# Caltech achines

## The Caltech People Project

Tommy Keswick & Mariella Soprano ArchivesSpace Online Forum 2020



### Introduction



Tommy Keswick
Digital Technologies Development Librarian



Mariella Soprano
Senior Archivist for Collection Management



### Agenda

- Conceptualizing the Caltech People Project
- Initial Data Processing
- Formulating a Strategy
- Implementation
- Future Workflows and Questions





- The Problem/Goal
- Why ArchivesSpace as a Solution?
- Integrating Data





- The Problem/Goal
  - Library would like to provide services across all the repositories
    - Linking individuals associated with Caltech to their bodies of work
    - Linking to external information resources about Caltech people
  - Many repositories across the Library (and Archives)
    - No authority files exist for names of people or groups
    - IDs for people are different across repositories
    - Name formats are different across publications
    - No way to separate Caltech people from their co-authors on publications (in metadata)





- Why ArchivesSpace as a Solution?
  - Institutional History
    - Today's research and publications are tomorrow's archival collections
  - Agent Records module provides functionality we need
    - No other system that we use can store as much authoritative data
  - Community adoption gives us confidence
    - Even if ArchivesSpace evolves into other projects in the future, the concept of Agents will likely persist





- Integrating ArchivesSpace data with other sources
  - Services built on top of the authority file
    - Built with the ability to utilize the links between data sources that ArchivesSpace holds
  - Aggregate information from internal and external sources
    - ArchivesSpace data can be harvested and used to link to outside sources
  - Index it all externally for a new fast discovery interface
    - Searching for a person will bring up everything we know about them from the sources we care about





Integrating ArchivesSpace data with other sources

#### Wennberg, Paul O

#### Links and identifiers

- · Caltech Archives profile
- ORCID 0000-0002-6126-3854

#### Title

R. Stanton Avery Professor of Atmospheric Chemistry and Environmental Science and Engineering Executive Officer for Environmental Science and Engineering Director, Ronald and Maxine Linde Center for Global Environmental Science

#### Division

Geological and Planetary Sciences Division

#### Biography

B.A., Oberlin College, 1985; Ph.D., Harvard University, 1994. Associate Professor of Atmospheric Chemistry and Environmental Engineering Science, Caltech, 1998-2001; Professor, 2001-03; Professor of Atmospheric Chemistry and Environmental Science and Engineering, 2003-04; Avery Professor, 2004-; Director, Linde Center, 2008-11, 2014-; Executive Officer, 2012-; Acting Director, Linde Center, 2012-14.

(also available recent 25 feeds)

#### **CaltechAUTHORS**

- · Combined (270) HTML, HTML Include, Markdown, BibTeX, JSON, RSS
- Article(s) (264) <u>HTML</u>, <u>HTML Include</u>, <u>Markdown</u>, <u>BibTeX</u>, <u>JSON</u>, <u>RSS</u>
- Book Section(s) (1) <u>HTML</u>, <u>HTML Include</u>, <u>Markdown</u>, <u>BibTeX</u>, <u>JSON</u>, <u>RSS</u>
- Conference Item(s) (3) <u>HTML</u>, <u>HTML Include</u>, <u>Markdown</u>, <u>BibTeX</u>, <u>JSON</u>, <u>RSS</u>
- · Report or Paper(s) (2) HTML, HTML Include, Markdown, BibTeX, JSON, RSS

#### CaltechDATA

- · Combined (13) HTML, HTML Include, Markdown, BibTeX, JSON, RSS
- Dataset (9) HTML, HTML Include, Markdown, BibTeX, JSON, RSS
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- · Software (2) HTML, HTML Include, Markdown, BibTeX, JSON, RSS
- · Model (1) HTML, HTML Include, Markdown, BibTeX, JSON, RSS
- · Text (1) HTML, HTML Include, Markdown, BibTeX, JSON, RSS





### **Initial Data Processing**

It always starts with a spreadsheet...

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1	Family_Name =	Given_Name =	Thesis_ID	T	Advisor_ID	Authors_ID =	ArchivesSpace_ID =
2255	Diorio	Christopher J.	Diorio-C-J		Diorio-C-J	Diorio-C	
2392	DuMond	Jesse William Monroe	DuMond-Jesse-William-Monroe		DuMond-J-W-M	DuMond-J-W-M	112
2508	Elachi	Charles	Elachi-C		Elachi-C	Elachi-C	117
2542	Eluszkiewicz	Janusz B.	Eluszkiewicz-Janusz-B		Eluszkiewicz-J-B	Eluszkiewicz-J	
2602	Estabrook	Frank B.	Estabrook-Frank-B		Estabrook-F-B		124
2606	Evans	David Albert	Evans-David-Albert		Evans-D-A		
2868	Fowler	William A.	Fowler-William-Alfred		Fowler-W-A	Fowler-W-A	131
2958	Fung	Yuan-Cheng	Fung-Yuan-Cheng		Fung-Yuan-cheng	Fung-Y-C	3024
2982	Galimidi	Rachel P.	Galimidi-Rachel-P		Galimidi-R-P	Galimidi-Rachel-P	
3074	George	Nicholas A.	George-N-A		George-N-A	George-N	
3174	Goddard	William Andrew	Goddard-W-A-III		Goddard-W-A-III	Goddard-W-A-III	142
3274	Gould	Roy W.	Gould-R-W		Gould-R-W	Gould-R-W	150
3370	Grimm	Ronald L.	Grimm-R-L		Grimm-R-L	Grimm-R-L	





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### **Initial Data Processing**

- It always starts with a spreadsheet...
  - Data collection grew beyond the Library-managed repositories
    - Caltech Directory (HR)
      - Contains titles and positions
    - ORCID
      - Author-managed form of name
    - VIAF
    - LCNAF
    - ISNI
    - Wikidata
    - SNAC





- Stakeholder Discussions
- Data Mapping
- Scripting





- Stakeholder Discussions
  - Library Developers, Repository Librarians, Systems Librarian, Archivists, Researchers

























- Data Mapping
  - Phase 1
    - Name Authority will be local
      - Harvesting from other sources is a future possibility
    - Notes will contain current and historical appointments from the Caltech Directory
      - Parsing of this data is a future possibility
    - Related Agents will link to Corporate Entity records of Caltech units
      - Caltech, Caltech Faculty, Caltech Students, divisions/departments, etc.
      - Potential enhancement with Dates parsed from Directory data
    - External Documents used for links to Caltech repositories
      - Linking the disperate IDs from the spreadsheet
  - o ... and looking forward to enhancements





### Scripting

- Starting with a CSV file containing all our data
- We have an ad hoc ArchivesSnake/API study group
- Began learning how to retrieve records, parse records, and update or create records





### **Implementation**

- Local Development Environment for testing creating & updating records
  - ArchivesSpace Docker + database dump from Lyrasis
  - Challenge: could not successfully back up and restore indexes to avoid lengthy reindexing
- Leveraging ArchivesSnake and the ArchivesSpace API
  - Basically, creating a Python script using ArchivesSnake to get and post records
    - If an Agent already exists (meaning, we have an ID in the spreadsheet), then we update that existing record, otherwise we create new Agent records
- Some challenges:
  - The order of Notes matters for display in the Public UI
    - We had to prepend new notes to existing notes for our desired display order
  - The Doozy : Related Agents are not paginated upon display (staff view & edit, public view)
    - Records with many Related Agents load that much HTML to display in a browser





### **Future Workflows and Questions**

- Who initiates a new person record?
  - If data comes from the Directory...
  - If data comes from our Institutional Repositories...
- How much automation or human curation?
  - What is the role of Archivists in approving/rejecting new records?
  - What is the technical process?
- When do we start Phase 2?
  - Parsing dates and appointments from the Directory
  - Automatically importing from external name authorities
- How do we overcome the Related Agents issue?
  - Operation of the property o
  - Output of the control of the cont

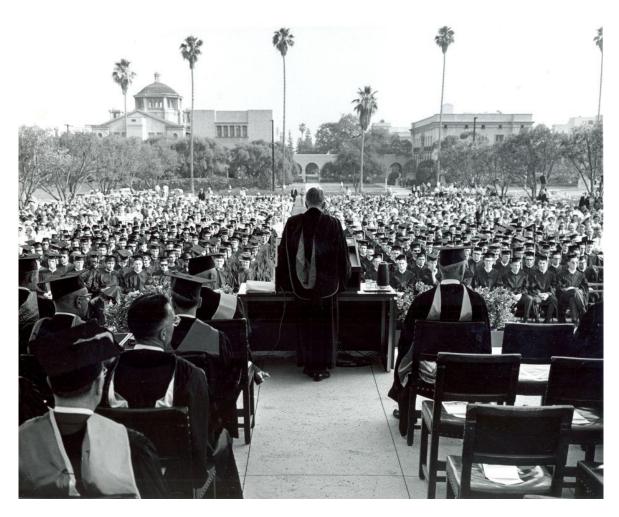




### Thank You!

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Caltech Library

Caltech archives