FOAF in the Archive: The LINKED JAZZ Project

ALISE 2012

Dallas, January 19, 2012

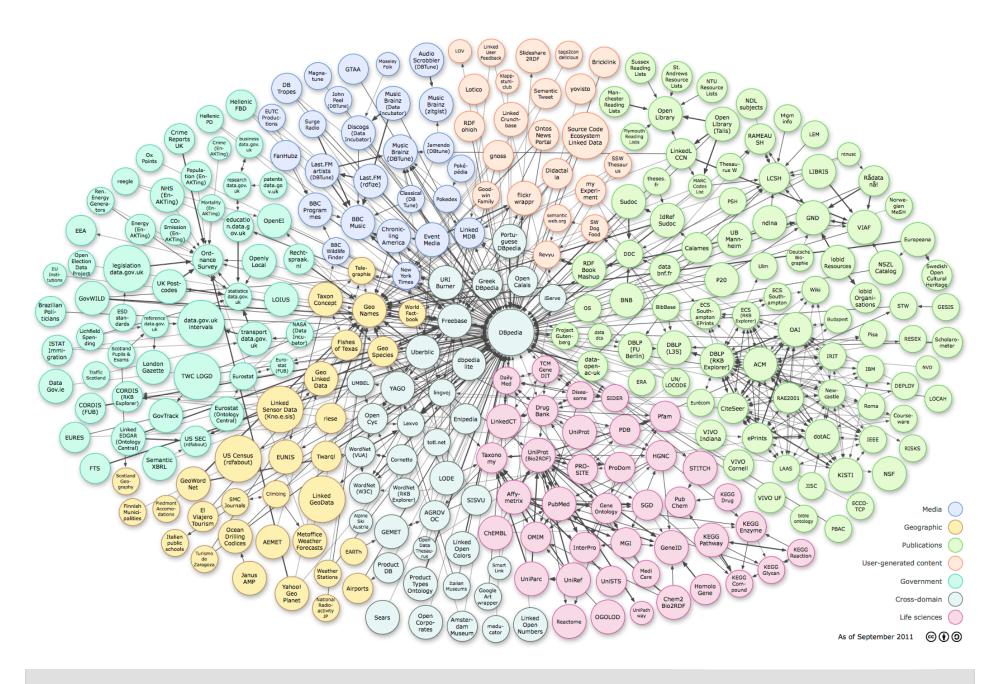
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linking networks of people

Experimenting with the application of Linked Open Data (LOD) technology to digital archives of jazz history.





project goals

- I. To help **identify** and **give legibility** to the network of relationships among the jazz artists described in primary sources.
- 2.To **expose** archival data to the web in the form of LOD that would facilitate discovery and increase visibility of archival content beyond the boundaries of institutional repositories.



"A Great Day in Harlem"



Red Allen, Buster Bailey, Count Basie, Emmett Berry, Art Blakey, Lawrence Brown, Scoville Browne, Buck Clayton, Bill Crump, Vic Dickenson, Roy Eldridge, Art Farmer, Bud Freeman, Dizzy Gillespie, Tyree Glenn, Benny Golson, Sonny Greer, Johnny Griffin, Gigi Gryce, Coleman Hawkins, J.C. Heard, Jay C. Higginbotham, Milt Hinton, Chubby Jackson, Hilton Jefferson, Osie Johnson, Hank Jones, Jo Jones, Jimmy Jones, Taft Jordan, Max Kaminsky, Gene Krupa, Eddie Locke, Marian McPartland, Charles Mingus, Miff Mole, Thelonious Monk, Gerry Mulligan, Oscar Pettiford, Rudy Powell, Luckey Roberts, Sonny Rollins, Jimmy Rushing, Pee Wee Russell, Sahib Shihab, Horace Silver, Zutty Singleton, Stuff Smith, Rex Stewart, Maxine Sullivan, Joe Thomas, Wilbur Ware, Dickie Wells, George Wettling, Ernie Wilkins, Mary Lou Williams, Lester Young



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http://dbpedia.org/resource/Marian_McPartland

http://dbpedia.org/resource/Thelonious_Monk

http://dbpedia.org/resource/Mary_Lou_Williams

How many people does this artist know? Is this artist connected to another specific artist? What type of relationship do these artists have?



methodology

Create a dataset of RDF triples representing jazz artists and their connections that can be queried and visualized.

Sample: 12 transcripts of taped interviews with jazz musicians.



FOAF in the archive

Friend of A Friend (FOAF) ontology applied to represent relationships among people from the past

- Core FOAF vocabulary (foaf:knows)
- Extension of FOAF

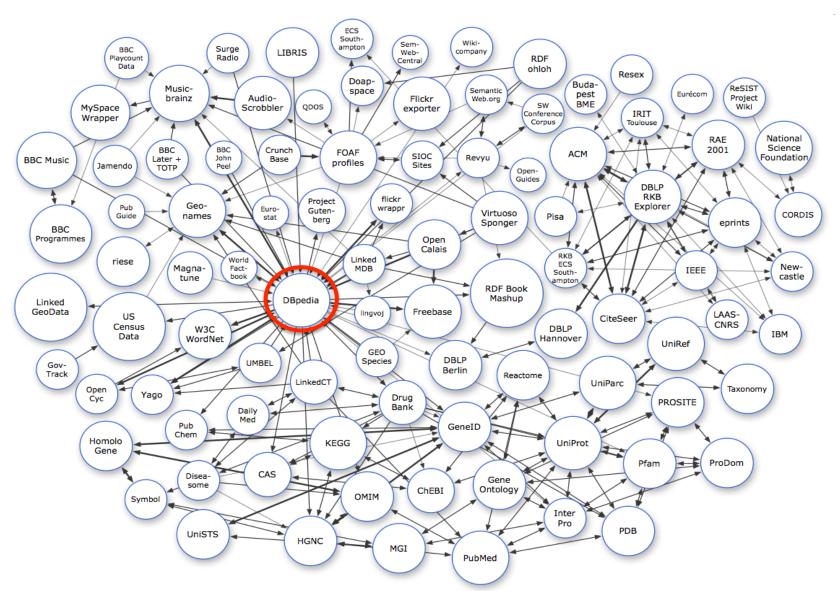


methods

- -Create a directory of names.
- Find matches between names from the directory and the transcripts.
- Record the relationship between the interview subject and the resulting match in the format of an RDF triple.

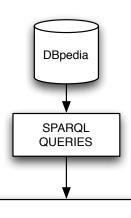


Linked Data cloud





name directory



JAZZ DIRECTORY

http://dbpedia.org/property/label "Herbie Hancock".
http://dbpedia.org/resource/Thelonious_Monk
http://dbpedia.org/resource/Coleman_Hawkins
http://xmlns.com/foaf/0.1/name "Coleman Hawkins"
http://dbpedia.org/resource/Oscar_Pettiford http://dbpedia.org/property/label "Oscar Pettiford".

- Inconsistencies within DBpedia
- Refinement as an ongoing process
- 11,066 triples describing
 6,444 individuals

<http://dbpedia.org/resource/Miles_Davis> <http://
xmlns.com/foaf/0.1/name> "Miles Davis" .





"No, we jammed here. **Thelonious Monk**—I remember once one morning I got sleepy so I said, 'I'm going to bed.' When the guys left, the door was open and Monk rang the doorbell and he came inside [...] I screamed. He yelled too and ran out the door and ran in to the closet and the clothes fell on him..."





"...and this was the, like the biggest jazz festival ever.

Mary Lou Williams played it and I played it and Toshiko

Akiyoshi had her big band, and I mean it was a large

event."

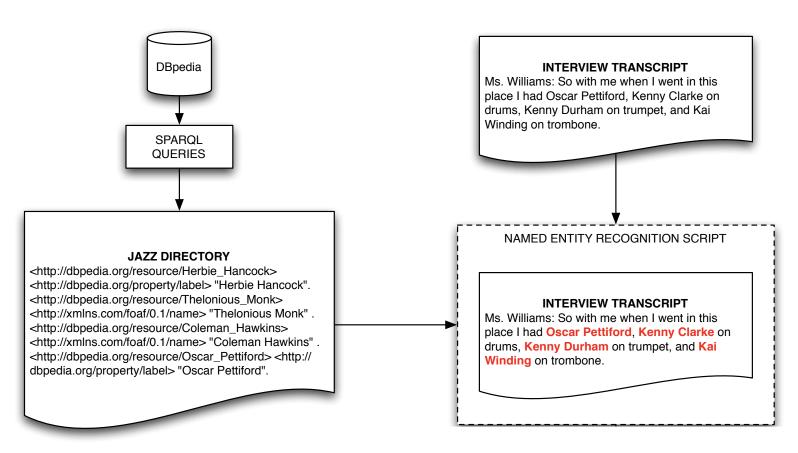




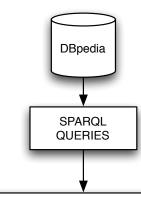
"Later on after I met **Count Basie** and Art Tatum, Buck showed me a run that Art Tatum—it was his famous run. He made it from top to bottom and Buck had taught me that run."



searching and matching



To search for and record the instance of the names, a Python script was written that parsed the jazz directory and searched for each name in the transcript.



JAZZ DIRECTORY

http://dbpedia.org/property/label "Herbie Hancock".
http://dbpedia.org/resource/Thelonious_Monk http://dbpedia.org/resource/Coleman_Hawkins http://xmlns.com/foaf/0.1/name "Coleman Hawkins" .
http://dbpedia.org/property/label "Oscar Pettiford".

INTERVIEW TRANSCRIPT

Ms. Williams: So with me when I went in this place I had Oscar Pettiford, Kenny Clarke on drums, Kenny Durham on trumpet, and Kai Winding on trombone.

NAMED ENTITY RECOGNITION SCRIPT

INTERVIEW TRANSCRIPT

Ms. Williams: So with me when I went in this place I had Oscar Pettiford, Kenny Clarke on drums, Kenny Durham on trumpet, and Kai Winding on trombone.

encoding connections

<http://dbpedia.org/resource/</pre>

Mary Lou Williams>

<http://xmlns.com/foaf/0.1/knows>

<http://dpedia.org/resource/Art_Blakey>

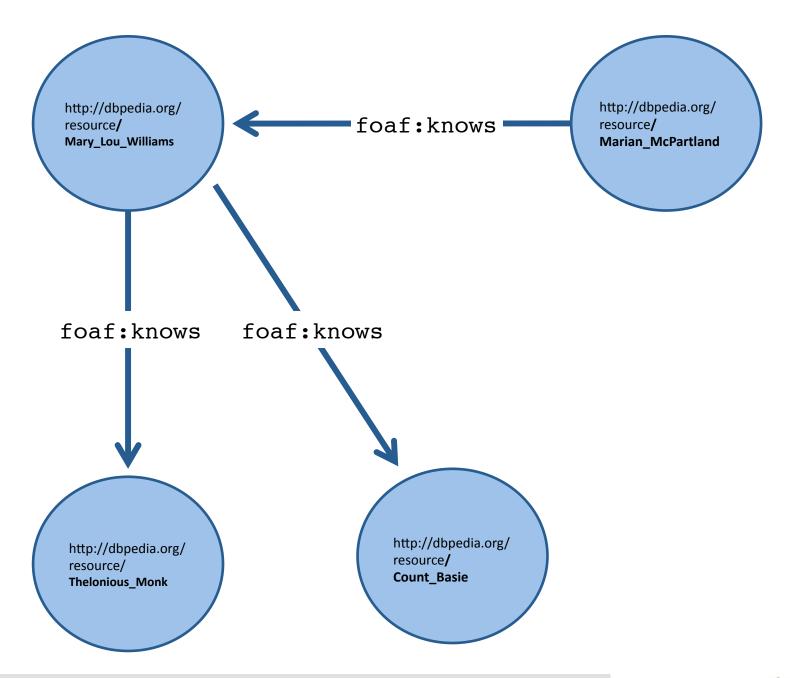
RESULTS FILE

http://xmlns.com/foaf/0.1/knowshttp://dbpedia.org/resource/Oscar_Pettiford.

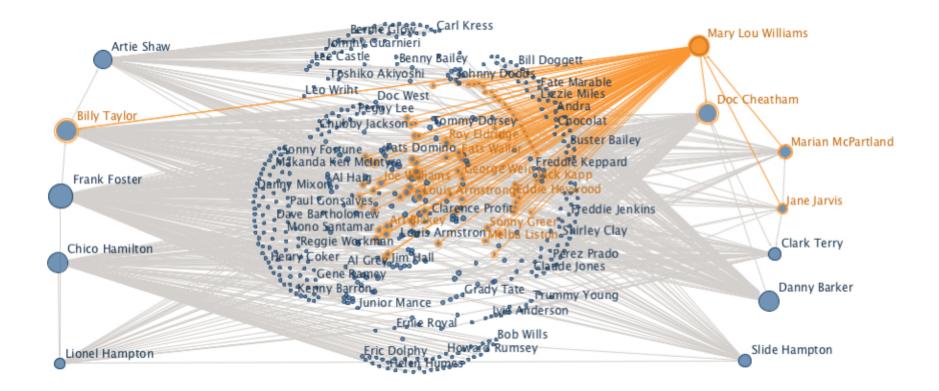
http://xmlns.com/foaf/0.1/knows>http://dbpedia.org/resource/Kenny_Clarke.

http://xmlns.com/foaf/0.1/knowshttp://dbpedia.org/resource/Kenny_Durham.

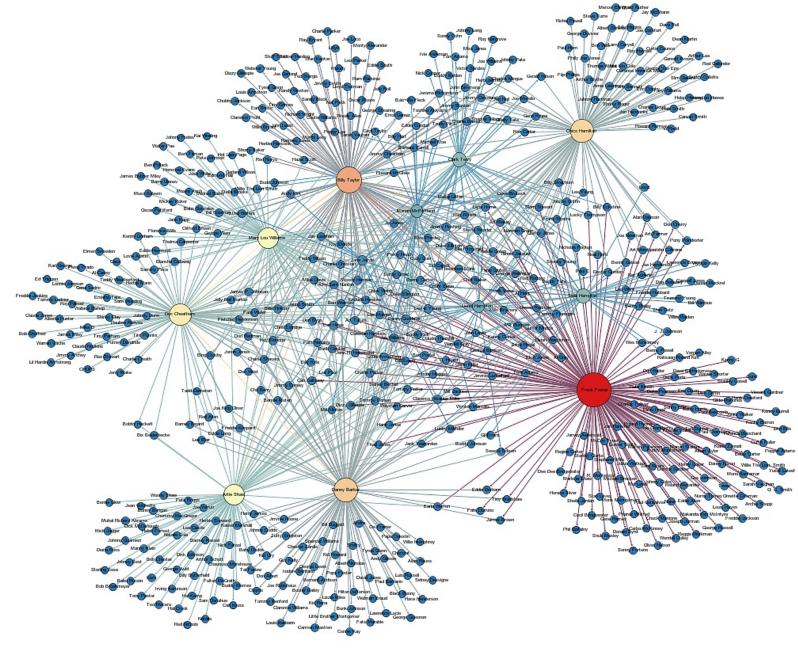
...













degree of knowing someone

doesn't know rel:knows_of rel:knows by_reputation rel:knows_in_passing rel:has_met foaf:knows rel:acquaintance_of rel:close_friend_of rel:influenced_by mo:collaborated_with rel:mentor_of



"...the biggest jazz festival ever. **Mary Lou Williams** played it..."

rel: knows of

"Later on after I met Count Basie..."

foaf: knows

"Jack Howard was an influence as far as giving me strength on the piano...He taught me a lot of professional things it would have taken me years and years to learn."

rel: mentor of

"No, we jammed here. Thelonious

Monk-—I remember once one morning
I got sleepy so I said...

rel: close friend of



relationship refinement

Two combined approaches for refining and validating foaf: knows relationships:

- machine-driven
- human-driven



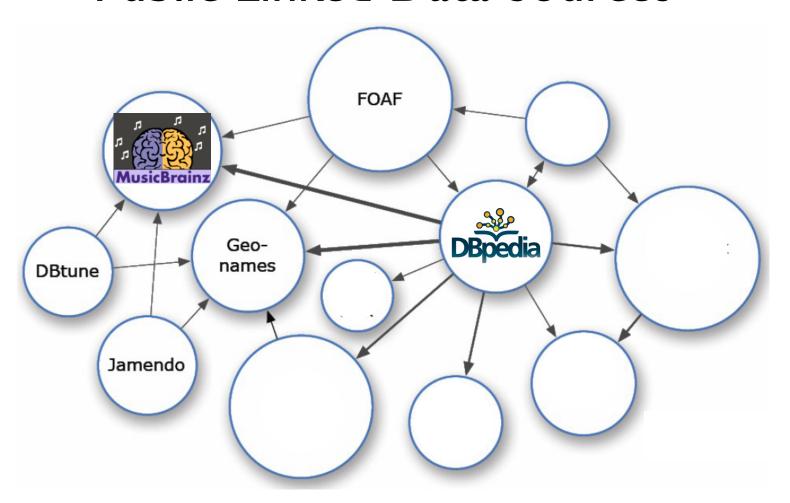
low hanging fruit

doesn't know

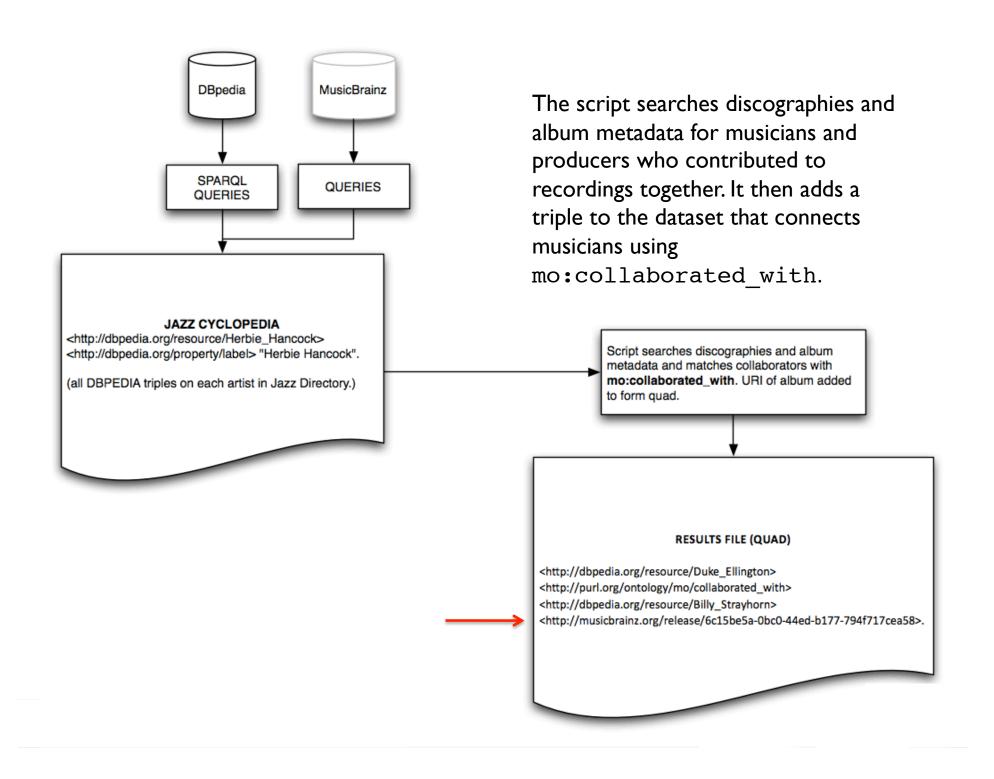
```
rel:knows_of
rel:knows by_reputation
rel:knows_in_passing
rel:has_met
foaf:knows
rel:acquaintance_of
rel:close_friend_of
rel:influenced_by
mo:collaborated_with
rel:mentor_of
```



Public Linked Data Sources







Linked Jazz



Sign up for an account

Full Name

Ema

Emai

Get to work

E Sign in with Twitter

Sign in with Facebook

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Phasellus nec nibh lectus. Maecenas eu augue diam. Sed varius metus eget magna cursus consequat. Fusce et vehicula ante. In semper suscipit sapien, sed auctor augue ornare sit amet. Transcripts Export data

Interview Transcripts

Below are the interview transcripts currently contained in this archive.



Mary Lou Williams

Interviewed by John S. in 1973

View details »



Buddy Tate

Interviewed by Michael Woods in 1995

View details »



Charles Davis

Interviewed by Monk Rowe in 1997

View details »



Ron Carter

Interviewed by Monk Rowe in 1999

View details »



Clark Terry

Interviewed by Joe Williams in 1995

View details »



Benny Powell

Interviewed by Michael Woods in 1995

View details »

Archive Stats

3,529 People

623 Connections

25 Transcripts

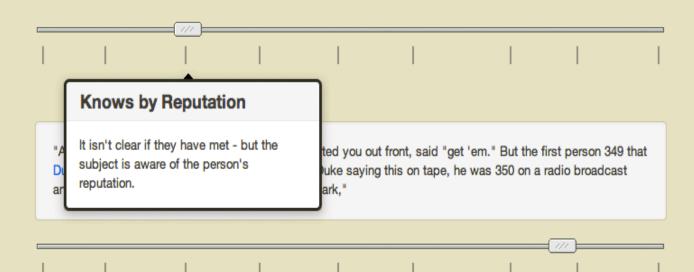
67 People Identified

- Duke Ellington
- Lucky Thompson
- Neal Hefti
- Snooky Young
- Tony Pastor
- Benny Bailey
- Garland Wilson
- Pete Johnson
- Cozy Cole
- Woody Shaw
- Ella Fitzgerald
- Arthur Schutt
- Curtis Counce
- Papa Celestin
- John Simmons
- Walter Page
- Tyree Glenn
- Chester Zardis
- Shadow Wilson
- J. Mayo Williams
- Pharez Whitted
- Webster Young

Mary Lou Williams

Excepts from a 1973 interview conducted by John S.

"Louis in 1920 and played briefly with Charlie Barnet and Eddie 6 Vinson before joining Count Basie in 1948. From 1951-59 he traveled with the 7 Duke Ellington Orchestra and toured Europe with the Quincy Jones production 8 of "Free & Easy." Clark was part of the NBC Tonight Show Orchestra in New 9 York City and"



"he's blowing and everything, and he gets back on the stage and he leans over and 371 he whispers, and



Team members

Cristina Pattuelli
Chris Weller
Ben Fino-Radin
Jared Negley
Sara Rubinow
Jeff Walloch
Genevieve Szablya







Thank you!

Questions?

Linked Jazz: http://linkedjazz.prattsils.org/

Contact: mpattuel@pratt.edu

