Linked Data and Annotations

What we stand to gain

ALCTS webinar, March 2018
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The Team

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The Collaboration
The Project
| 500 | Dealer note: Cette lettre datée du "3-XI-80" glissée entre les pages : "Monsieur le Professeur, J'ai le plaisir de vous envoyer le troisième volume des Oeuvres de Daniel Lagache. Recevez, Monsieur, l'expression de mes sentiments les meilleurs Eva Rosenblum" |
The Goal

http://viaf.org/viaf/88958529

http://viaf.org/viaf/54207577

http://viaf.org/viaf/54153607

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The Reason

“What I will propose here will not be ... proceeding along the discursive lines of a linear order of reasons.”
Jacques Derrida, *Margins of Philosophy*
The Questions

- What do presentation volumes tell us about Derrida's connections with members of the Yale School?
- Derrida isn't known for work in religion, so who sent him all those books on Judaism?
- When did Derrida begin to be more influential and known to American scholars as compared to French scholars? What other nationalities are found among the dedicators?
- What languages are the dedications in?
- Can I find the relationships which are brought out within the dedications? What works are referenced? What other people are referenced?
The Process

- Selecting the presentation volumes for our dataset
- Choosing data models and creating sample encodings
- Digitizing the dedication pages
- Transcribing the annotations
  - Double-blind transcription followed by reconciliation
- Identifying entities
- Encoding the annotations
The Process

Hosted by ALCTS, the Association for Library Collections and Technical Services
The Workflow

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The Reality

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The Model

W3C Web Annotation Data Model
The Model

Features of the Web Annotation Model

- Body
- Target
- Motivation / purpose
- Text quote selector
The Model
The Code

```
<http://libserv6-dev.princeton.edu/ld4pul/dedication121#anno1>

a oa:Annotation ;
dcterms:creator <http://libserv6-dev.princeton.edu/ld4pul> ;
oa:hasBody [ oa:hasPurpose ex:inscribing ;
oa:hasSource <http://libserv6-dev.princeton.edu/ld4pul/dedication121#body1> ] ;
oa:hasTarget [ oa:hasScope <http://libserv6-dev.princeton.edu/ld4pul/2089173#Item> ;
oa:hasSource <http://libserv6-dev.princeton.edu/ld4pul/dedication121#pageX> ] ;
oa:motivatedBy oa:describing .
```
The Code

```xml
<http://libserv6-dev.princeton.edu/ld4pul/1296316#Work>
  a bf:Work;
  bf:hasInstance <http://libserv6-dev.princeton.edu/ld4pul/1296316#Instance>
  owl:sameAs <http://worldcat.org/entity/work/id/57070179> .

<http://libserv6-dev.princeton.edu/ld4pul/1296316#Instance>
  a bf:Instance;
  bf:hasItem <http://libserv6-dev.princeton.edu/ld4pul/1296316#Item>;
  bf:instanceOf <http://libserv6-dev.princeton.edu/ld4pul/1296316#Work>;

<http://libserv6-dev.princeton.edu/ld4pul/1296316#Item>
  a bf:Item;
  bf:itemOf <http://libserv6-dev.princeton.edu/ld4pul/1296316#Instance>.
```
a oa:Annotation ;
dcterms:creator <https://library.princeton.edu/ldp/cams/1d4p/dedication2#anno5> ;
oa:hasBody [ oa:hasPurpose oa:tagging ;
oa:hasSource <https://library.princeton.edu/ldp/cams/1d4p/dedication2#body1> ];
oa:hasTarget [ oa:hasSelector [ a
   oa:TextQuoteSelector ;
oa:prefix "gne à terre. " ;
oa:exact "Aragon" ;
oa:suffix "."
   ] ;
owl:sameAs <http://viaf.org/viaf/8178518> ;
oa:hasSource <https://library.princeton.edu/ldp/cams/1d4p/dedication2#body1> ];
oa:motivatedBy oa:identifying .
<https://library.princeton.edu/tsd/cams/ld4p/dedication2#anno5>

a  oa:Annotation ;
dctterms:creator  <https://library.princeton.edu/tsd/cams/ld4p>  ;
oa:hasBody  [  oa:hasPurpose  oa:tagging ;
oa:hasSource  <https://library.princeton.edu/tsd/cams/ld4p/dedication2#body1>
]

oa:hasTarget  [  oa:hasSelector  [  a
  oa:TextQuoteSelector ;
oa:prefix  "gne à terre. " ;
oa:exact  "Aragon" ;
oa:suffix  "."
]

owl:sameAs  <http://viaf.org/viaf/8178518>  ;
oa:hasSource  <https://library.princeton.edu/tsd/cams/ld4p/dedication2#body1>
]
oa:motivatedBy  oa:identifying .
The Gaps

Made-up classes and properties
ex:inscribing
ex:AuthorsPresentationInscription
ex:Page

Others?
ex:sourceOf (relating a bf:Item to a body)
ex:isDedicator
The Editor

https://www.youtube.com/watch?v=DpevKe26YuE&feature=youtu.be
The Process

1. Get bib records from Voyager
2. Get OCLC records from WorldCat
3. Get OCLC Work IDs for the MARC that is output from steps 1 & 2
4. Make XML file of reconciled dedications plus additional data
5. Convert MARC to BIBFRAME 2.0
6. Put BIBFRAME into triple store
The Process

Scripts used along the way

Peter Green:

- get OCLC records based on list of OCLC numbers
- get Voyager bib records based on list of bib ids
- get OCLC Work IDs for the MARC records from OCLC and Voyager
- get ead data into generic xml
- add reconciled dedications to this generic xml (the result then goes into BaseX which is behind the Annotation Editor)

Library of Congress:

- marc2bibframe2 - to convert the MARC records to BF2
The Interface

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The Results

Time to SPARQL!
The Result

Finding all the dedicators

```
select distinct ?viaf ?exact
where
{
{select ?viaf ?exact where {
 ?anno oa:hasTarget ?target .
 ?target oa:hasSelector ?selector ; owl:sameAs ?viaf .
 ?selector oa:exact ?exact . }}

{select ?viaf
where {?person dcterms:creator ?viaf}}
}
limit 25
```
<table>
<thead>
<tr>
<th>viaf</th>
<th>exact</th>
</tr>
</thead>
<tbody>
<tr>
<td>viaf:98176372</td>
<td>&quot;danièle&quot;</td>
</tr>
<tr>
<td>viaf:36915715</td>
<td>&quot;Haroldo&quot;</td>
</tr>
<tr>
<td>viaf:64011112</td>
<td>&quot;Jacqueline Risset&quot;</td>
</tr>
<tr>
<td>viaf:7393696</td>
<td>&quot;Maria Antonietta Macciochi&quot;</td>
</tr>
<tr>
<td>viaf:7393696</td>
<td>&quot;Maria Antonietta M.&quot;</td>
</tr>
<tr>
<td>viaf:108466921</td>
<td>&quot;Kostas Axelos&quot;</td>
</tr>
<tr>
<td>viaf:14844280</td>
<td>&quot;Geneviève&quot;</td>
</tr>
<tr>
<td>viaf:44301265</td>
<td>&quot;Roger&quot;</td>
</tr>
<tr>
<td>viaf:109488678</td>
<td>&quot;Michel Beaujour&quot;</td>
</tr>
<tr>
<td>viaf:19678260</td>
<td>&quot;André Green&quot;</td>
</tr>
<tr>
<td>viaf:79020186</td>
<td>&quot;Mathieu Bénézet&quot;</td>
</tr>
<tr>
<td>viaf:268001579</td>
<td>&quot;عبد الوهاب المؤدب&quot;</td>
</tr>
</tbody>
</table>
The Result ... and more

```
WHERE {
  SERVICE wikibase:label { bd:serviceParam wikibase:language "[AUTO_LANGUAGE],en". }
  ?VIAF_identifier wdt:P214 "94343599".
  OPTIONAL { ?VIAF_identifier wdt:P569 ?date_of_birth. }
  OPTIONAL { ?VIAF_identifier wdt:P19 ?place_birth. }
  OPTIONAL { ?VIAF_identifier wdt:P570 ?date_of_death. }
  OPTIONAL { ?VIAF_identifier wdt:P20 ?place_death. }
}
```

<table>
<thead>
<tr>
<th>VIAF_identifier</th>
<th>VIAF_identifierLabel</th>
<th>date_of_birth</th>
<th>date_of_death</th>
</tr>
</thead>
<tbody>
<tr>
<td>wd:Q2436796</td>
<td>Françoise Collin</td>
<td>Apr 8, 1928</td>
<td>Sep 1, 2012</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>place_birth</th>
<th>place_birthLabel</th>
<th>place_death</th>
<th>place_deathLabel</th>
</tr>
</thead>
<tbody>
<tr>
<td>wd:Q95129</td>
<td>Braine-le-Comte</td>
<td>wd:Q2269954</td>
<td>Saint-Sauveur</td>
</tr>
</tbody>
</table>
The Result

How did the dedicutors refer to Derrida?

```
select ?revname (count (?name) as ?no) 
where 
{ ?anno oa:hasTarget ?b1 .
  ?b1 oa:hasSelector ?b2 .
  ?b2 oa:exact ?name .
  ?b1 owl:sameAs viaf:88958529 .

  bind (lcase (?name) as ?revname)
}
group by ?revname
order by desc (?no)
```
You searched for: Subjects > Jews--Persecutions--Portugal--Lisbon.

1 entry found

1. http://libserv6-dev.princeton.edu/l4pul/19999#item
   - bf:Work: http://libserv6-dev.princeton.edu/l4pul/19999#Work
   - Title: The Lisbon massacre of 1506 and the royal image in the Shebet Yehudah /
   - Genre: bibliography
   - Subjects: Jews--Persecutions--Portugal--Lisbon.
   - Classification: DS135.P75
   - Inscription: Pour Jacques Derrida Hommage, et amitié - Yosef
   - Dedicators: Yerushalmi, Yosef Hayim, 1932-2009

http://viaf.org/viaf/54176111/
The Results

Derrida isn't known for work in religion, so who sent him all those books on Judaism?

- Elie Wiesel [https://viaf.org/viaf/108176447](https://viaf.org/viaf/108176447)
- Yosef [http://viaf.org/viaf/54176111](http://viaf.org/viaf/54176111)
- Edward Kaplan [http://viaf.org/viaf/4931176](http://viaf.org/viaf/4931176)
- B. Levy [http://viaf.org/viaf/27076673](http://viaf.org/viaf/27076673)
- 2 books from Sylvie C.D. [http://viaf.org/viaf/9868303](http://viaf.org/viaf/9868303)

What languages are the dedications in?

- 419 French
- 2 German
- 29 English
- 1 Italian
- 4 Arabic
- 1 Greek
The Lessons

- Clean up
- Model choice
- New skills
- New tools
- Collaboration

- Perseverance!
The Upshot

Effort vs value?

RDF / BIBFRAME?
The End

An image of the deceased French philosopher Jacques Derrida by Pablo Secca / CC-BY-SA-3.0