The Linked Jazz Project

Cristina Pattuelli
School of Information and Library Science
Pratt Institute, New York
Discovering Jazz History through Linked Open Data

LINKED JAZZ
OVERVIEW

Linked Open Data (LOD)
Linked Jazz as a case study
Development methods and tools
Current work & future directions
Semantic Web ➔ Web of Data

Web technology to publish and connect structured data on the web.
LINKED OPEN DATA

Connect | Share | Reuse | Aggregate | Integrate
Connect | Share | Reuse | Aggregate | Integrate
LINKED OPEN DATA

Connect | Share | Reuse | Aggregate | Integrate
LINKED OPEN DATA

Connect | Share | Reuse | Aggregate | Integrate
The web as a global unified management platform and discovery space.
The web as a **global unified** management platform and discovery space.
Experimenting with the application of Linked Open Data technology to digital archives of jazz history.

Art Kane, *A Great Day in Harlem*, 1958
A Great Day in Harlem


Art Kane, *A Great Day in Harlem*, 1958
PROJECT GOALS

To provide a service useful to researchers for analyzing the history of jazz and offer a new perspective on the interpretation of archival content.

To expose archival data to the web in the form of linked open data that would facilitate cross-domain interlinking and increase visibility of cultural digital content.
Oral Histories

326 MR: That’s great. Tell me about — I’ve been waiting to get to the fifteen years you spent at Ryan’s?
327 EL: Oh yes.
328 MR: Wow. That’s a long time for a...
329 EL: Well Roy Eldridge was my — well let’s see — he was my conscience.
330 MR: Yeah?
331 EL: Yeah, he was like my — I don’t know what to call him. I had a great relationship with him.
332 EL: He was a very different person. I never played with anyone that loved to play as much as him. Never. And my greatest...
Identify the relationships among jazz artists and represent them as Linked Open Data.
CRAFTING & PROTOTYPING

- Data Preparation
- Data Analysis
- Data Curation
- Data Visualization

- Name Vocabulary
- Mapping and Curator Tool
- Transcript Analyzer
- Visualizer
- Crowdsourcing Tool
Jazz Name Vocabulary

Personal name vocabulary in the form of RDF statements including the artist’s name paired with a Uniform Resource Identifier (URI).

http://dbpedia.org/resource/Thelonious_Monk
<http://xmlns.com/foaf/0.1/name>
“Thelonious Monk”
Data curation to reduce ambiguity, inconsistencies and incompleteness of data. E.g., named entity resolution and enrichment.
1. Mapping and Curation Tool

<table>
<thead>
<tr>
<th>Name</th>
<th>Birth - Death</th>
<th>Verification Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Robert Timothy Wilkins</td>
<td>1896 - 1987</td>
<td>VI</td>
</tr>
<tr>
<td>Big Joe Williams</td>
<td>1903 - 1982</td>
<td>VI</td>
</tr>
<tr>
<td>Claude Williams</td>
<td>1908 - 2004</td>
<td>VI</td>
</tr>
<tr>
<td>Fess Williams</td>
<td>1894 - 1975</td>
<td>VI</td>
</tr>
<tr>
<td>Harold Ivory Jr' Williams</td>
<td>1949 - 2010</td>
<td>VI</td>
</tr>
<tr>
<td>Joe Williams</td>
<td>1918 - 1999</td>
<td>VI</td>
</tr>
<tr>
<td>Johnny Williams</td>
<td>1905 - 1984</td>
<td>VI</td>
</tr>
<tr>
<td><strong>Mary Lou Williams</strong></td>
<td><strong>1910 - 1981</strong></td>
<td>VI</td>
</tr>
<tr>
<td>Paul Williams</td>
<td>1915 - 2002</td>
<td>VI</td>
</tr>
<tr>
<td>Richard Williams</td>
<td>1931 - 1985</td>
<td>VI</td>
</tr>
<tr>
<td>Robert Pete Williams</td>
<td>1914 - 1980</td>
<td>VI</td>
</tr>
<tr>
<td>Skinny Williams</td>
<td>1916 - 1994</td>
<td>VI</td>
</tr>
</tbody>
</table>

Mary Lou Williams (May 8, 1910 – May 25, 1981) was an American jazz pianist, composer, and arranger. Williams wrote hundreds of compositions and arrangements, and recorded more than one hundred records (in 78, 45, and LP versions). Williams wrote and arranged for such bandleaders as Duke Ellington and Benny Goodman, and she was friend, mentor, and teacher to Thelonious Monk, Charlie Parker, Miles Davis, Tadd Dameron, Dizzy Gillespie, and many others.

http://ld.loc.gov/authorities/names/n82025133
altLabel | Scruggs, Mary Elfriede, 1910-1981
prefLabel | Williams, Mary Lou, 1910-1981
INTEGRATION WITH NAME VARIANTS

<skos:inScheme rdf:resource="http://viaf.org/authorityScheme/LC"/>
  <skos:altLabel>Ellington, Edward Kennedy, 1899-1974</skos:altLabel>
  <skos:altLabel>Éllington, Diuk, 1899-1974</skos:altLabel>
  <skos:altLabel>Turner, Joe, 1899-1974</skos:altLabel>
  <skos:altLabel>Greer, Sonny, 1899-1974</skos:altLabel>
  <skos:altLabel>Ellington, Obie Duke, 1889-1974</skos:altLabel>
  <skos:altLabel>Duke, Obie, 1889-1974</skos:altLabel>
<skos:exactMatch rdf:resource="http://id.loc.gov/authorities/names/n50080187"/>
Transcript Analyzer

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

"...going with Bubbles. He'd come to Pittsburgh and he'd say, 'Now I'm going to teach you some of my things.' Buck was a great teacher for me. We'd be in the Subway jamming and he'd 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."
“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.”
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.
Interactive Visualization Tool

http://linkedjazz.org/network/
Machine + Human-Driven Approach

Automation and human curation

Automated techniques used to generate a unspecified social network.

Crowdsourcing approach to help reliably identify the nature of the personal and professional relationships between people.
4 Crowdsourcing Tool
LINKED JAZZ

52nd ST

Revealing the relationships of the jazz community
Harold Ousley talks about Monty Alexander

The mayor at that time.

Was the mayor at that time. And the bus was on strike, the taxis were on strike, the subway. I had to walk from 95th Street all the way down to 31st Street. We were working in a club in a building down there. And then I worked other jobs around New York City with him. So that was a great experience. We had a lot of wonderful musicians in that band, George Coleman, the other saxophonist, and me. But they had a lot -- it was a good experience, wonderful. You note one thing, you begin to -- that's another level on the business because you're playing in venues that you don't get a chance to be in when you're trying to get to places. You know it's the top level basically. Carol Burnett had a party out in California that the band was invited to. So everywhere that Count Basie went it was a top place. Same way with Lionel Hampton. So you get to experience that and meet people and just see what that setting is about. And it's a wonderful experience.

And gosh, you made quite a bit of music with Jack McDuff.

Oh yeah, Brother Jack McDuff and I met in Chicago because he lived there at the time. And he had a small band that we used to work with and rehearse. So that was my first time playing with Brother Jack McDuff. And then when I came to New York and Brother Jack McDuff came through I was affiliated with a gentleman named Lew Posterman that had a publishing company. So he would record a lot of the songs in the publishing company. And so Brother Jack McDuff recorded about three or four songs of mine, and then I recorded some other music. I had quite a few other songs that got recorded.

Yeah, you've done quite a bit of writing. Do you sit at a keyboard when you write? Or how does it evolve?

No, I write from a horn. I hear a song and when I hear it, if I feel good or get that feeling about it then I go to my horn and play it and then put it on tape so I don't forget it. And then just kind of develop it from that point. Because a lot of times a song will just keep coming back to me, you know, and so I may write it and it may take me maybe, instead of writing it in one day or one sitting it's from time to time and I get little (laughter) and then I get the completeness of the song. And then it's
ONGOING AND FUTURE WORK

LINKING NETWORKS OF PEOPLE TO NETWORKS OF INFORMATION.

• Mashups with external datasets (bibliographic and domain specific, e.g., discographies)
• BEBOP BOX for contextual data
• Wikipedia Edit-a-thons
• Educational bottega
All tools are released as open source projects.

Mash Up Our Data!
[LinkedJazz.org/api](http://LinkedJazz.org/api)
THANK YOU

Questions?

Cristina Pattuelli
mpattuel@pratt.edu
@cristinapattuel

Linked Jazz Team

http://linkedjazz.org/