

Linked Jazz: An Exploratory Pilot

DC 2011

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connected creativity

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

project's objectives

To help **identify** and **give legibility** to the network of relationships among the jazz artists described in primary sources.

To provide a **new perspective** on the interpretation of archival content.

To **expose** archival data to the web and to contribute cultural heritage RDF triples to the LOD ecosystem.

FOAF in the archive

FOAF applied to represent relationships among people from the past.

- **Core** FOAF vocabulary.
- **Extension** of FOAF.

application scenario

Domain: history of jazz.

The jazz community is characterized by a high degree of interaction and connectivity.

Primary audience: researchers, jazz fans, and archivists.

“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



http://dbpedia.org/resource/Marian_McPartland

http://dbpedia.org/resource/Thelonious_Monk

http://dbpedia.org/resource/Mary_Lou_Williams

?

?

pilot

Method to create a dataset of RDF triples representing jazz artists and their connections.

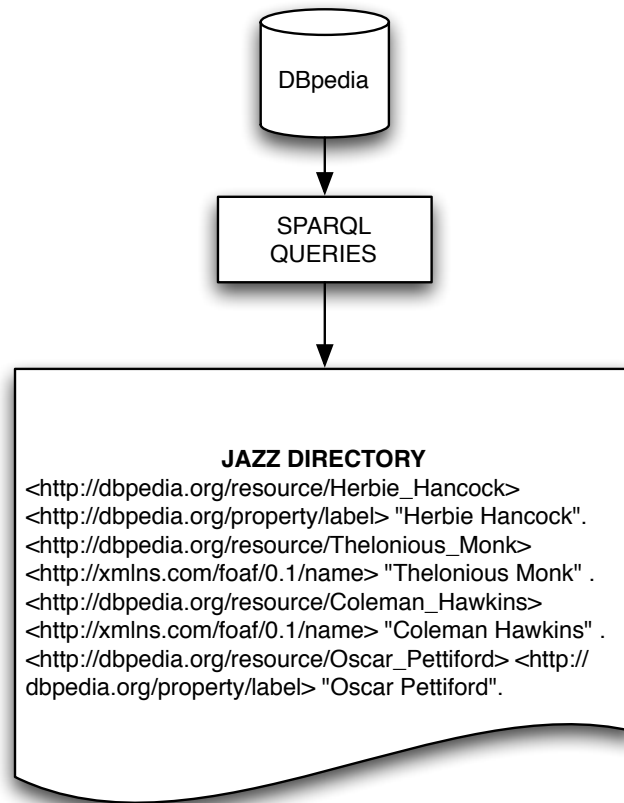
Sample: 12 transcripts of taped interviews with jazz musicians.

methodology

Create a directory of names.

Find matches between name directory and transcripts.

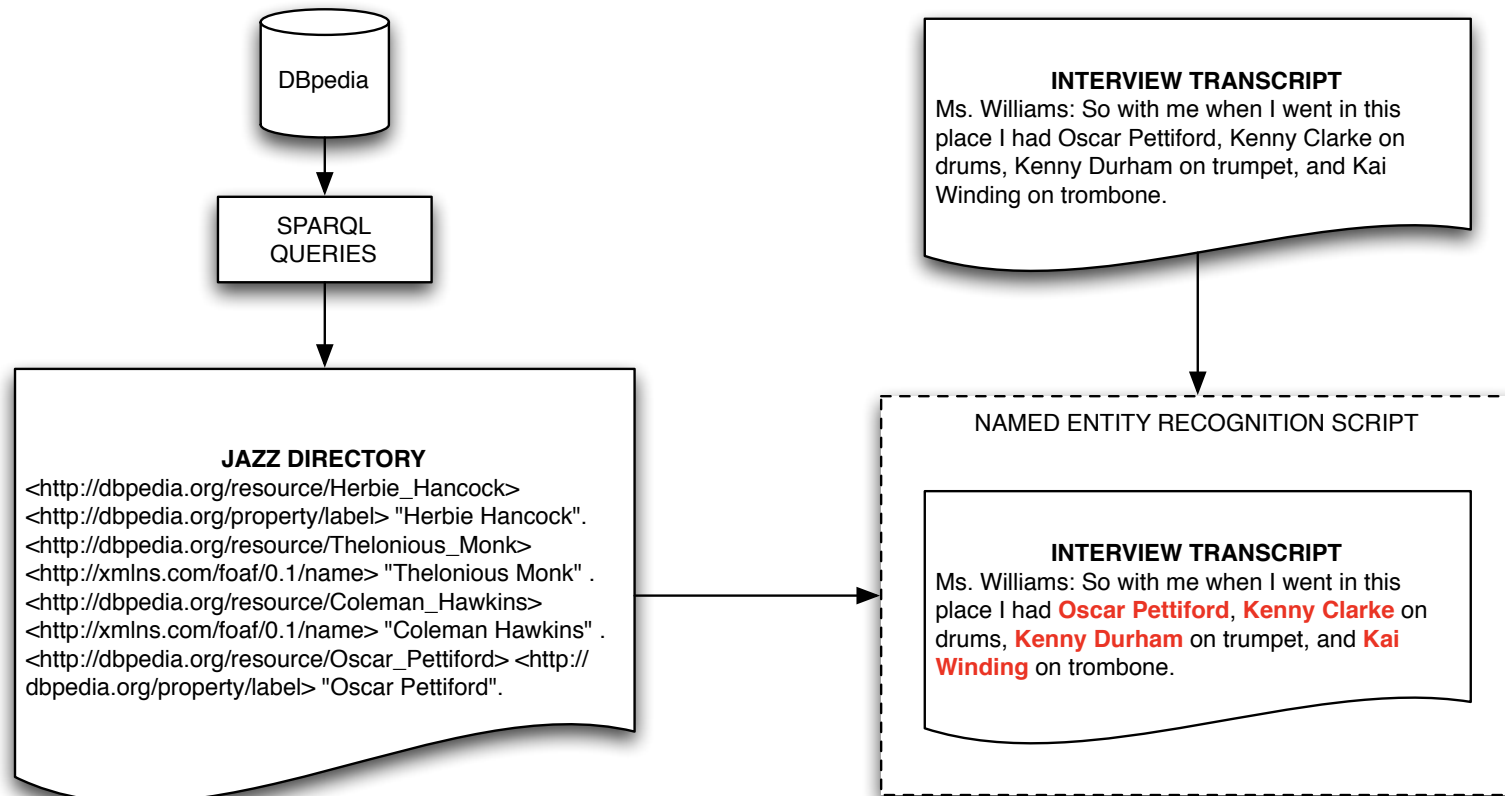
Record the relationship between the interview subject and the resulting matches as RDF triples.



Name Directory

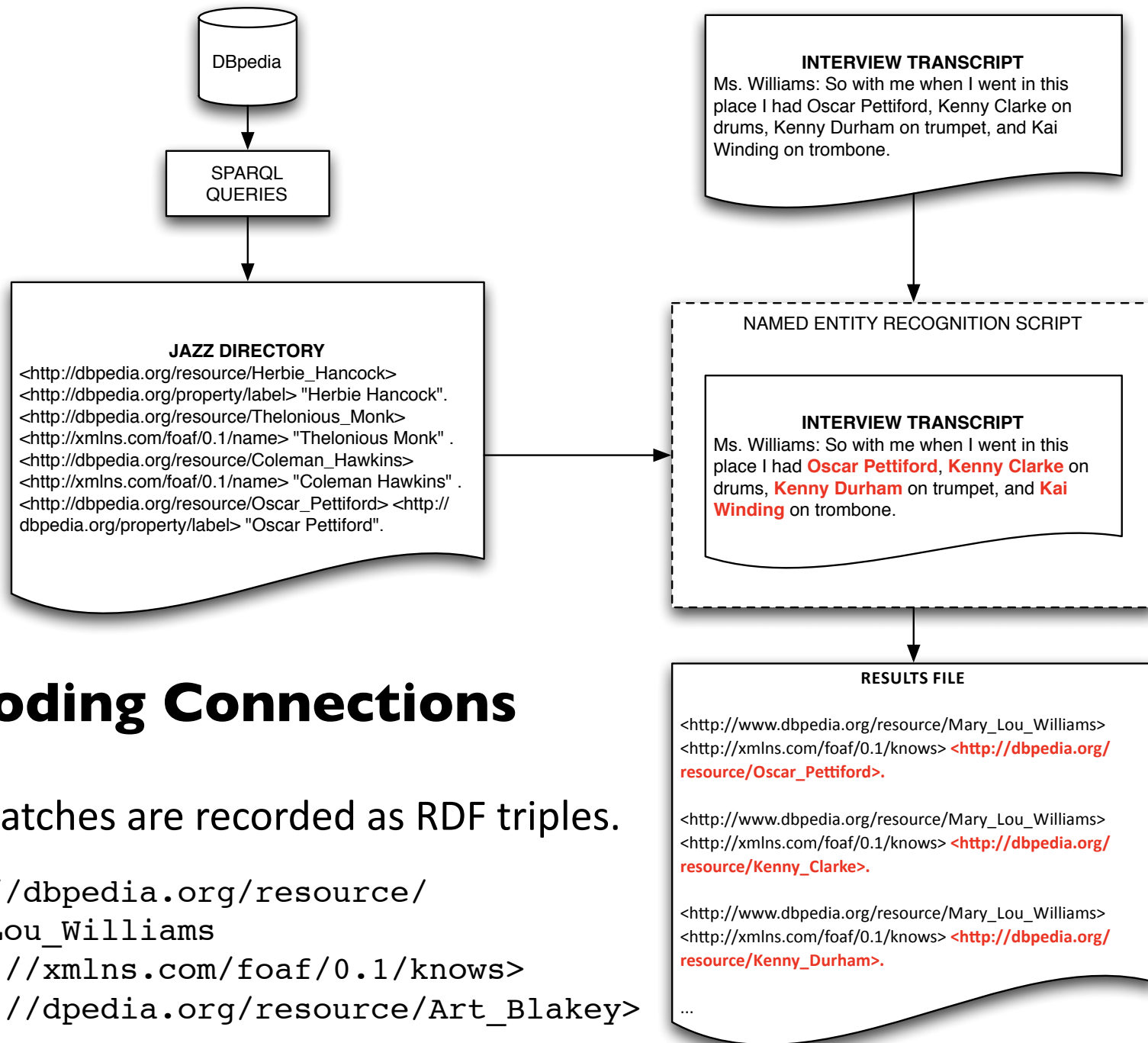
- Inconsistencies within DBpedia
- Refinement as an ongoing process
- 17,559 triples describing 6,444 individuals

`<http://dbpedia.org/resource/Artie_Shaw> <http://xmlns.com/foaf/0.1/name> "Artie Shaw" .`



Searching and Matching

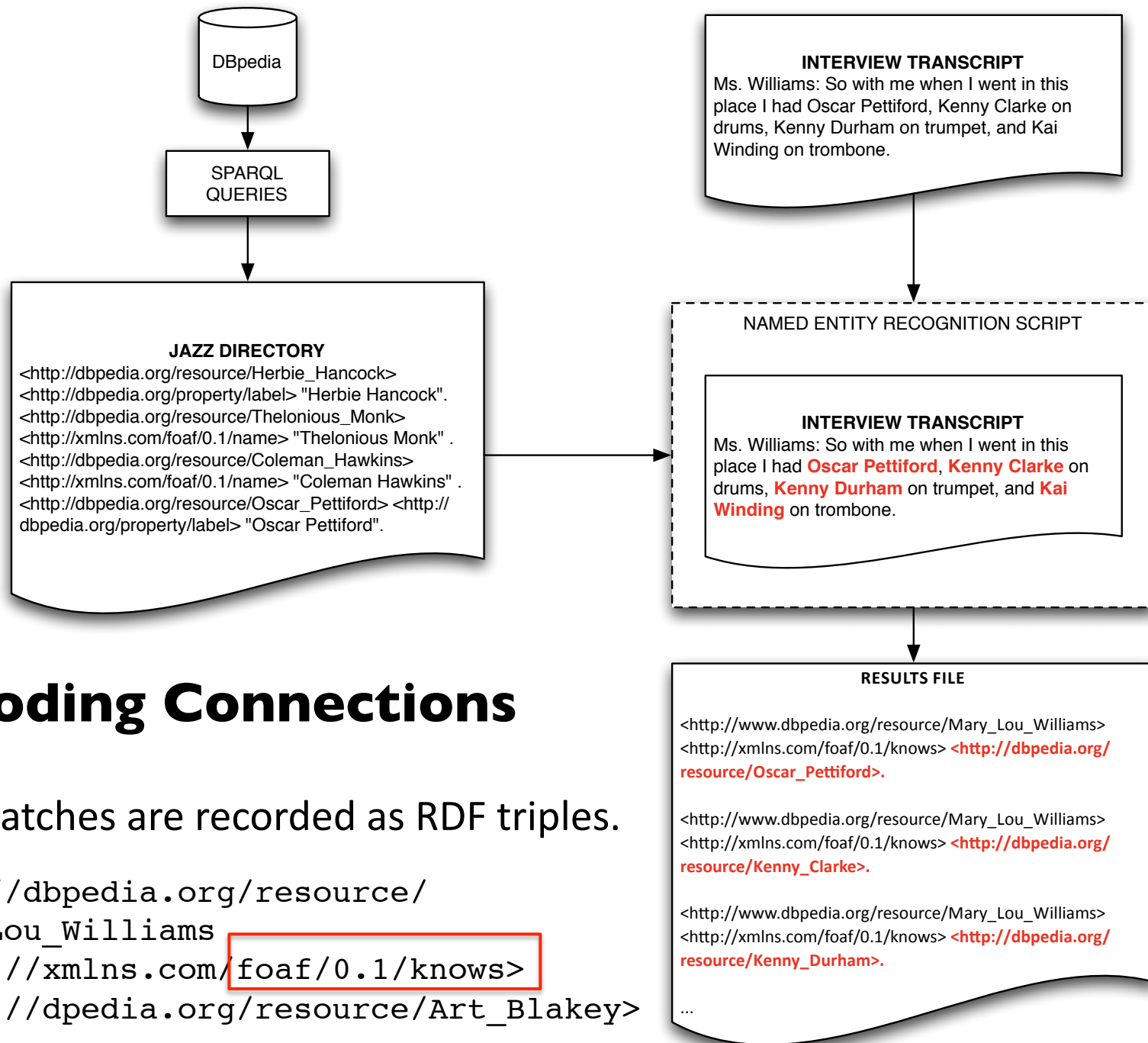
To search for and record the instance of the names, a Python script was written that parsed the jazz directory and searched for each name in the transcript.



Encoding Connections

The matches are recorded as RDF triples.

```
http://dbpedia.org/resource/  
Mary_Lou_Williams  
<http://xmlns.com/foaf/0.1/knows>  
<http://dbpedia.org/resource/Art_Blakey>
```

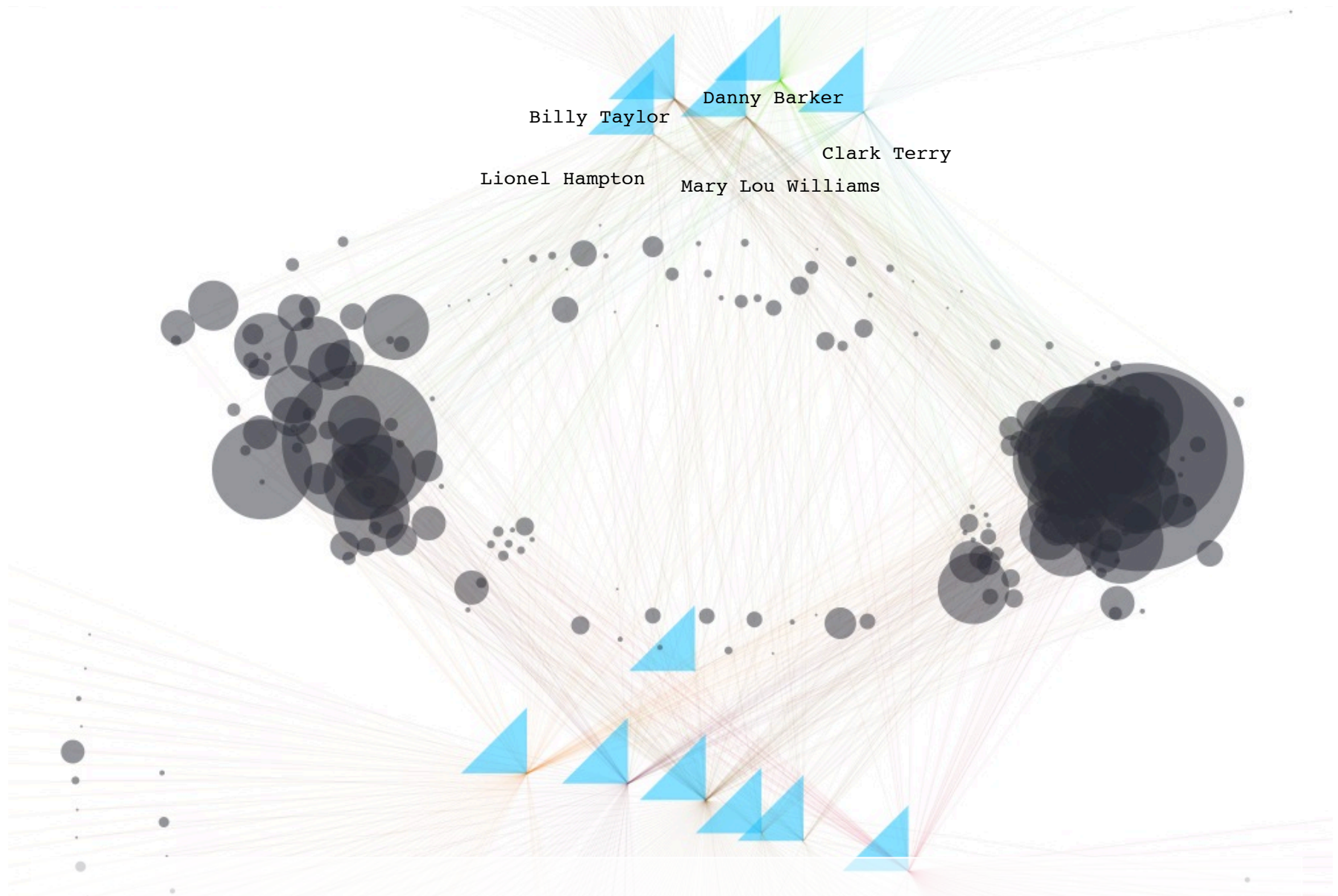


Encoding Connections

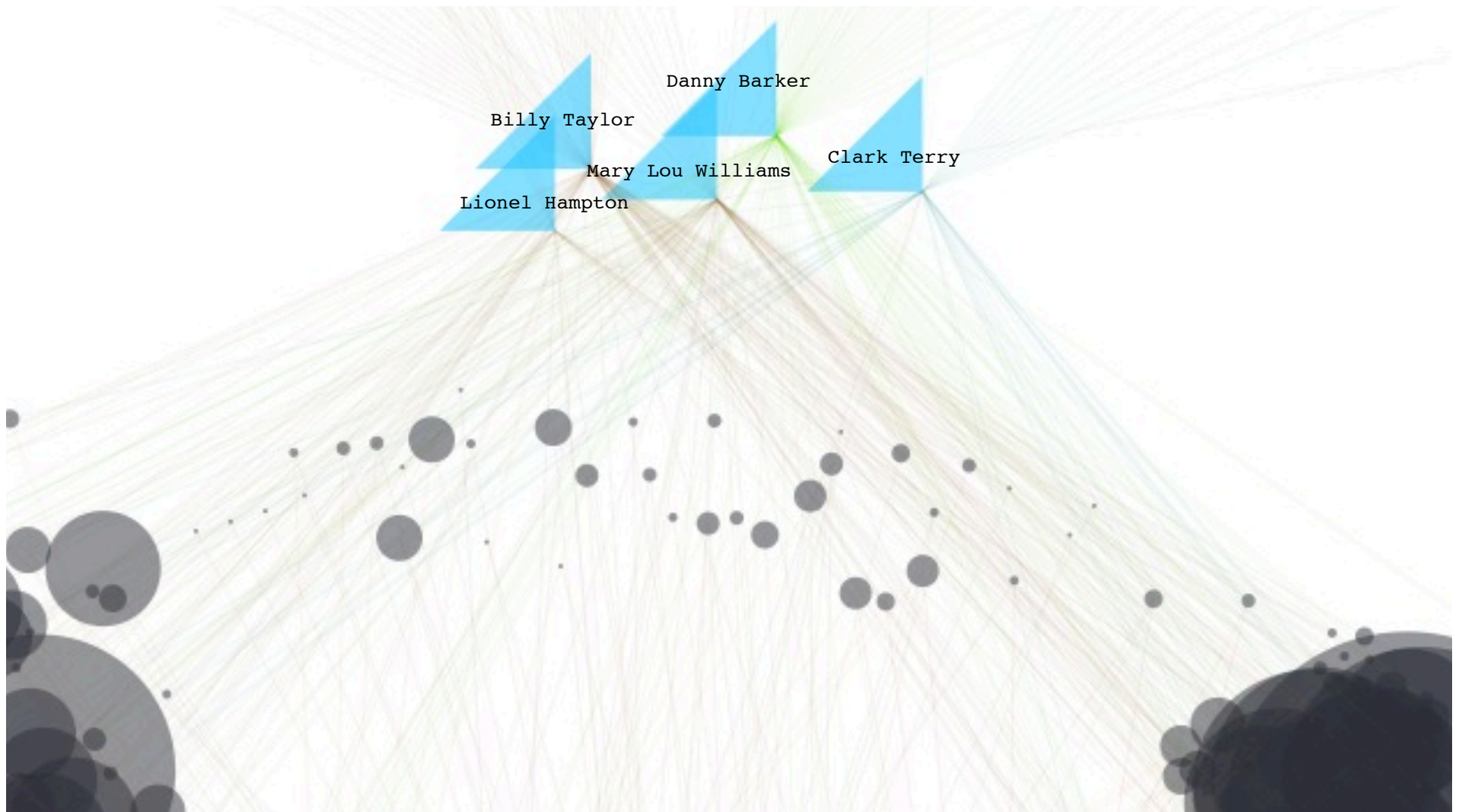
The matches are recorded as RDF triples.

```

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<http://dbpedia.org/resource/Art_Blakey>
  
```



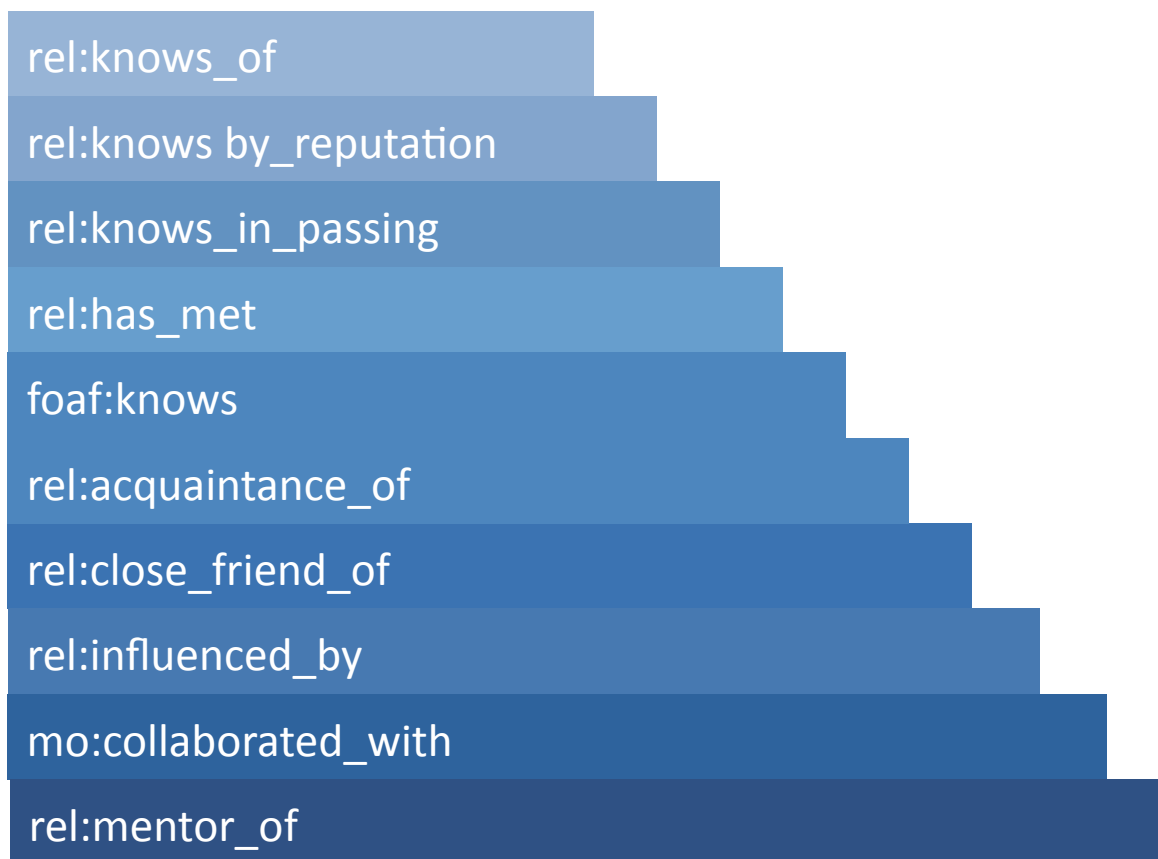
*Social graph revealing communities and social proximities of individual jazz musicians based on `foaf:knows` relationships identified in interview transcripts.
(generated using the JavaScript InfoVis Toolkit's force-directed algorithm)*



Nature of the connections identified remains implicit. We can only assume that jazz artists citing other jazz artists are likely to have some kind of social connection.

degree of knowing someone

doesn't know





Mary Lou Williams

*“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..”*



Marian McPartland

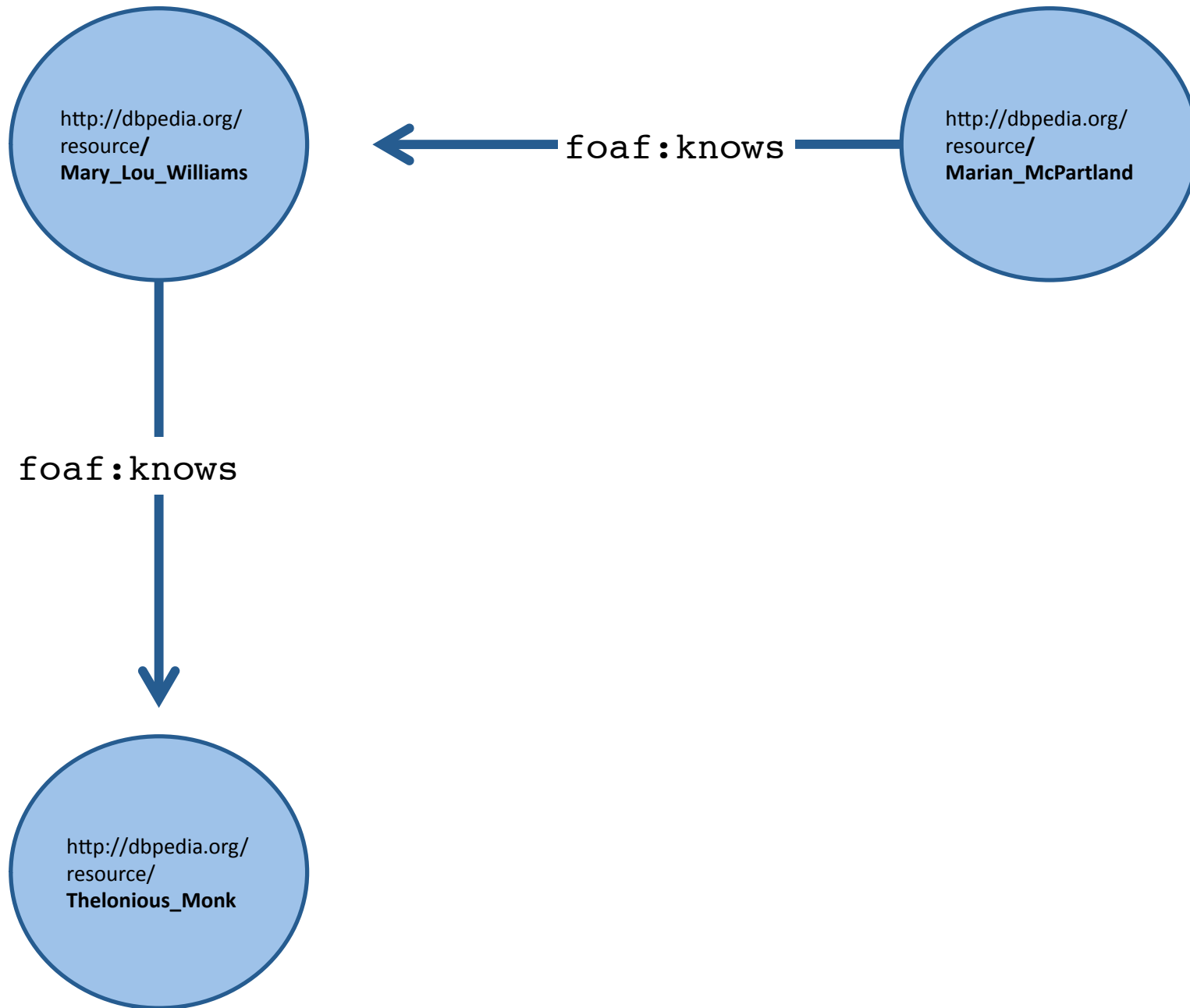
*“...and this was the, like the biggest jazz festival ever. **Mary Lou Williams** played it and I played it and Toshiko Akiyoshi had her big band, and I mean it was a large event.”*

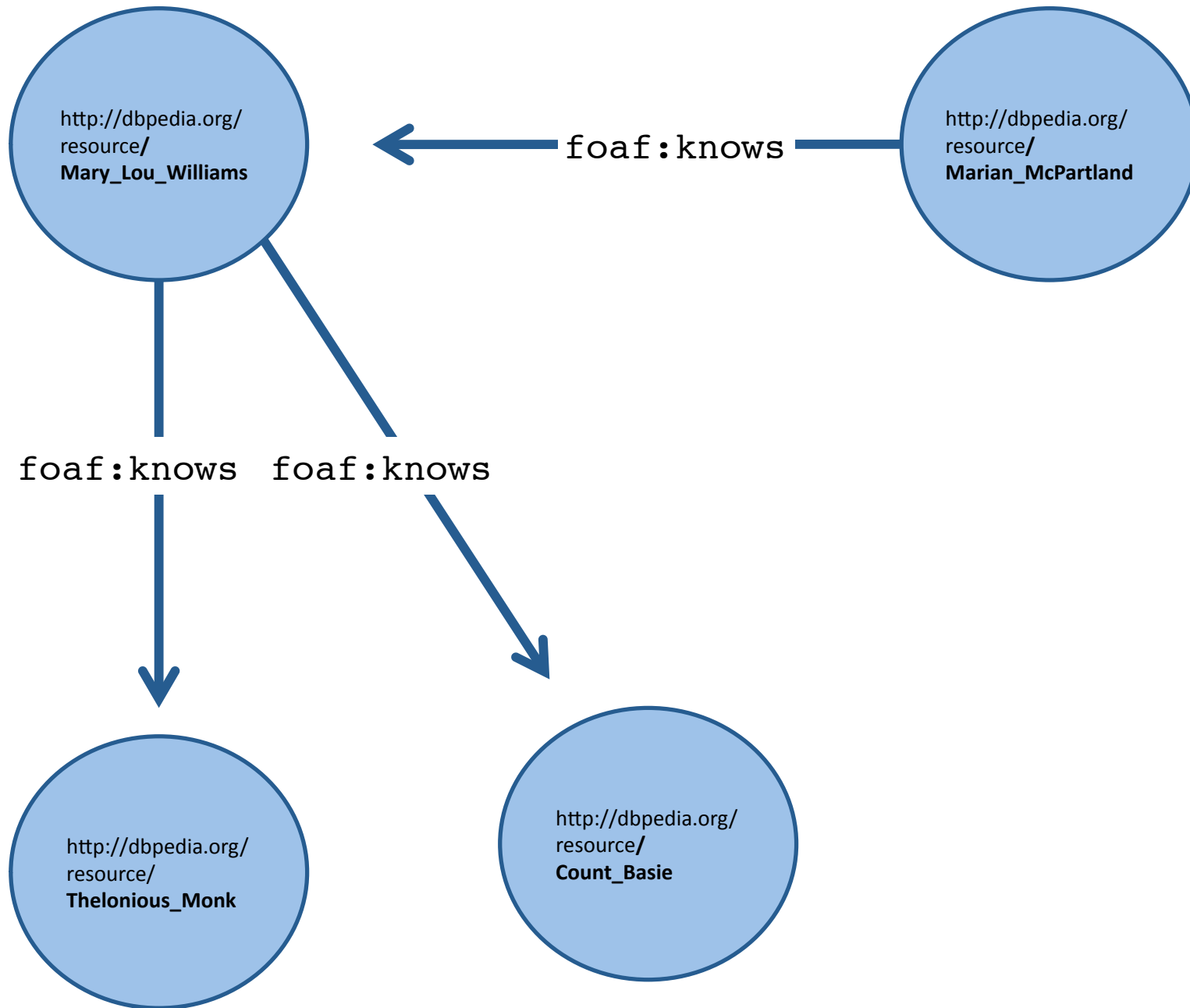


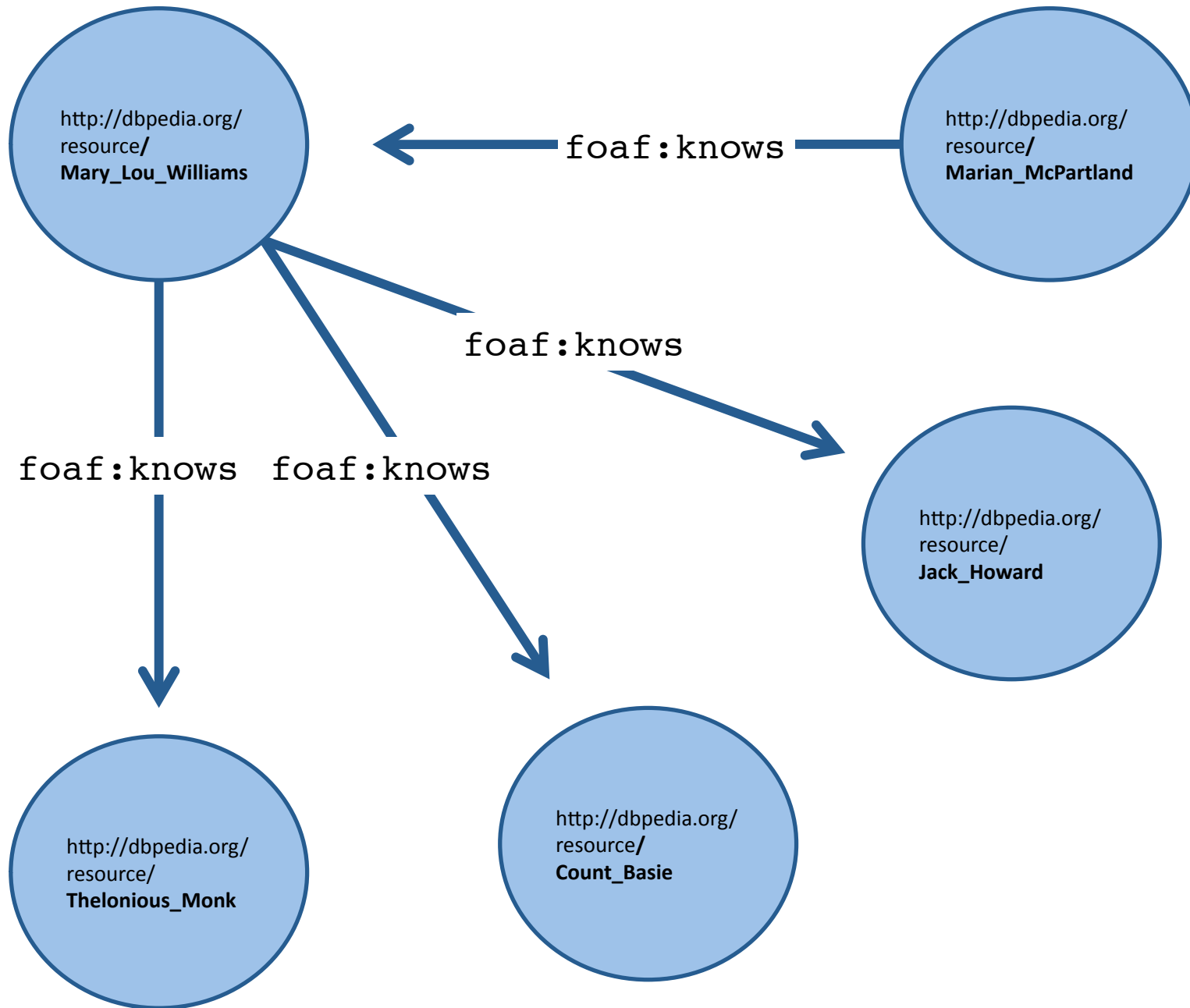
Mary Lou Williams

*“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.”*

*“**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.”*







*“...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.”*

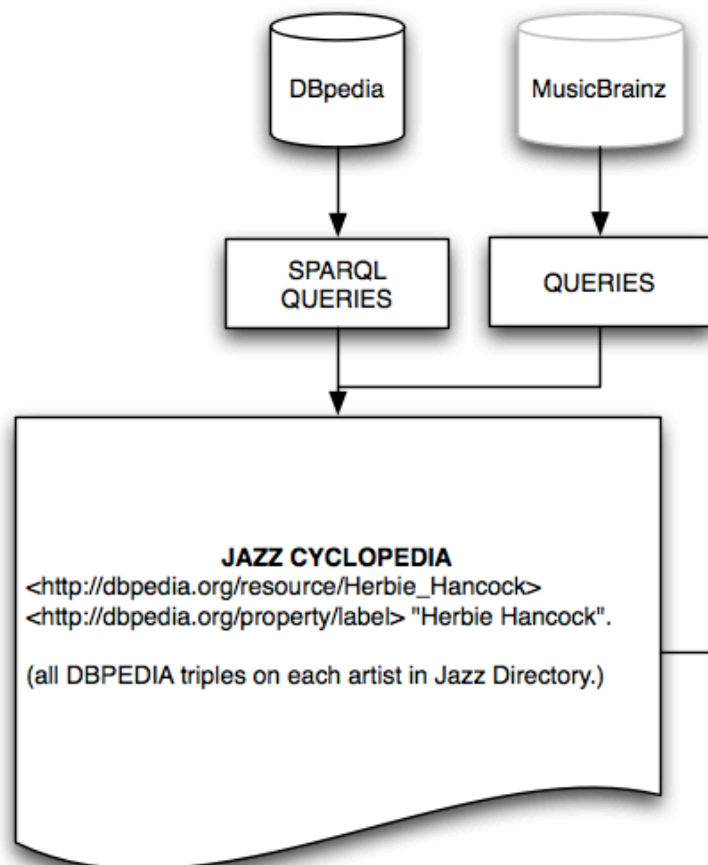
rel: mentor of

*“No, **we jammed here**. **Thelonious Monk** - **I remember once one morning I got sleepy so I said**...”*

rel: close friend of

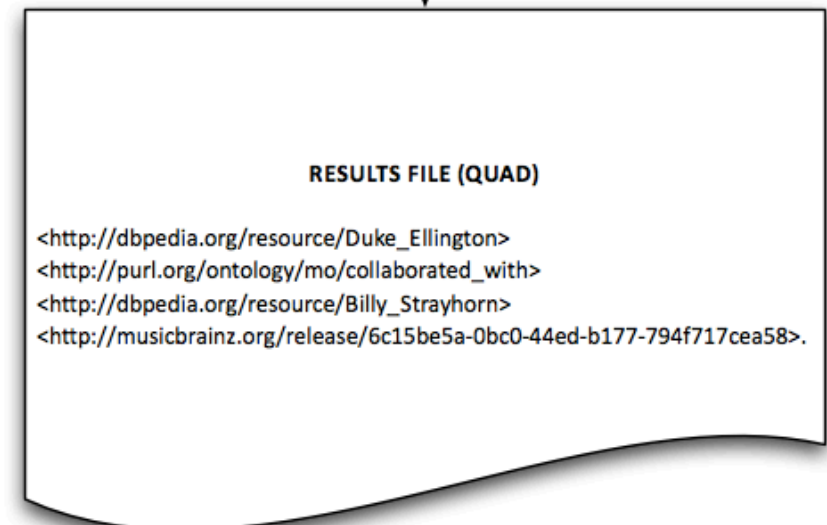
current work

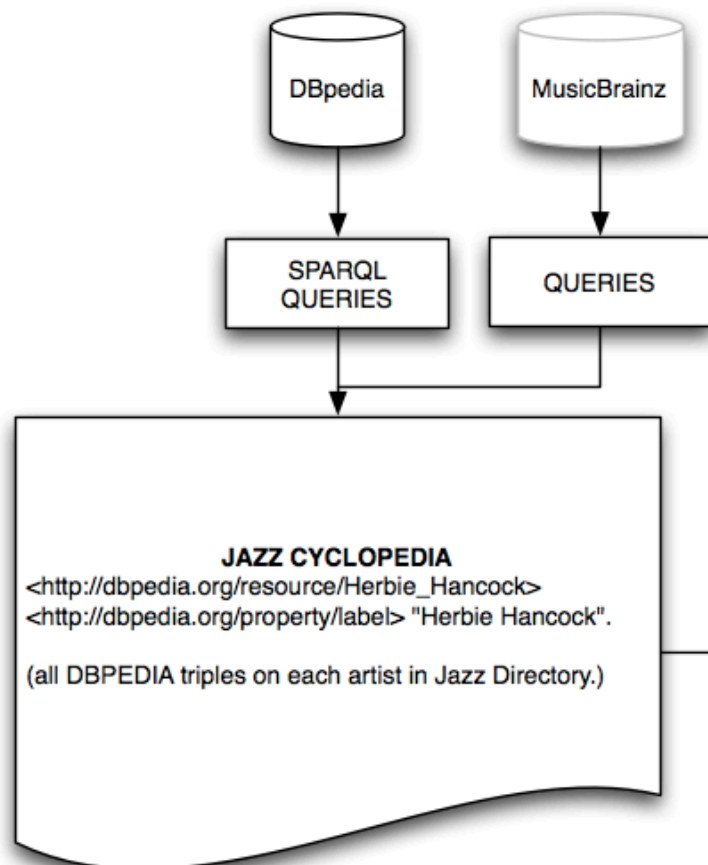
- Relationships refinement.



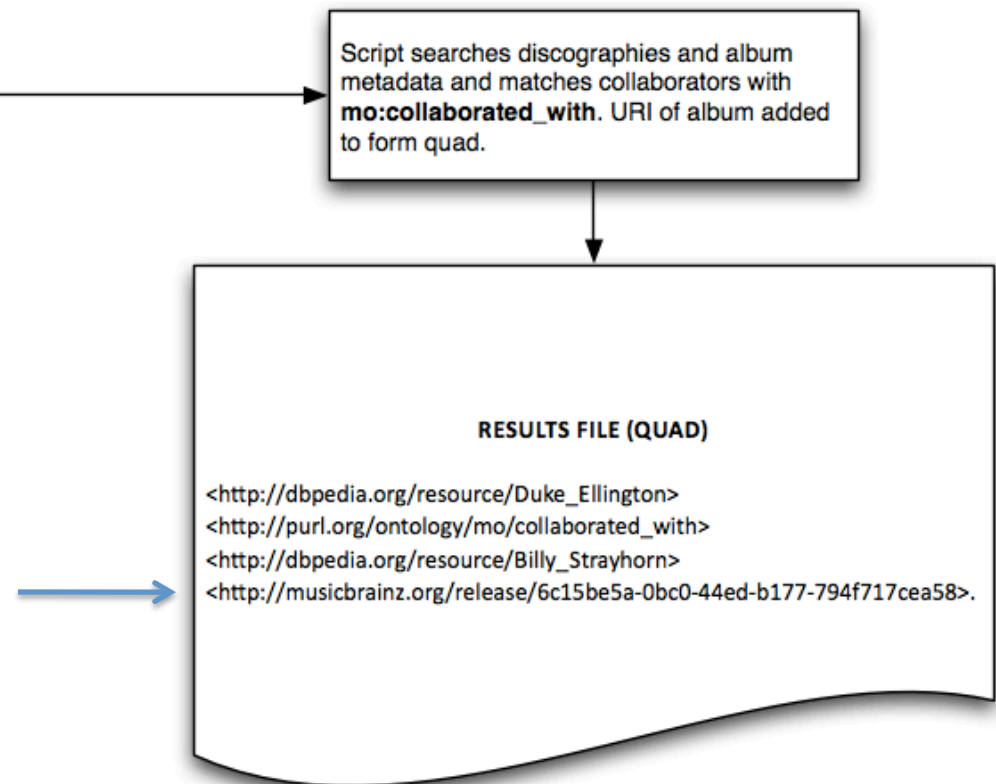
The script searches discographies and album metadata for musicians and producers who contributed to recordings together. It then adds a triple to the dataset that connects musicians using `mo:collaborated_with`.

Script searches discographies and album metadata and matches collaborators with **mo:collaborated_with**. URI of album added to form quad.





The script searches discographies and album metadata for musicians and producers who contributed to recordings together. It then adds a triple to the dataset that connects musicians using `mo:collaborated_with`.



future work

- Crowd-sourcing for relationships assessment/validation.

Crowd Sourcing to Domain Experts

New Tab

← → ↻ 🔍

☆ 🔑 VHX TAG I 1000+

Jane Jarvis

September 3rd, 1995
Interviewed by:
Monk Rowe

👤 People Identified

Thelonious Monk	(35 mentions)
Clark Terry	(22 mentions)
Slide Hampton	(8 mentions)

📍 Places Identified

W: 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. He discovered that I was asleep - it was around 8 o'clock in the morning. I had a "big, big twin bed, so when I woke up I saw something on the other bed and I screamed. He yelled too and ran out

California and he laughed about it. That was so funny. Monk would write a tune and he'd come here and play it for 2 or 3 months. I'd say, "Why do you keep playing the same thing over and over?" He'd say, "I'm trying to see if it's a hit. It'll stay with you if it's a hit."

I: When did you first meet Thelonious Monk?

W: I think it was the year of 1930 in Kansas City. He was traveling with a show there. They had opened up a new night club called the Subway or something like that in Kansas City and I met Monk there and he was playing the same way he plays now. No one understood it. I used to hang out with him

← knows well
married or related
collaborated with
musical group
knows
in passing
by reputation
knows of
does not know

future work

- Linked jazz data available for linked data-enabled applications.

LINKED JAZZ



Team members

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Chris Weller

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Sponsors



Pratt

Thank you!

Questions?

Contact: mpattuel@pratt.edu

Download this presentation: <http://linkedjazz.prattsils.org/dc2011>