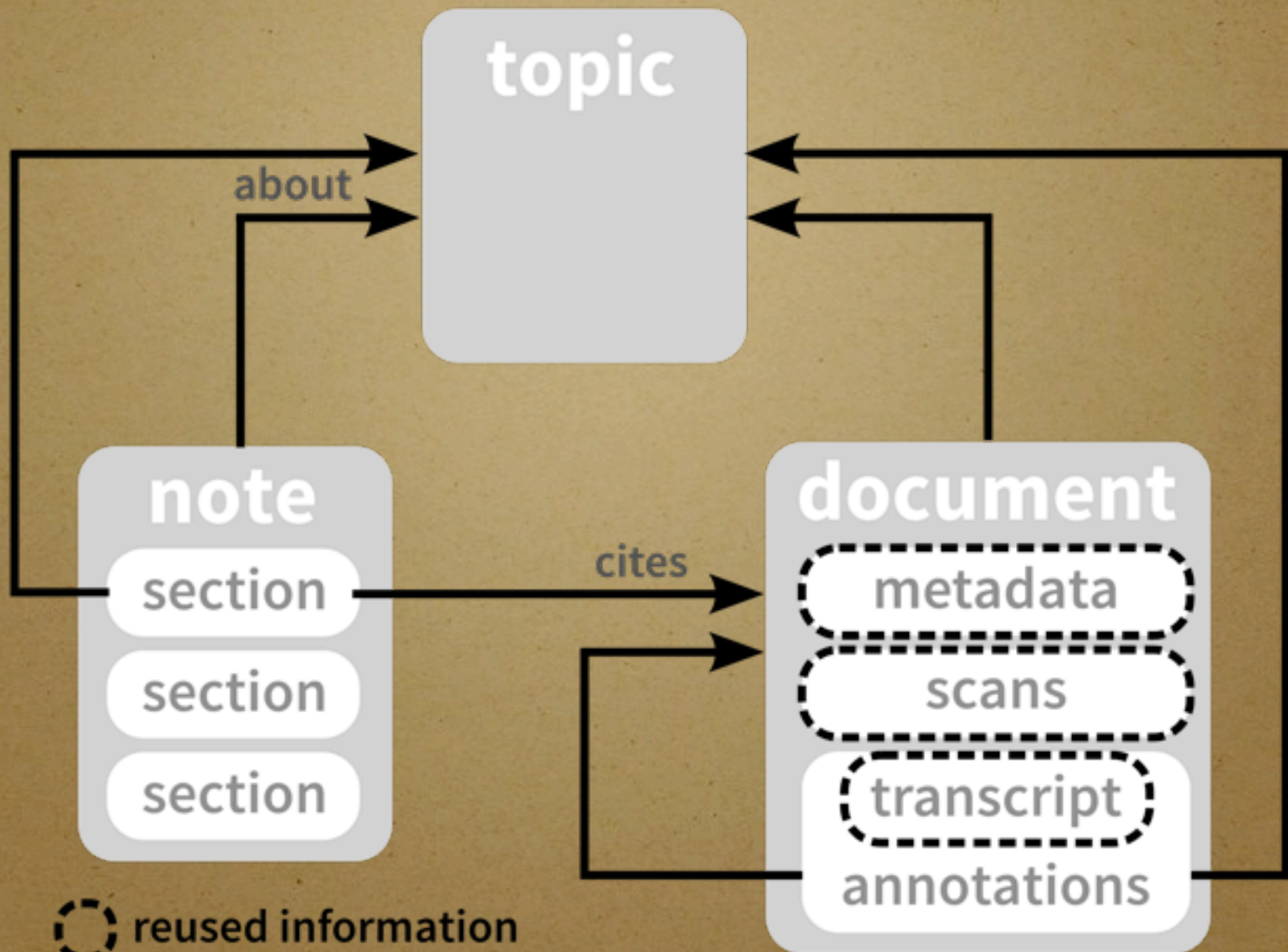
 reused information

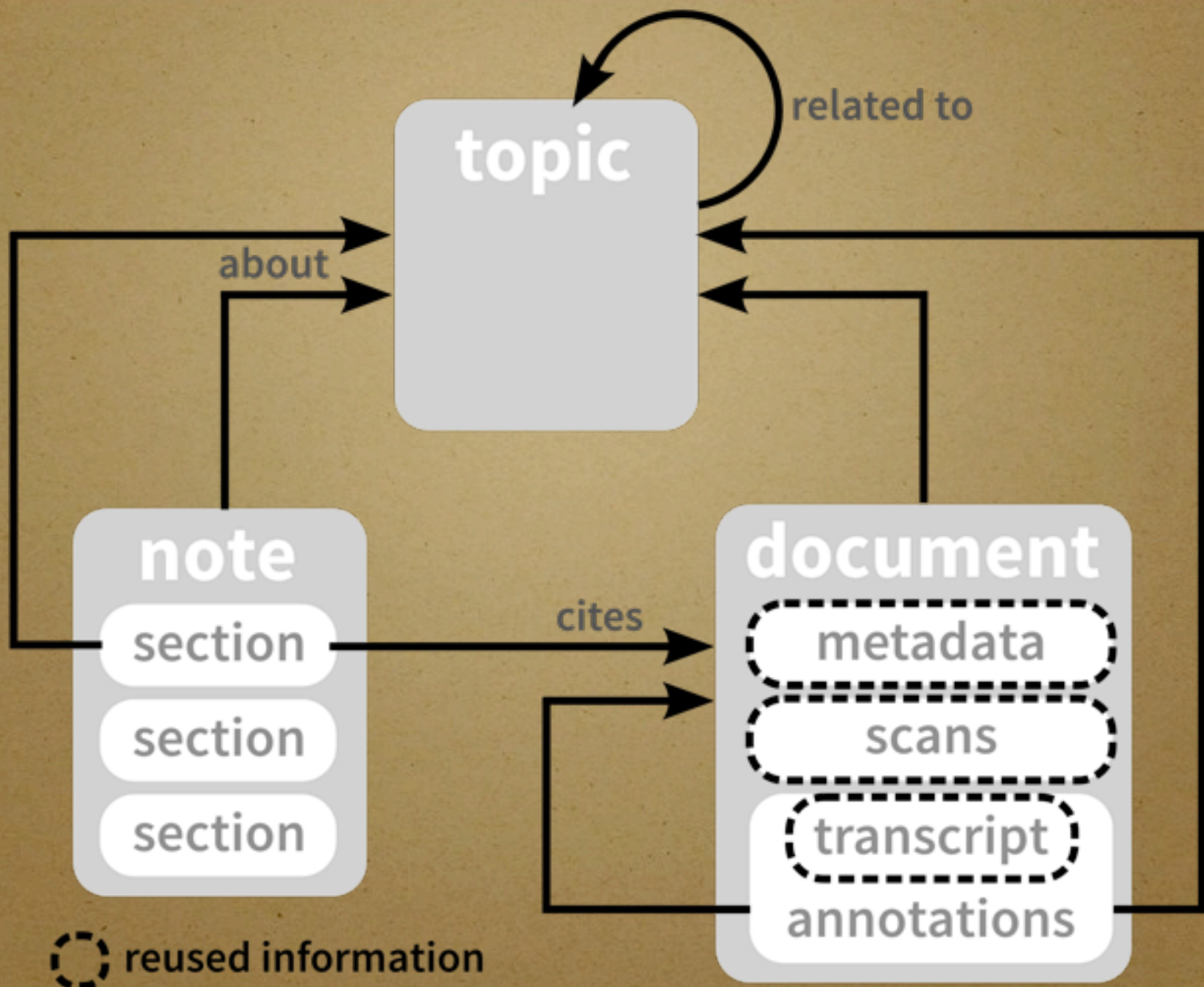


cites

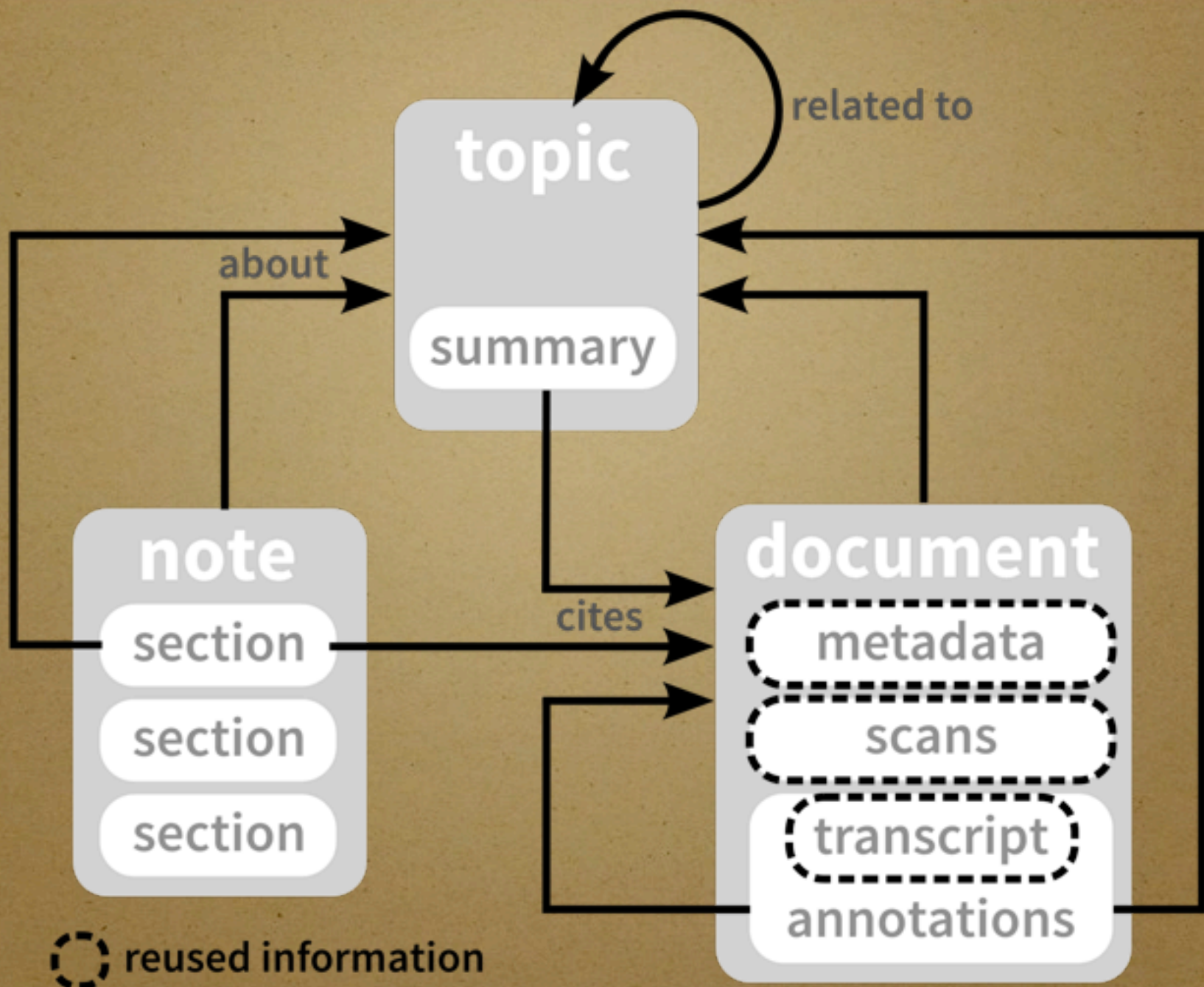


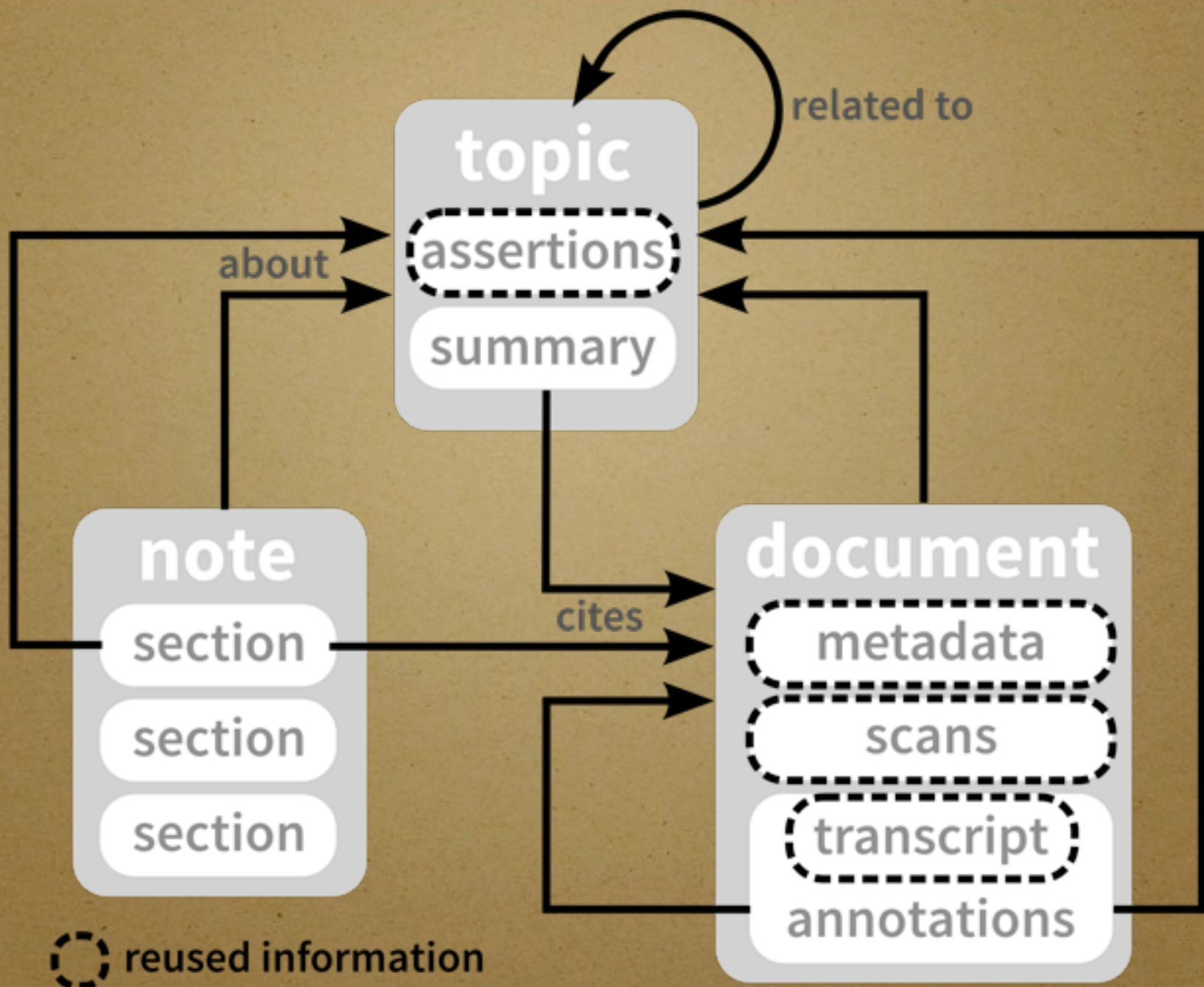
 reused information











# Documents

Zotero for  
document metadata

High quality,  
zoomable scans

Transcripts in  
HTML with  
interface to  
annotate passages  
of text

**Add document**

**B** **I**

Emma Goldman to Alexander Berkman, December 12, 1915, reel 4, Emma Goldr

Item type **Letter**

Title

Author

Recipient

Abstract

Type

Date

Language

Short Title

"HELEN KELLER FINDS DEFENSE PLANS BAD" The New York Times, December 26

# Topics

Primary method  
of indexing items

Classified by type

Interface for  
clustering and  
merging

### Change topic

Name

Type

Related topics

Lenin, Vladimir Ilich (1870-1924)

Article

**B I P H1 H2 H3**

Russian author, lawyer, crime reporter, editor, and photographer. All articles about the purgative power of World War I. By summer of the Destruction. "Although Andreyev's articles addressed international v the war was to eradicate an evil, he rejected the Brest-Litovsk pea pamphlet in early 1919 entitled S.O.S. (ed. Russian Libera! Comm world to organize themselves and break Bolshevik power. In S.O.S. emphasizes his belief in the "nobility" of the people. Andreyev inter suddenly of a brain hemorrhage. His works include: The Seven Who

**Citations**

Carr, E. H. A History of Soviet Russia. London: Macmillan, 196

# Notes

- Most difficult part of the project
- Notes are messy, and purposefully so
- How to model something so chaotic & idiosyncratic?
- Goals: Easy to use; flexible but consistent

# Notes

Description

Status: Open, closed, hibernating

Assigned users

Sections

Citation with optional notes

Stored as HTML

Revision history



## Sanger and the Third ICPP

Unlike the coverage in secondary sources, planning on the Third ICPP started far earlier than De See Watumull and the Third ICPP and British and Third ICPP for more. Focus in these notes is

Add section:

 Sanger, Margaret, letter to Katharine Dexter McCormick, Jan. 8, 1951 [MSM S33:712]

 Sanger, Margaret letter to Pearl S. Buck, Jan. 9, 1951 [MSM S33:717]

**B** *I* **P** **H1** **H2** **H3**   

Notes that if they had been able to keep the East-West going, it would have made a great contribution and blundering, not only in Washington but wherever our leaders are, and of course most frightful civic affairs given to military leaders. We seem to learn nothing from history and one would think make our military leaders hesitant to build up a powerful military organization. Germany did so on their knees."

"There is a possibility of our having a population Conference in the Orient somewhere in 1952 from India recently tells me many of the 65 clinics that I organized in 1936 are still going. It will be the health groups to that information as well as supplies will not have to be limited to people v ahead and I am so happy to feel well again."

 Sanger, Margaret letter to Eleanor C. Jenkins, Jan. 9, 1951 [MSM S33:719]

 Sanger, Margaret letter to Eleanor C. Jenkins, Jan. 9, 1951 [MSM S33:719]

# Design principles

- Minimal amount of “friction” for researchers
- Flexibility for different work habits
- Consistency in data models
- Existing technology wherever possible
- Adherence to web standards

# Open source

- <https://github.com/editorsnotes>
- HTTP API built on Django web framework
- PostgreSQL database
- Haystack for full-text searching
- Zotero for document description
- Google Refine for duplicate detection
- Mozilla Persona for ID management



# Roadmap

- Better sorting, filtering and aggregating of notes
- Improved naming control and discoverability
- Temporal, geospatial, and relational visualization



Goldman, Emma, 1869-1940

Goldman, Emma

1869-1940 ,nax ,s070a

VIAF ID: 36377930 (Personal)

Permalink: <http://viaf.org/viaf/36377930>

Preferred Forms

- 100 1 0 2a Goldman, Emma
- 100 1 \_ 2a Goldman, Emma, bd. 1869-1940
- 100 1 \_ 2a Goldman, Emma, bd. 1869-1940
- 100 1 \_ 2a Goldman, Emma, bd. 1869-1940
- 100 1 \_ 2a Goldman, Emma
- 100 1 \_ 2a Goldman, Emma, bd. 1869-1940
- 100 1 \_ 2a Goldman, Emma, bd. 1869-1940
- 100 1 \_ 2a Goldman, Emma, bd. 1869-1940



## About: Emma Goldman



An Entity of Type : [agent](#), from Named Graph : <http://dbpedia.org>, within Data Space : [dbpedia.org](http://dbpedia.org)

Emma Goldman (June 27 1869 – May 14, 1940) was an anarchist known for her political activism, writing and speeches. She played a pivotal role in the development of anarchist political philosophy in North America and Europe in the first half of the twentieth century. Born in Kovno in the Russian Empire, Goldman emigrated to the US in 1895 and lived in New York City, where she joined the burgeoning anarchist movement.

Property	Value
<a href="#">dbpedia-owl:abstract</a>	<ul style="list-style-type: none"> <li>Emma Goldman fou una anarquieta coneguda p desenvolupament de la filosofia anarquieta de les feministes en el pensament anarquieta. D'origen part del creixent moviment anarquieta després i renom i escriptora de filosofia anarquieta i anti-socials i lluita sindical. Ella i el també escriptor</li> </ul>

Home About Search

## Emma, 1869-1940

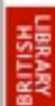
Henry G. (Henry Garfield), 1881-1970 | Content, Harold A. (1887-1944) | Havel, Hip

Article Related Notes & Queries (2) Related Documents (226)

### Basic Biographical Information

### Sources

- Falk, Candace. "Love, Anarchy, and Emma Goldman." (New York: Holt, Rinehart and Winston, 1984).
- [222] In 1914, Goldman publicized and sold copies of *The Woman Rebel* during her lecture tours.
- [243] In 1916, Goldman was arrested in NYC for lecturing about birth control.
- [245] Given the choice between a fine of \$100 or fifteen days in jail, Goldman opted for the jail time.



## British National Bibliography

At the time, this dataset is not guaranteed to be stable; its contents may change at any time without warning.

### Goldman, Emma, 1869-1940

<http://brbl-diaa.bdl.lc.uk/2/person/GoldmanEmma1869-1940>

event	1869
	1940
family name	Goldman
given name	Emma
has created	A woman without a country / Emma Goldman
	Living my life / Emma Goldman



## Personensuche

Informationen zu 480.475 Personen mit Wikipedia-Artikel

Suche  
Vorname  
Runde Geburtstage  
Runde Todestage  
Über diese Seite

### Emma Goldman

US-amerikanische Anarchistin und Friedensaktivistin

**Geboren**  
27. Juni 1869, Kovno (Kaunas)

**Gestorben**  
14. Mai 1940, Toronto

**Alter**  
70j

**Name**  
Goldman, Emma

**Staat**  
 USA

**<sameAs>**  
Interlinking the Web of Data

The Web of Data has many equivalent URIs. This service helps you to find co-references between different data sets. Enter a known URI, or use Sindice to search first.

Freebase  
<http://rdf.freebase.com/>

DBpedia  
<http://dbpedia.org/>

Virtual International Authority File  
<http://viaf.org/>

Deutsche Nationalbibliothek  
<http://d-nb.info/>

New York Times  
<http://data.nytimes.com/>

topic names

candidate URIs

statements (triples)

# Linked Data Harvester

# Goldman, Emma, 1869-1940

Related topics: Havel, Hippolyte (1869-1950)

Article

Discussion

Related Notes & Queries (1)

Related Documents

Facts

From [VIAF](#) about [Goldman, Emma](#):

**name** [Goldman, Emma](#) ✓ ✕ [Goldman, Emma, 1869-1940](#) ✓ ✕ [Goldmann, Emma, 1869-1940](#) ✓ ✕ [Gol'dman, Emma 1869-1940](#) ✓ ✕ [Goldmann, E. 1869-1940](#) ✓ ✕ [Górudoman, Ema, 1869-1940](#) ✓ ✕ [אמנוע, גאמל'אג](#) ✓ ✕ [המא, גמל'אג](#) ✓ ✕

**date of death** [1940](#) ✓ ✕

**type** [Person](#) ✓ ✕ [Person](#) ✓ ✕

**date of birth** [1869](#) ✓ ✕

From [Freebase](#) about [Emma goldman](#):

**date of death** [1940-05-14](#) ✓ ✕

**series written (or contributed to)** [Emma Goldman: A Documentary History of the American Years](#) ✓ ✕

**country of nationality** [United States of America](#) ✓ ✕

**ethnicity** [Ashkenazi Jews](#) ✓ ✕ [Jewish people](#) ✓ ✕

**cause of death** [Stroke](#) ✓ ✕

# Lessons learned

- Possible to automatically harvest relevant linked data from libraries and other institutions
- Editorial control over the harvested data needs to be better integrated into the note-taking process
- Did not adequately demonstrate the benefits of structured data
- Do not simply aggregate and edit linked data—need to usefully exploit it to researchers' benefit.

# In-process reconciliation

Editors create topics to label and index their notes; later reconciled to external identifiers in a separate batch process.

**Old**



Editors fluidly create, link to, and reconcile topics **within the note-taking process.**

**New**

# Motivating structured data use

enabled storing and editing of structured data, but provided **no incentive for editors** to do this

**Old**



storing and editing structured data  
**immediately enables** sorting and filtering and creating simple visualizations

**New**

# Women Already Voters: Test Cases during Reconstruction

Related topics: Anthony, Susan B. | Burnham, Carrie S. | Chicago, Ill. | Detroit, Mich. | Gardner, Nannette B. | Huntington, Sarah M. T. | Norwalk, Conn. | Philadelphia, Pa. | Rochester, N.Y. | Santa Cruz, Calif. | Spencer, Sara J. | St. Louis, Mo. | Van Valkenburg, Ellen R. | Waite Washington, D.C. | Webster, Sarah E. | Woman Suffrage

Article   Related Notes & Queries (8)   Related Documents (66)

## Filters —

+ Item Type

— Publication Title

+ Author

+ Archive

+ Representations

### Publication Title

- Revolution (11)
- Woman's Journal (6)
- Chicago Legal News (4)
- Chicago Daily Tribune (3)
- Norwalk Gazette (3)
- Philadelphia Inquirer (3)
- Detroit Tribune (2)
- Albany Law Journal (2)
- New York Times (2)
- Rochester Union & Gazette (1)
- [Philadelphia Press] (1)
- Woman's Journal (1)
- Central Law Journal (1)
- Detroit Advertiser and Tribune (1)
- Santa Cruz Sentinel (1)
- New Northwest (1)
- St. Louis Dispatch (1)

# Sorting & filtering

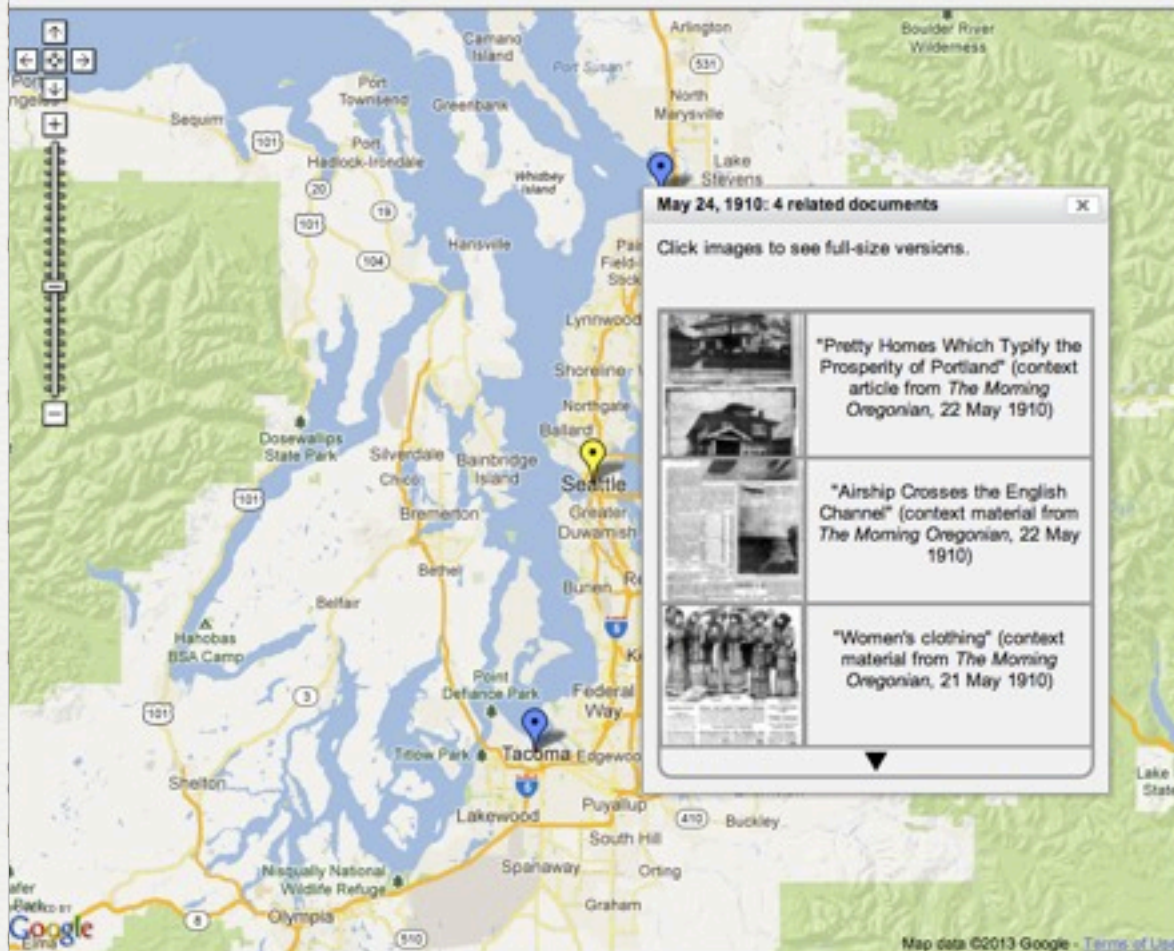


# Sorting & filtering

- Filter and sort notes not only using the dates of the cited documents (as they currently can), but also using:
  - locations and birth and death dates of the people referenced in the notes
  - locations and dates of existence of the organizations referenced
  - locations and dates of the events referenced

# Light and Shadows: Emma Goldman 1910-1916

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1910 1911 1912 1913 1914 1915 1916 1917

# Visualizing notes

- A note on Dhanvanthi Rama Rau & the Fourth International Conference on Planned Parenthood can become viewable as:
  - a **map** of specific locations in Stockholm and Bombay
  - a **timeline** of dates associated with the conference
  - a **network** of relationships among people and organizations.

# Expected benefits

- Working notes become repurposable
- Working notes become more discoverable
- Shift of focus from one-shot product to continuous data curation process

# Thank You

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Project information

<http://ecai.org/mellon2010/>

Project site

<http://editorsnotes.org/>

Source code

<https://github.com/editorsnotes>