

# Linked Jazz: The Data Sessions

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Karen Li-Lun Hwang  
March 4, 2016





Art Kane, A Great Day in Harlem, 1958

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

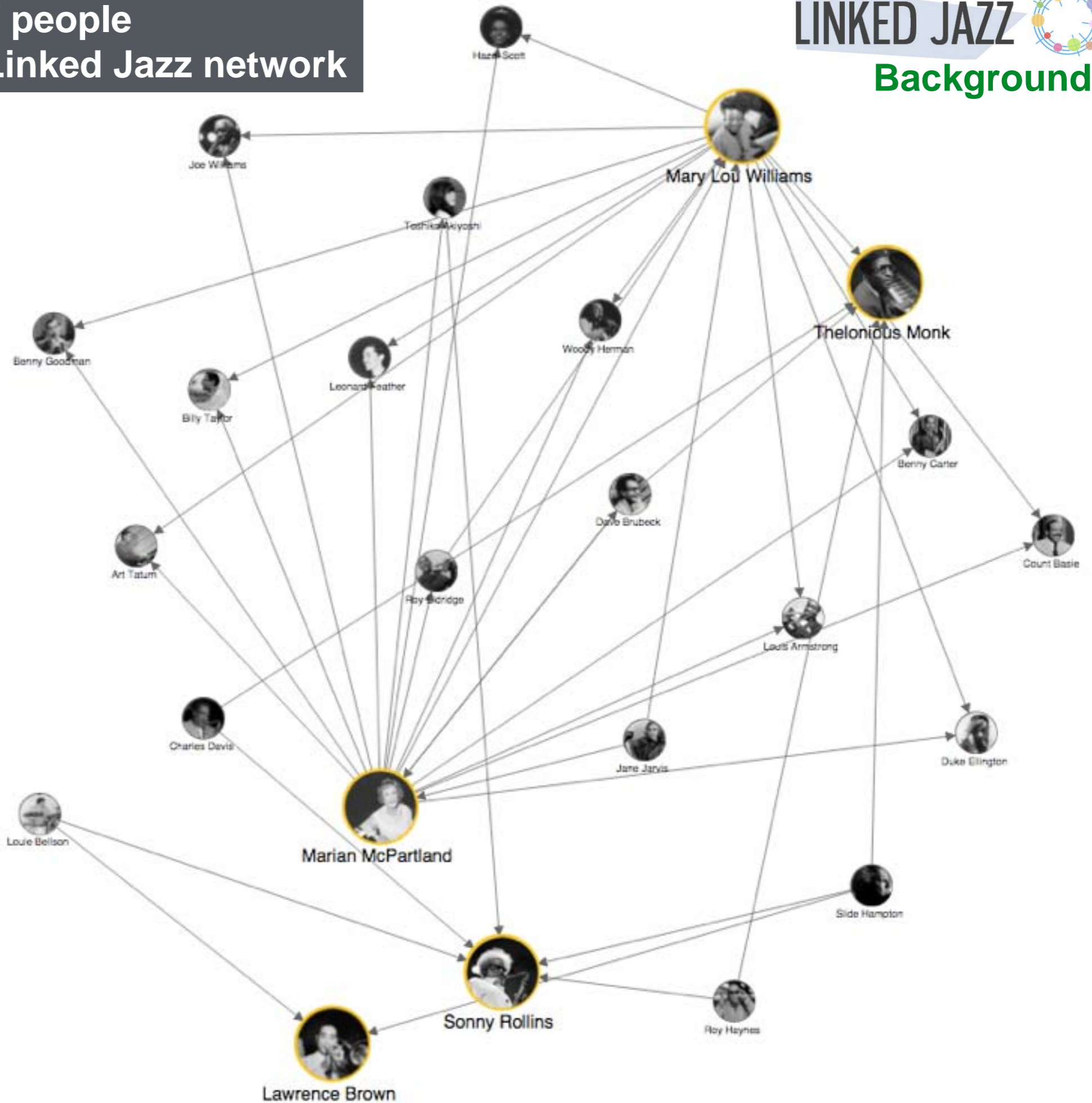


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# The constellation of people represented in the Linked Jazz network



**Representing** the rich social network  
of **relationships in jazz**

**Analyzing** cultural heritage resources to generate  
**linked data extracted** from the resource.

Using **RDF to express** those relationships.

Leveraging linked data to **combine and  
extend relationships** across resources.

**Sharing our data** with others so that it can be  
repurposed, combined, and made available in **new ways**.

What resources do we use  
to define relationships?

How is our linked data  
generated?



Transcripts of oral histories  
from jazz collections  
around the country

Vi Redd

Vi Redd was born in Los Angeles on September 20, 1928 and has enjoyed a distinguished career as a saxophonist, vocalist and educator. Her father, Alton Redd, was the famous New Orleans drummer, and her aunt, Alma Hightower educated numerous future music greats in L.A. She received her teaching degree from the University of Southern California and her varied career has taken her from elementary school and college classrooms to concert stages both here and abroad. She has recorded with Al Grey and members of the Basie band and she has released albums as a leader on United Artists and Atco. Ms. Redd has been honored by the Los Angeles Jazz Society and the Smithsonian, and has served as a consultant to the National Endowment for the Arts and the National Academy of Recording Arts and Sciences.

Vi Redd was interviewed in Los Angeles on February 13, 1999, by Monk Rowe, director of the Hamilton College Jazz Archive.

MR: We are filming today for the Hamilton College Jazz Archive in Los Angeles. I'm very privileged to have Ms. Vi Redd with me. I am very pleased to have you here today.

VR: And I'm very happy to be here.

MR: And you look appropriate for Valentine's Day too.

VR: I should say.

MR: You look great.

VR: All in red, huh? Just like my name but it's two D's.

MR: I've been reading about the L.A. jazz scene recently, and your family, you and your brother and your father, come up so often.

VR: And my aunt, Mrs. Hightower.

MR: Yes. It's quite amazing. You must have had music in your house from your first memory.

VR: Right. As far back as I can remember there was music in the house. Somebody was playing, people were coming from Louisiana who might have had some hard luck or something and they were coming to stay with us for a time, then of course my aunt, Mrs. Hightower, she stayed with us. You know they had extended families quite a bit then.

MR: And my mother used to say, when I'd say "there's too much noise in the house." And she'd say "why Lloyd Reese used to rehearse a twelve piece band in the living room. So what do you mean?" And I'm sure you've heard of Lloyd Reese also.

VR: Yes. So he rehearsed in your living room.



Interview with Vi Redd by Monk Rowe, 1999  
Hamilton College Jazz Archive



# Transcript Analyzer (TA) for machine-assisted identification and reconciliation of name entities



The screenshot displays the LINKED JAZZ interface. At the top left is the LINKED JAZZ logo. To its right are buttons for 'Load Transcript', 'Reprocess Transcript', and 'Publish'. Below these are navigation tabs: 'Names', 'Partials', 'Others', 'Meta-Structure', and 'Rules (6)'. The 'Names' tab is active, showing a list of jazz names with icons for each. The transcript on the right shows a passage with names highlighted in blue (Count Basie, Art Tatum) and orange (Buck). A dark grey box at the bottom right of the transcript area contains the text: 'Interview with Mary Lou Williams by John S. Wilson, 1973 Rutgers, Institute of Jazz Studies'.

Name	Icon
Bill Coleman	Person icon
Bill Sousa	Person icon
Billie Holiday	Person icon
Billy Taylor	Person icon
Black Actors	Person icon
Blanche Calloway	Person icon
Boo Frazier	Person icon
Brother John Sellers	Person icon
Bubber Miley	Person icon
Buck Clayton	Person icon
Bud Powell	Person icon

Proper names are located. The TA uses our existing list of jazz names to identify names and map each instance with the person's URI.



# Name control: LOD resources



Authority For: Ed Sherry

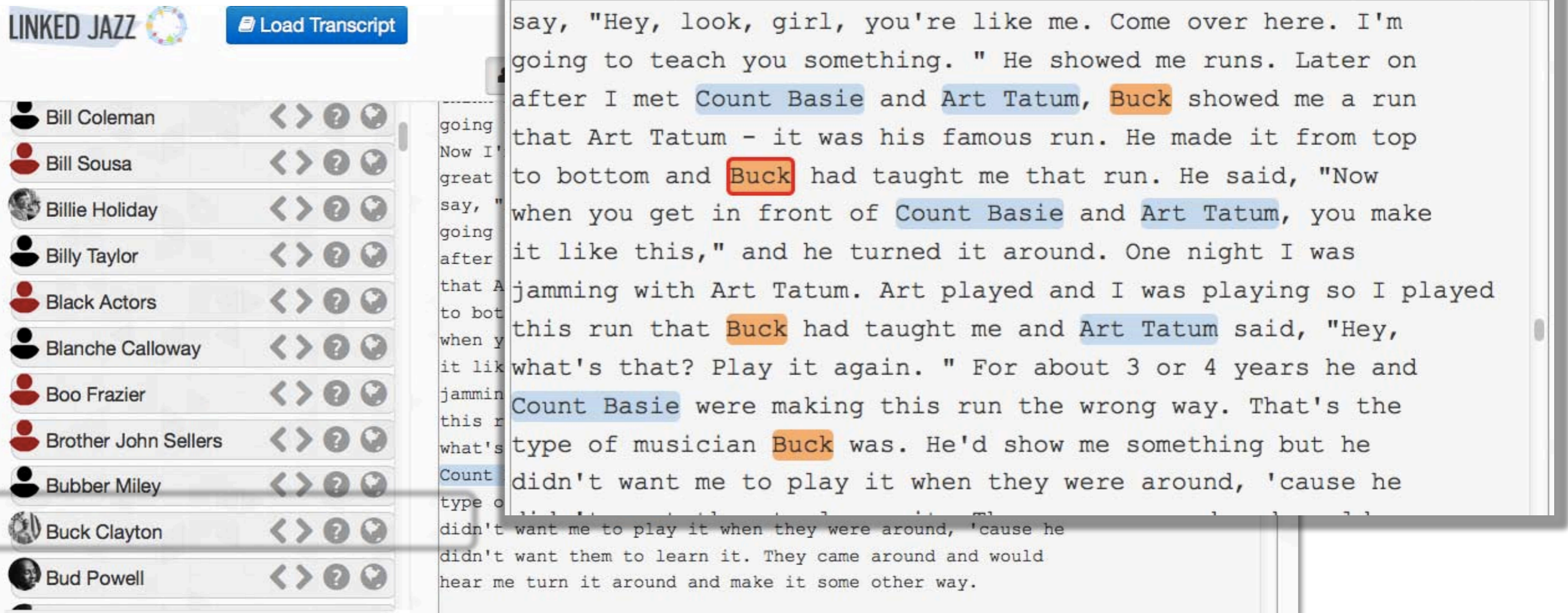
field to enter URI from name authority


option to "mint" into Linked Jazz namespace if not found elsewhere

Search: [Google](#) | [Wikipedia](#) | [Musicbrainz](#) | [LOC](#)

Close

# Name mapping allows the relationship to be automatically established in RDF



LINKED JAZZ  Load Transcript

Bill Coleman <> ?  
Bill Sousa <> ?  
Billie Holiday <> ?  
Billy Taylor <> ?  
Black Actors <> ?  
Blanche Calloway <> ?  
Boo Frazier <> ?  
Brother John Sellers <> ?  
Bubber Miley <> ?  
Buck Clayton <> ?  
Bud Powell <> ?

going  
Now I'  
great  
say, "  
going  
after  
that A  
to bot  
when y  
it lik  
jammin  
this r  
what's  
Count  
type o  
didn't want me to play it when they were around, 'cause he  
didn't want them to learn it. They came around and would  
hear me turn it around and make it some other way.

say, "Hey, look, girl, you're like me. Come over here. I'm going to teach you something. " He showed me runs. 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. He said, "Now when you get in front of Count Basie and Art Tatum, you make it like this," and he turned it around. One night I was jamming with Art Tatum. Art played and I was playing so I played this run that Buck had taught me and Art Tatum said, "Hey, what's that? Play it again. " For about 3 or 4 years he and Count Basie were making this run the wrong way. That's the type of musician Buck was. He'd show me something but he didn't want me to play it when they were around, 'cause he didn't want them to learn it. They came around and would hear me turn it around and make it some other way.

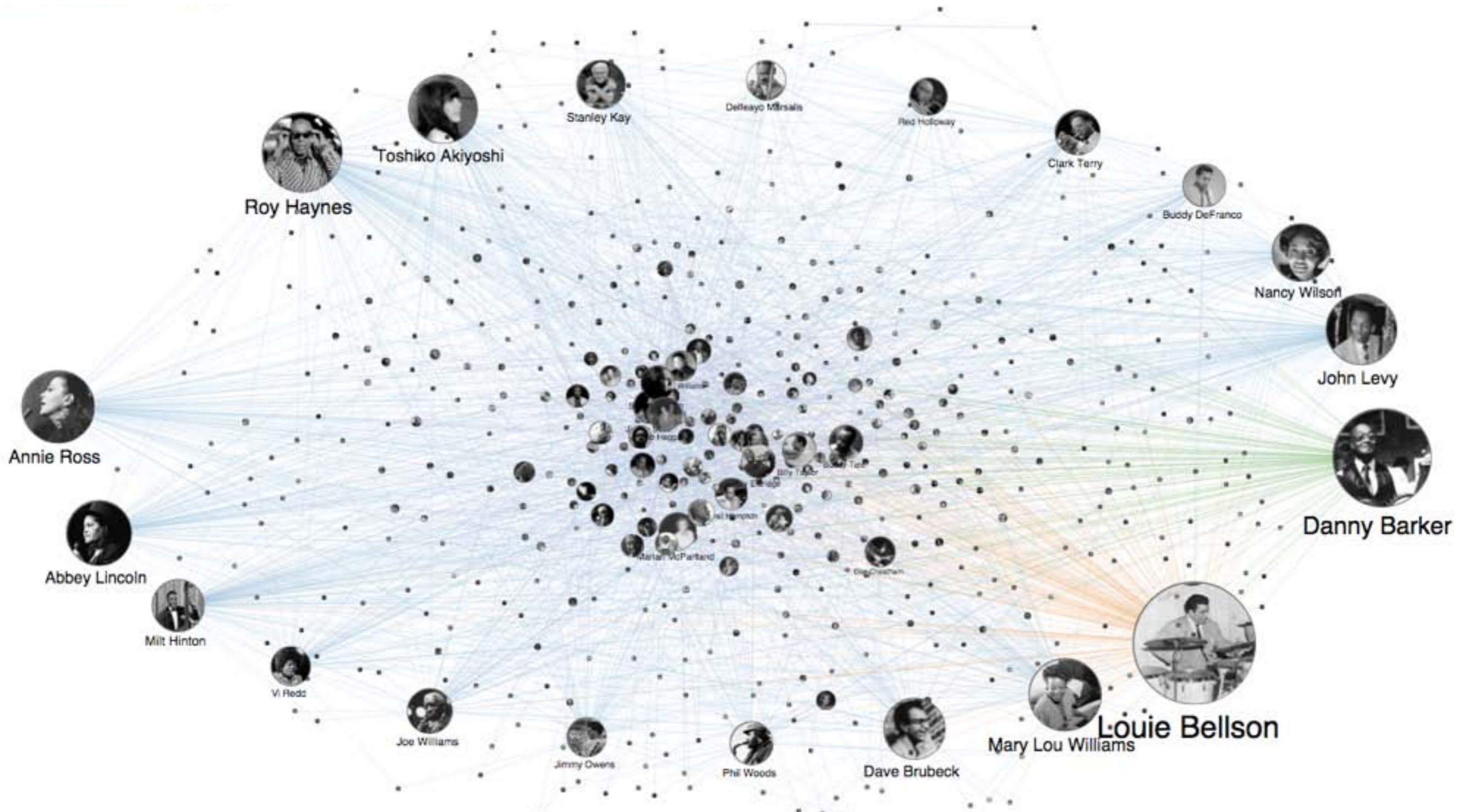
Mary Lou Williams talks about a Buck.

[http://dbpedia.org/resource/Mary\\_Lou\\_Williams](http://dbpedia.org/resource/Mary_Lou_Williams) talks about [http://dbpedia.org/resource/Buck\\_Clayton](http://dbpedia.org/resource/Buck_Clayton)

[http://dbpedia.org/resource/Mary\\_Lou\\_Williams](http://dbpedia.org/resource/Mary_Lou_Williams) <http://purl.org/vocab/relationship/knowsOf> [http://dbpedia.org/resource/Buck\\_Clayton](http://dbpedia.org/resource/Buck_Clayton)



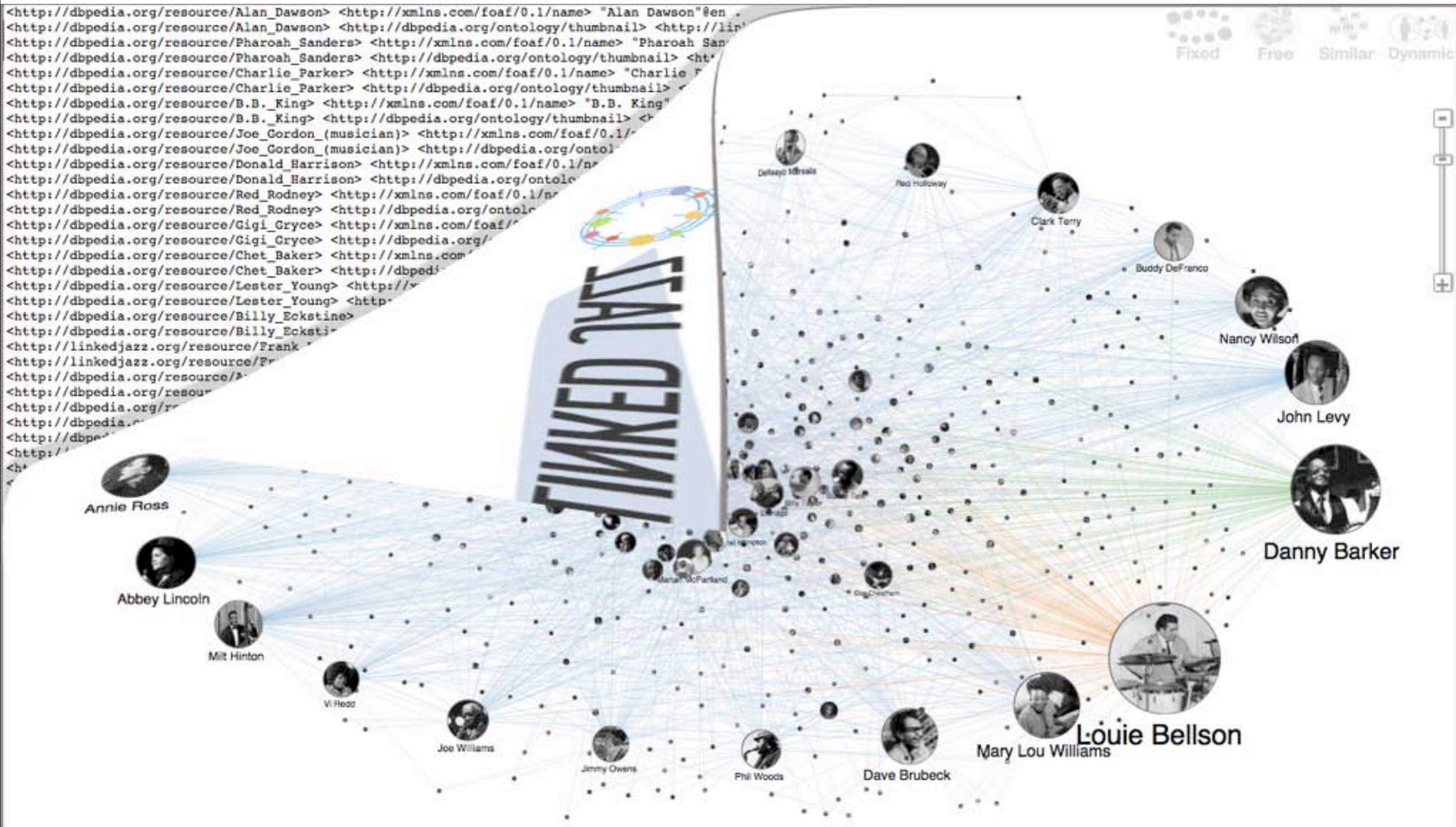
# Relationships derived from all transcripts visualized in an interactive network graph



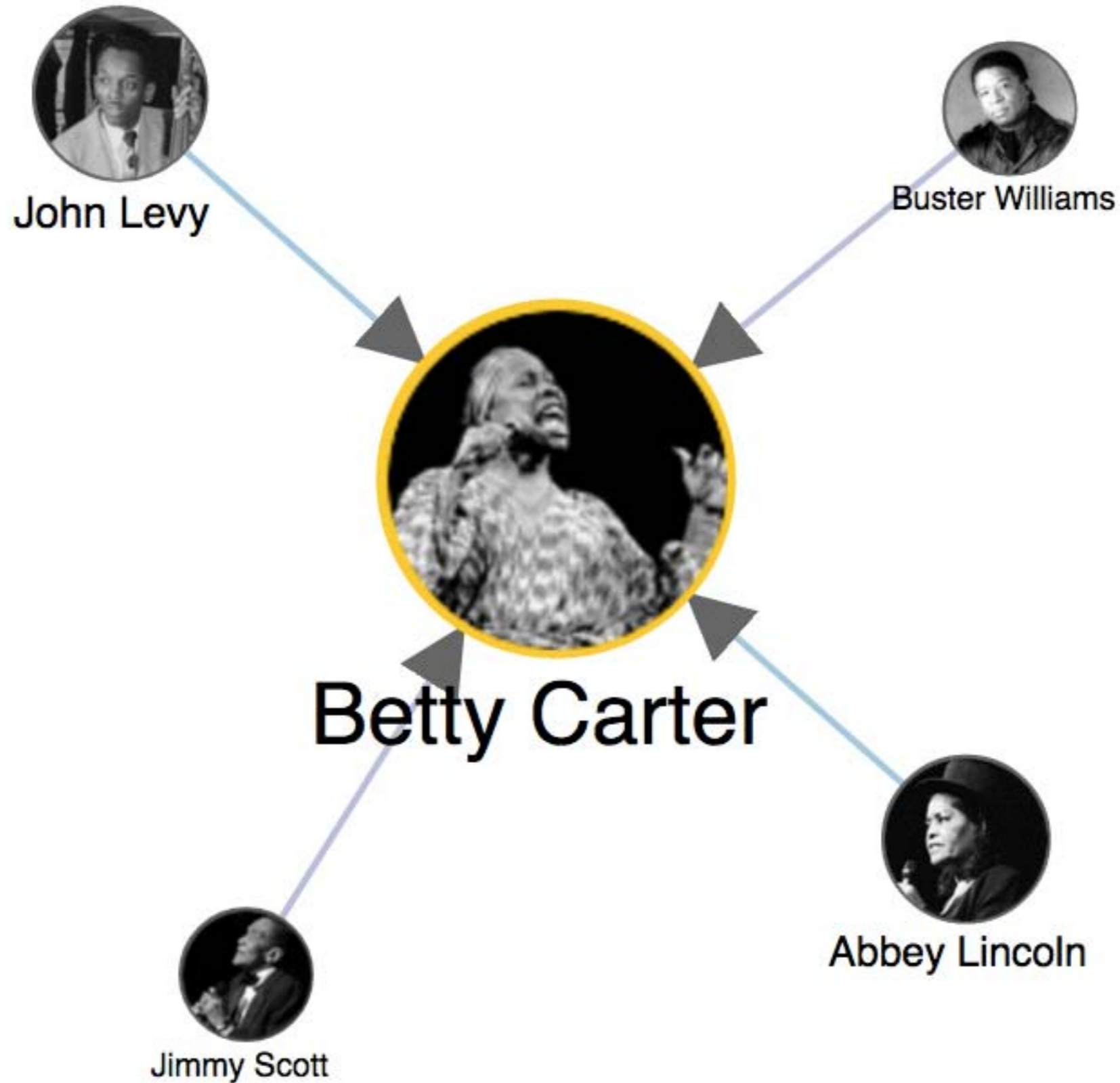
**A new way to explore resources...**



# Under the Hood







Transcript Dialog

[Transcript Source](#)



Well you worked with a great list of singers. Do you learn anything different from singers than you do from playing behind horn players?

Interviewer

I think that there's a wealth of knowledge that you learn from singers that you don't learn from horn players, or it's not as pronounced. See with singers you learn right away that you've got to play in tune. Not because they necessarily sing in tune. But in my case I spent two years with Sarah Vaughan. Sarah Vaughan not only sang in tune all the time but she had perfect pitch. So she knew when you were out of tune. Now the antithesis to that was when I worked with **Betty Carter** who always sang out of tune but you still better play in tune. And out of tune did not affect her effectiveness. It was sort of like an art form for her. But with **Betty Carter**, she was the consummate canned heat. She was like a can of Sterno. You open it up and you put a flame to it and you get this beautiful blue flame. She could swing slower than anybody I had ever played with. She could sing a ballad or she could count off a tempo that was just perfect for the tune that you're going to play. She could lay back so far you'd be damn near half a chorus ahead of her and she's still singing in the right place.



Buster  
Williams



Wow. That's amazing. Are you ever tempted, I mean the first few times that happens, are you ever tempted -- oh she's ... should I go with

Semantic data from [52nd St Crowd](#): Buster Williams played together with Betty Carter



OK

  
Jimmy Scott

Interview with Buster Williams  
by Monk Rowe, 2002  
Hamilton College Jazz Archive



***“...Betty Carter who always sang out of tune but you still better play in tune... It was sort of like an art form for her.”***

I think that there's a wealth of knowledge that you learn from singers that you don't learn from horn players, or it's not as pronounced. See with singers you learn right away that you've got to play in tune. Not because they necessarily sing in tune. But in my case I spent two years with Sarah Vaughan. Sarah Vaughan not only sang in tune all the time but she had perfect pitch. So she knew when you were out of tune. Now the antithesis to that was when I worked with **Betty Carter** who always sang out of tune but you still better play in tune. And out of tune did not affect her effectiveness. It was sort of like an art form for her. But with **Betty Carter**, she was the consummate canned heat. She was like a can of Sterno. You open it up and you put a flame to it and you get this beautiful blue flame. She could swing slower than anybody I had ever played with. She could sing a ballad or she could count off a tempo that was just perfect for the tune that you're going to play. She could lay back so far you'd be damn near half a chorus ahead of her and she's still singing in the right place.



Buster  
Williams

***“...she was the consummate canned heat. She was like a can of Sterno. You open it up and you put a flame to it and you get this beautiful blue flame.”***

Interview with Buster Williams  
by Monk Rowe, 2002  
Hamilton College Jazz Archive

## Ways we provide access to our data:

### API

<https://linkedjazz.org/api/>

Outputs as data dumps:

JSON

RDF triples

Gephi GEFX files

### SPARQL

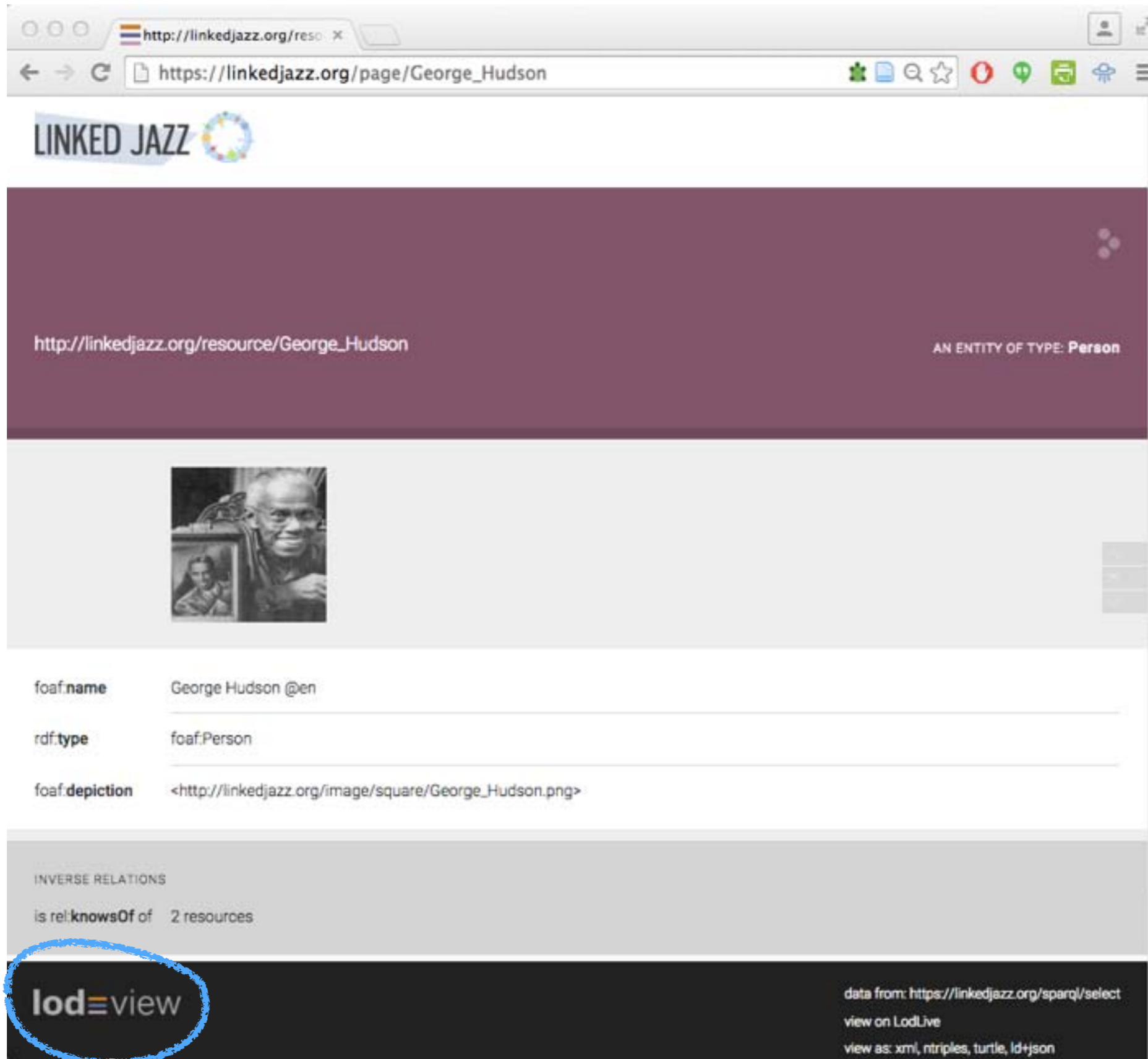
<https://linkedjazz.org/sparql/>

### Network Graphs

one-click download of the Gephi GEFX file for the displayed graph using the icon



# Dereferencing Pages for Name Entities



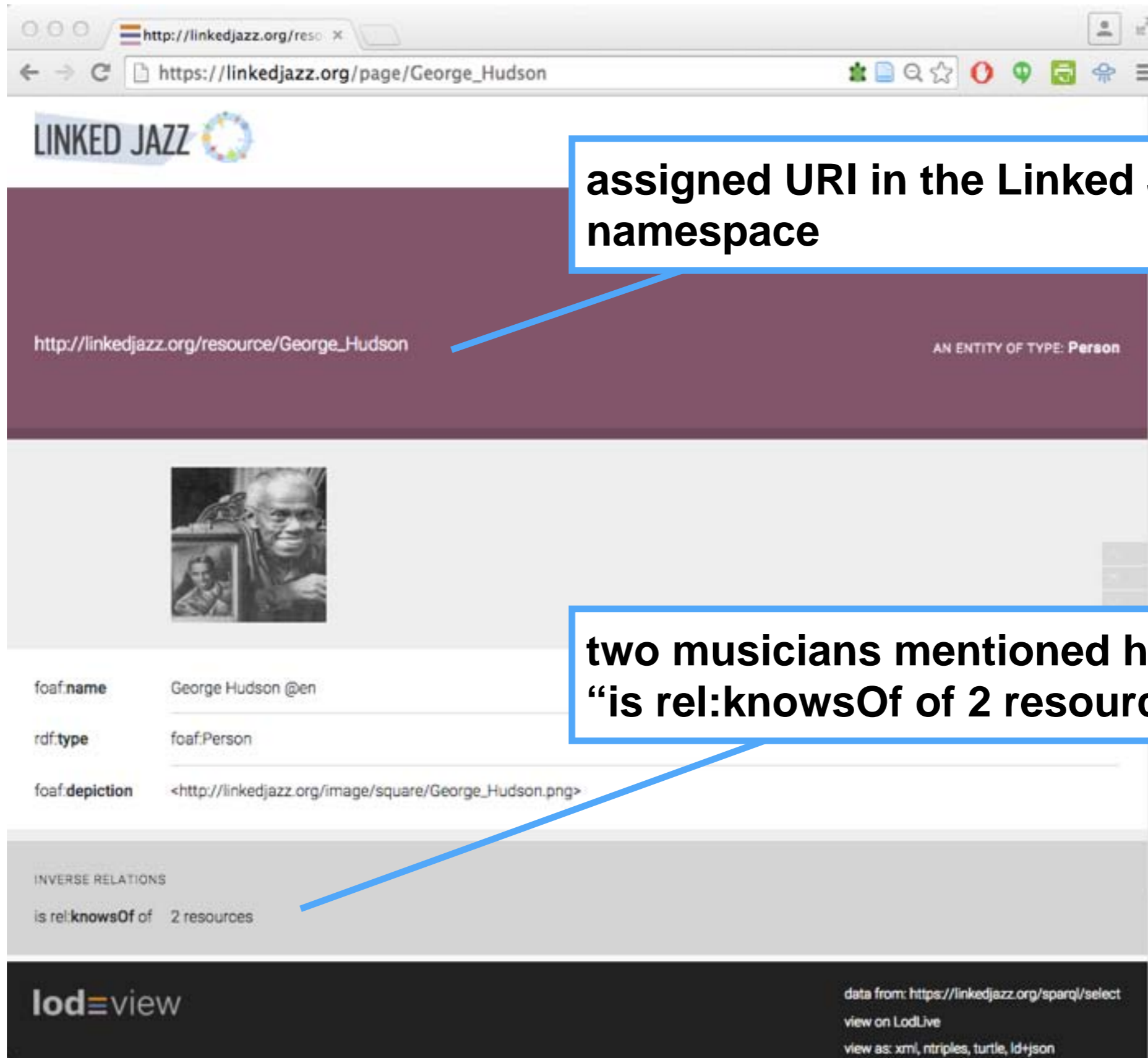
The screenshot shows a web browser window with the address bar containing `https://linkedjazz.org/page/George_Hudson`. The page header features the LINKED JAZZ logo. Below the header, a dark purple banner displays the URI `http://linkedjazz.org/resource/George_Hudson` and the text "AN ENTITY OF TYPE: Person". A central section contains a black and white photograph of George Hudson. Below the photo, the following RDF metadata is displayed:

<b>foaf:name</b>	George Hudson @en
<b>rdf:type</b>	foaf:Person
<b>foaf:depiction</b>	< <a href="http://linkedjazz.org/image/square/George_Hudson.png">http://linkedjazz.org/image/square/George_Hudson.png</a> >

Below the metadata, the "INVERSE RELATIONS" section indicates "is rel:knowsOf of 2 resources". At the bottom left, the "lodview" logo is circled in blue. At the bottom right, the text reads: "data from: <https://linkedjazz.org/sparql/select> view on LodLive view as: xml, ntriples, turtle, ld+json".



# Dereferencing Pages for Name Entities



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foaf:name	George Hudson @en
rdf:type	foaf:Person
foaf:depiction	< <a href="http://linkedjazz.org/image/square/George_Hudson.png">http://linkedjazz.org/image/square/George_Hudson.png</a> >

Below the metadata, an "INVERSE RELATIONS" section shows "is rel:knowsOf of 2 resources". The footer includes the "lodview" logo and technical information: "data from: https://linkedjazz.org/sparql/select", "view on LodLive", and "view as: xml, ntriples, turtle, ld+json".

assigned URI in the Linked Jazz namespace

two musicians mentioned him: "is rel:knowsOf of 2 resources"

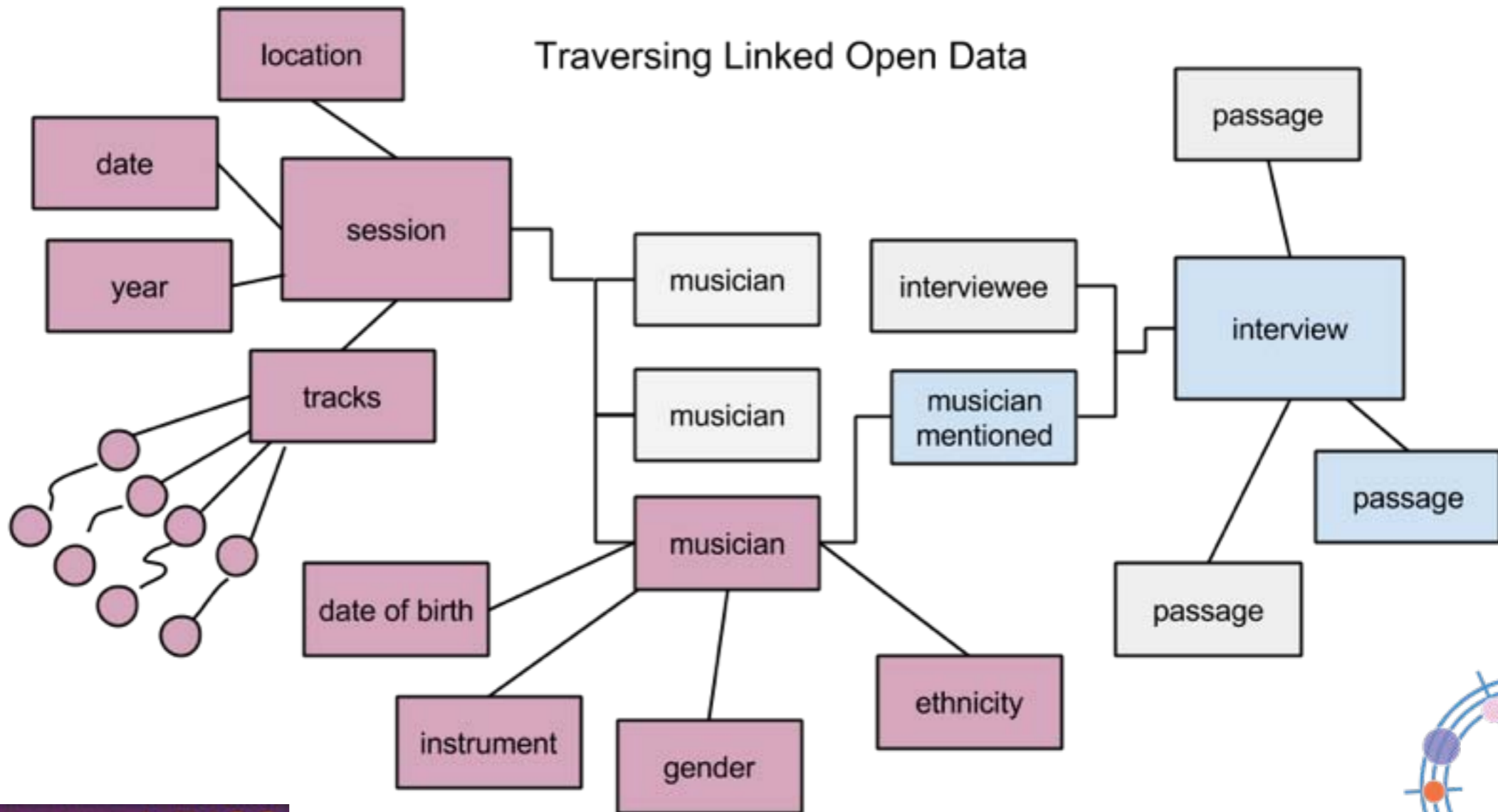
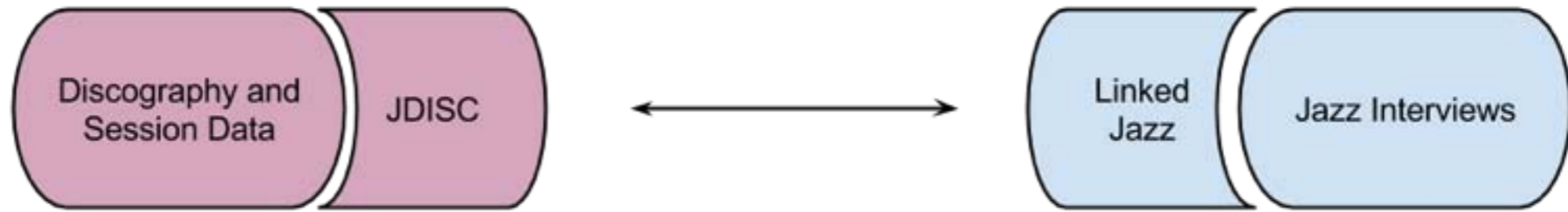
What does our Linked Open Data enable us and other users to do?



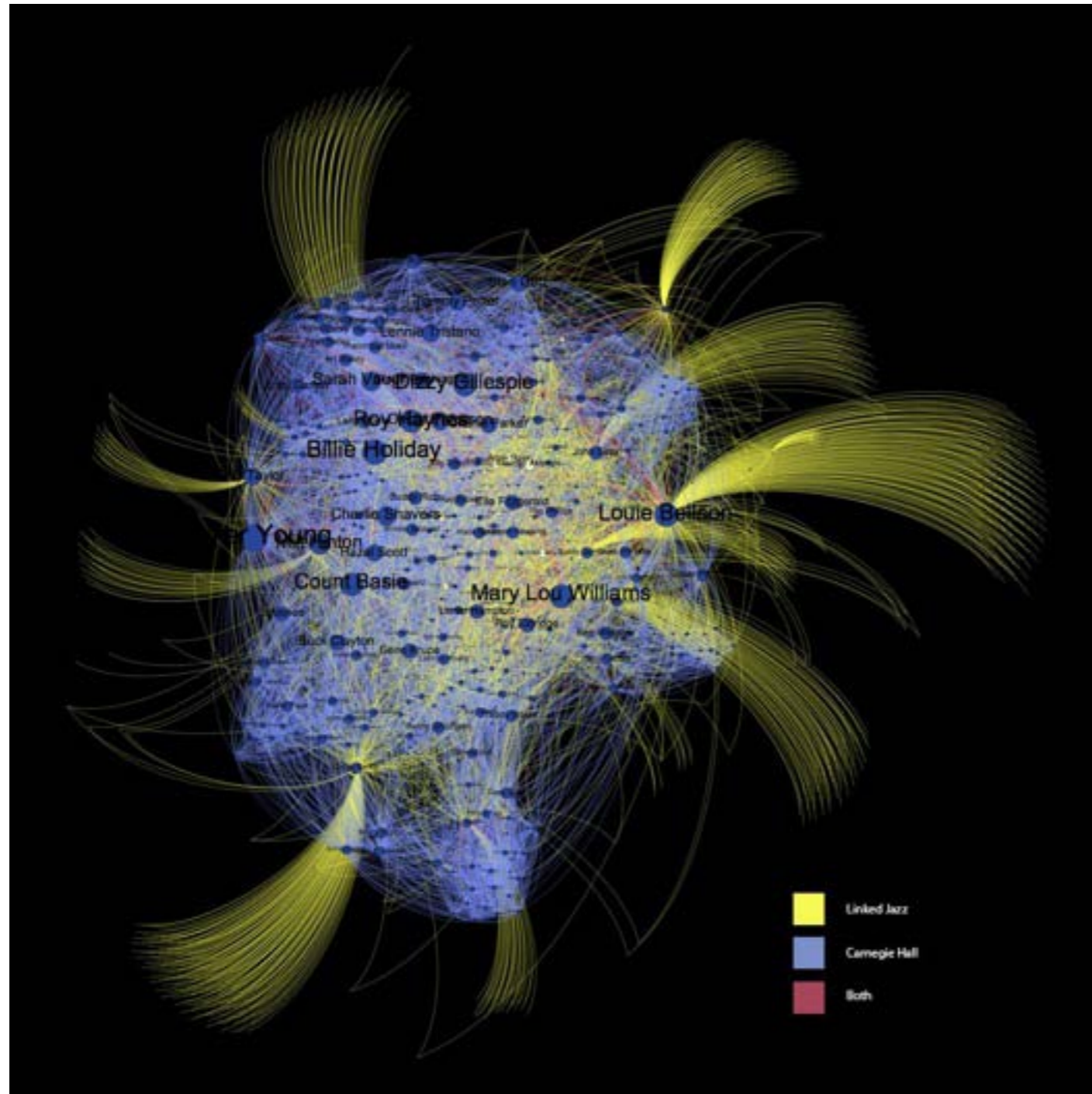
<1>

Interlink our data with other  
LOD datasets to build  
custom datasets

# Experimental interlinking examples







Exploratory network visualization of musicians in Linked Jazz transcript data and Carnegie Hall performance data

CARNEGIE HALL



by Molly Reese-Lerner and Hannah Sistrunk

For more information: [http://pfch.nyc/linked\\_jazz\\_meets\\_carnegie\\_hall/](http://pfch.nyc/linked_jazz_meets_carnegie_hall/)


## <2>

Enrich our entities with  
attributes from other LOD  
resources to create new ways  
to understand the data

# Using Linked Data to write loops to query gender data from other LOD resources

dcterms:subject  
"Female\_jazz\_musicians"

F



Python module  
musicbrainzngs used  
to access gender field


F

owl:sameAs  
( 'zitgist' )



SPARQL query to  
obtain categories to  
parse and IDs for VIAF  
and MusicBrainz

dbpedia-owl:viafId



XML record accessed  
using VIAF's API to  
retrieve gender element

"a" = F

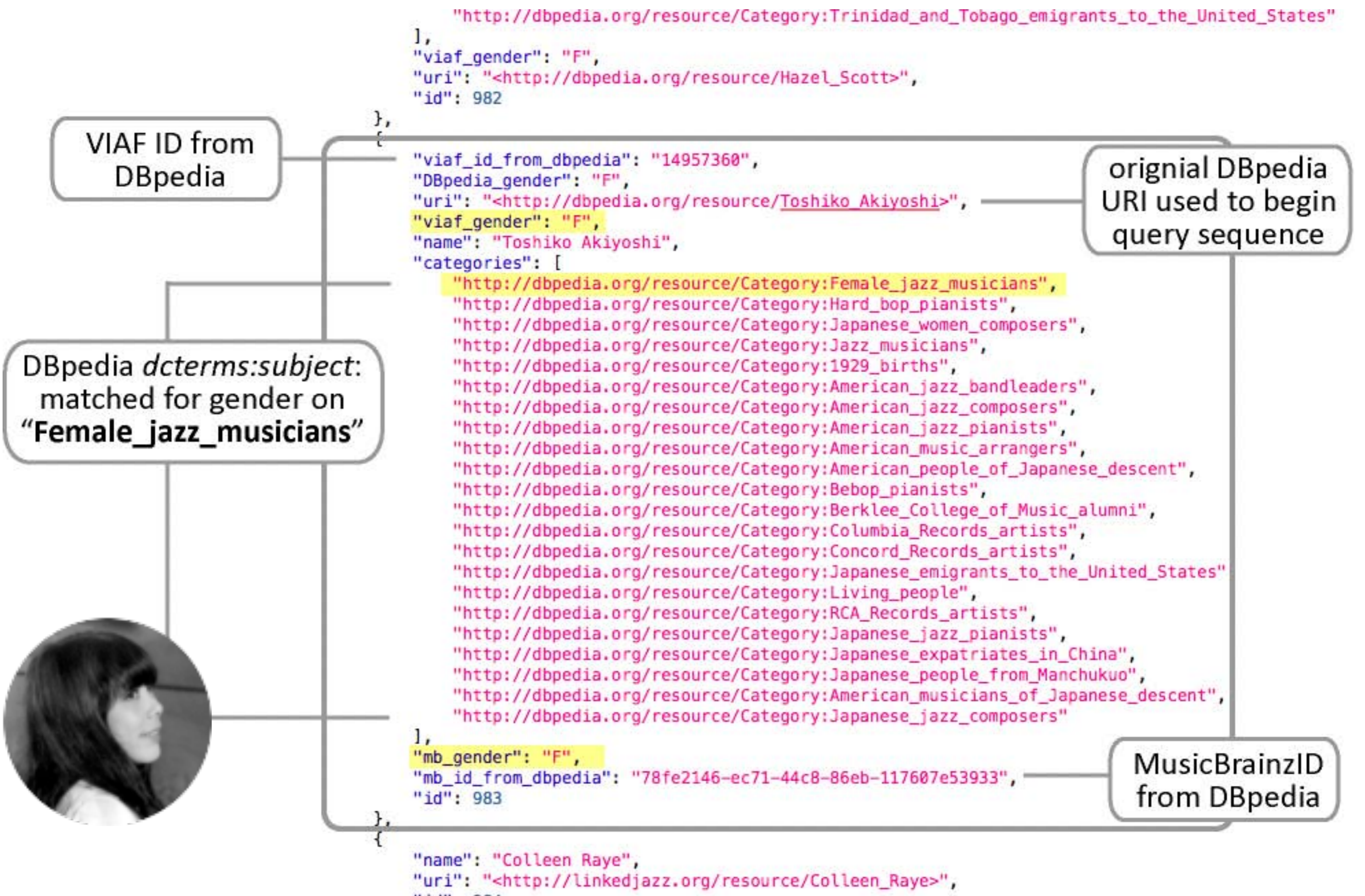
[http://dbpedia.org/resource/Toshiko\\_Akiyoshi](http://dbpedia.org/resource/Toshiko_Akiyoshi)

Toshiko  
Akiyoshi



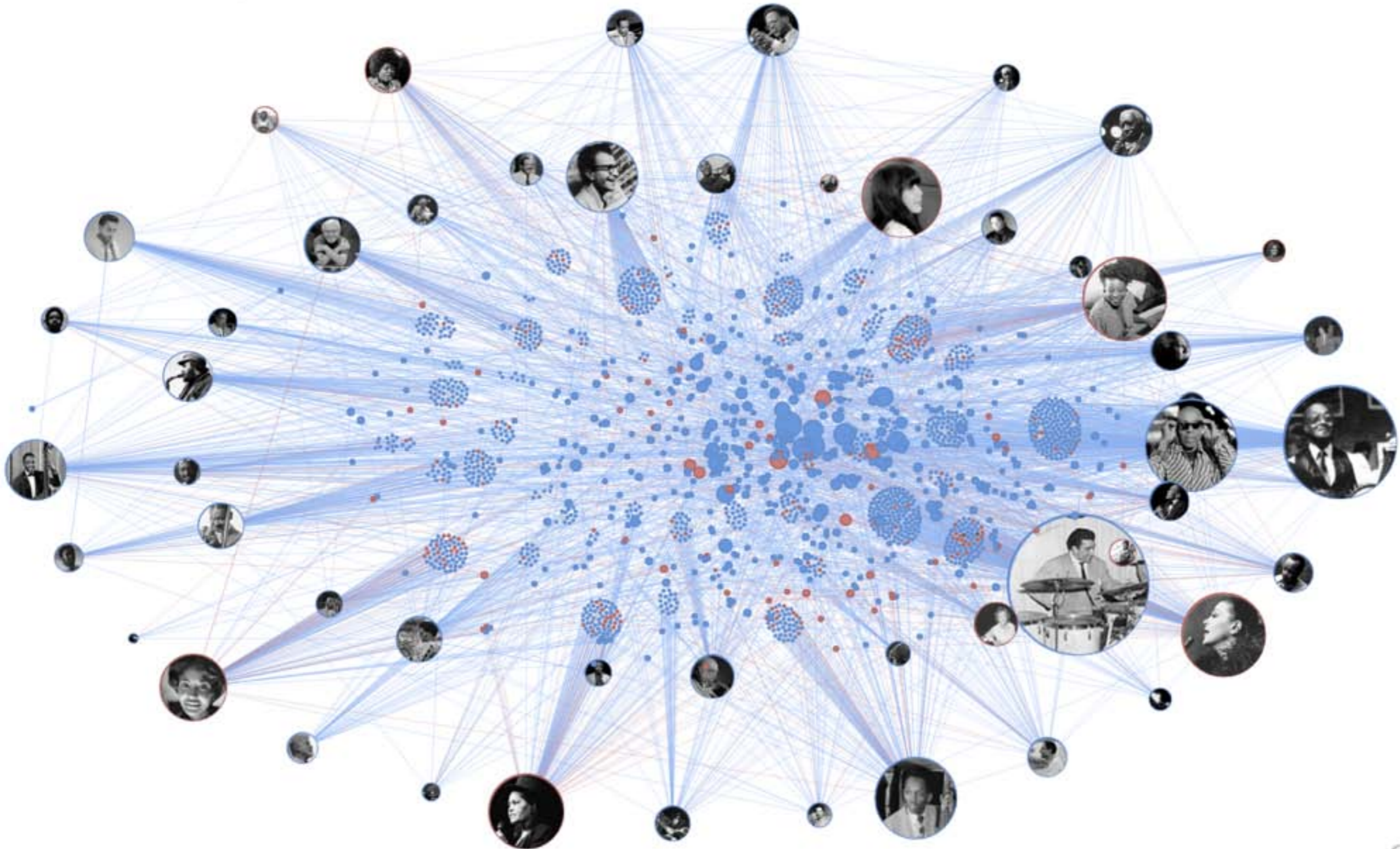


# Storing the queried data for evaluation and use



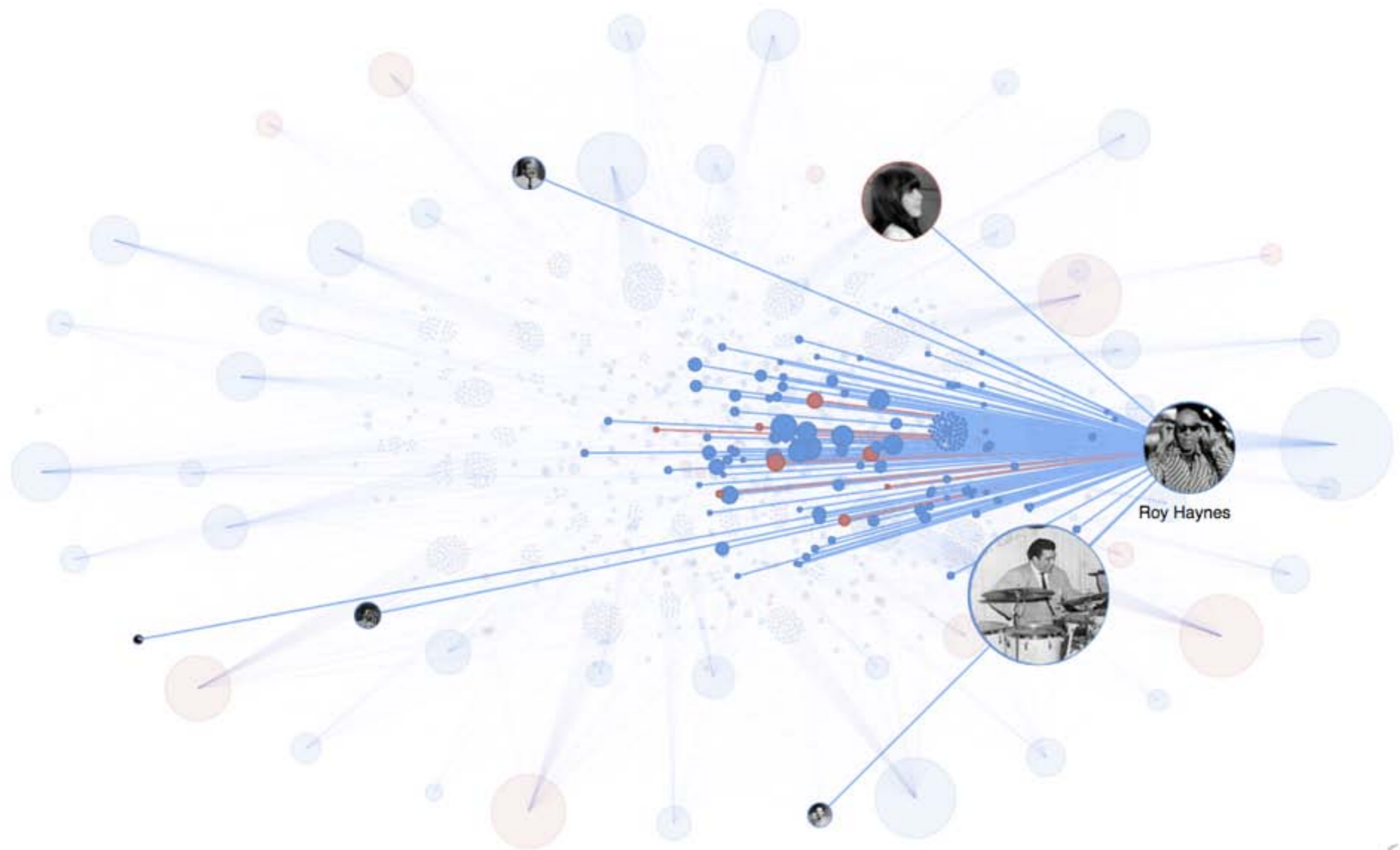


# New view of network through a gender lens



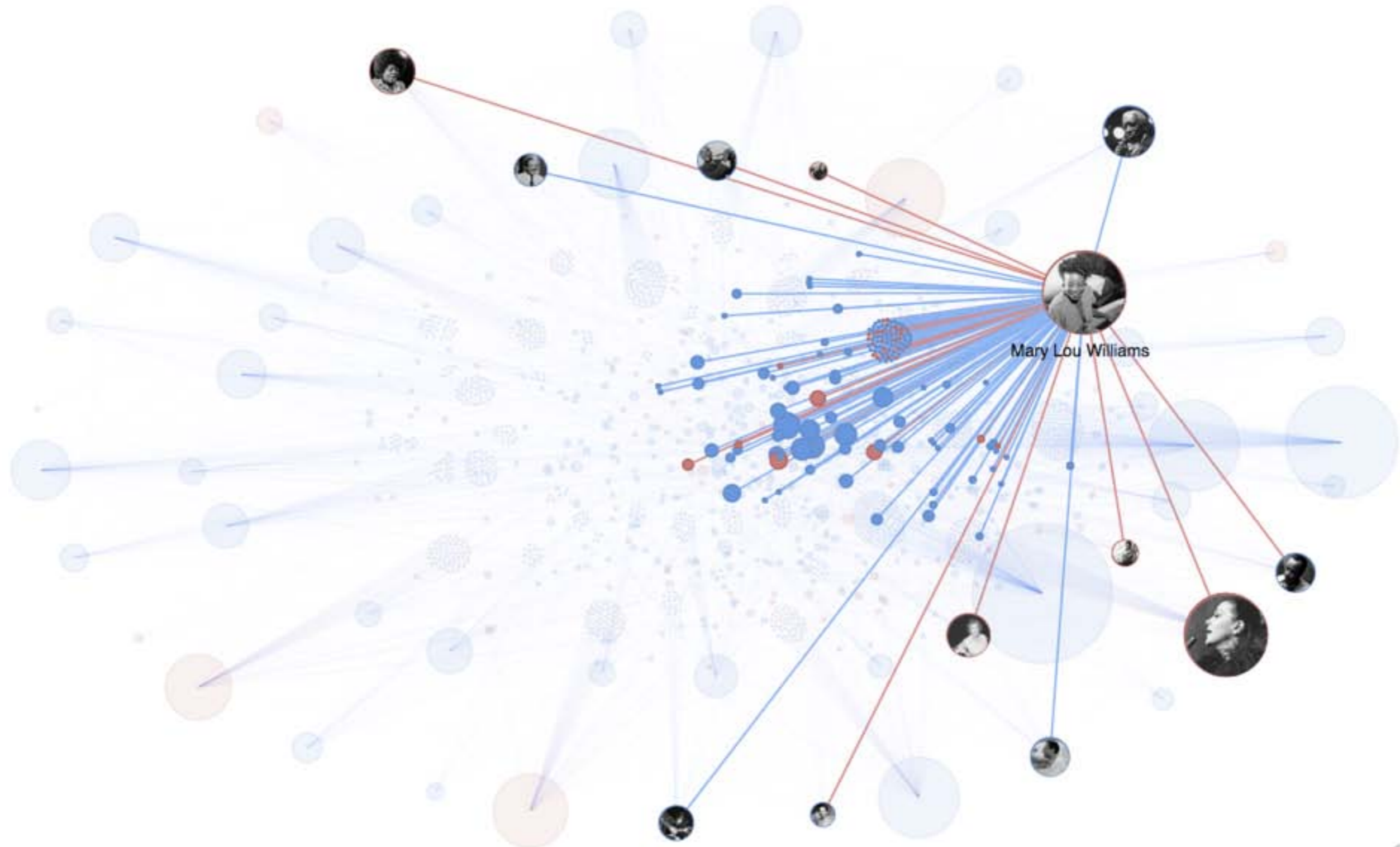


# Roy Haynes' transcript visualized with gender encoding





# Mary Lou Williams' transcript visualized with gender encoding



## Ongoing and Future Projects

- Crowdsourcing semantic refinement of relationships on 52nd Street  
<https://linkedjazz.org/52ndStreet/>
- Publishing the Linked Jazz ontology
- Interlinking with other resource types:
  - Tulane University jazz photo collections
  - William P. Gottlieb collection, Library of Congress
- Adding new attributes to our dataset, e.g. “instrument”, “date of birth”, “place of death”





# Thank you!

Find us at: [linkedjazz.org](http://linkedjazz.org)



[khwang3@pratt.edu](mailto:khwang3@pratt.edu)  
[linkedjazz@linkedjazz.org](mailto:linkedjazz@linkedjazz.org)

