Using IIIF and Wikibase to syndicate and share cultural heritage material on the Web

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Background

• **IIIF** – International Image Interoperability Framework: Consortium designed to create both community of practice as well as APIs for describing and sharing digital material on the Web

• **CONTENTdm** - OCLC's digital repository service for building and showcasing cultural heritage digital collections

• **Wikibase** – Infrastructure for working with semi-structured data (used to support Wikidata)
MASS AGGREGATION
Data Harvest

• Developed a prototype of the IIIF Change Discovery API for 13 Million CONTENTdm items

• Harvested the metadata

• Reconciled string headings to linked data URIs
  – Only looked at strings that were associated with Dublin Core fields
  – Limited those strings to ones that occurred more than 2000 times
Data exploration

• Built a prototype application to search and explore the 13 Million harvested CONTENTdm records
  – https://researchworks.oclc.org/iiif-explorer/
Findings

• It was exciting to find unexpected things in unexpected places

• Reconciliation was limited based on
  – Scale of the data
  – Heterogenous nature of metadata
  – Algorithmic approach to matching

• Exercise in harvesting and mapping record-based data for discovery
LINKED DATA FROM THE GROUND UP
Data Harvest

- Worked with 5 CONTENTdm users and selected 3 collections from each
- Manually reviewed, mapped, and reconciled metadata
- Imported the data into a Wikibase instance for management
Data explorer

• Built a new prototype application to search and explore the data ingested into the Wikibase instance
1 to 10 of 10 results for *louis armstrong*.
Louis Armstrong

Daniel Louis "Satchmo" Armstrong was a musician, composer, jazz trumpeter, bandleader, singer, soloist, film star, and comedian. Considered one of the most innovative and influential artists in jazz history, Armstrong is known for songs like "West End Blues," "Black and Blue," "La Vie En Rose" and "What a Wonderful World." By the time of his death in 1971, the man known around the world as "Ambassador Satch," was widely recognized as a founding father of jazz. His influence, as an artist and cultural icon, is universal, unmatched, and very much alive today.

date created
1944

height
8 inch

width
10 inch

part of
John W. Mosley Photograph Collection

classification used
Photographs

process or format
Black and white prints

about
Philadelphia | Entertainers | Musicians | Singers | Jazz | African Americans | Composers | African American entertainers | Jazz musicians | African American men | African American pioneers | African American icons | Composers--United States | Innovators

depicts
Louis Armstrong

More Like This
1 to 8 of 8 results for depicts:Q161624.

- Louis Armstrong
- Louis Armstrong
- Louis Armstrong
- Louis Armstrong and Jake Armstrong
- Louis Armstrong Outside of the Pyramid Club
- Louis Armstrong
- Louis Armstrong and Jake Armstrong
- Louis Armstrong
Louis Armstrong

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depicts
Louis Armstrong

More Like This
### Louis Armstrong

American jazz trumpeter, composer and singer
Satchmo | Pops | Armstrong, Louis

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**Constraint Violation Report  View**

**Statements**

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**Context and Background**

Louis Armstrong (August 4, 1901 – July 6, 1971), nicknamed Satchmo or Pops, was an American trumpeter, composer, singer and occasional actor who was one of the most influential figures in jazz. His career spanned five decades, from the 1920s to the 1960s, and different eras in jazz. Coming to prominence in the 1920s as an "inventive" trumpet and cornet player, Armstrong was a foundational influence in jazz, shifting the focus of the music from collective improvisation to solo performance. With his instantly recognizable gravelly voice, Armstrong was also an influential singer, demonstrating great dexterity as an improviser, bending the lyrics and melody of a song for expressive purposes. He was also skilled at scat singing.

Renowned for his charismatic stage presence and voice almost as much as for his trumpet-playing, Armstrong’s influence extends well beyond jazz music, and by the end of his career in the 1960s, he was widely regarded as a profound influence on popular music in general. Armstrong was one of the first truly popular African-American entertainers to "cross over", whose skin color was secondary to his music in an America that was extremely racially divided. He rarely publicly politicized his race, often to the dismay of fellow African-Americans, but took a well-publicized stand for desegregation in the Little Rock Crisis. His artistry and personality allowed him socially acceptable access to the upper echelons of American society which were highly restricted for black men of his era.

Sources: DBpedia | Wikipedia | Wikimedia Commons
About: Jazz musicians
About: African American men
About: African American pioneers
About: African American icons
About: Composes—United States
About: Innovators
About: Louis Armstrong
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Findings

• It takes a lot of human effort to create the structured data
• Wikibase is a powerful and flexible infrastructure for creating, managing, and curating structured data
• There is a lot of potential for enhancing existing metadata about cultural heritage items
Opportunities for further research

• Evaluate how to better balance algorithmic record conversion with domain knowledge expertise
• Determine how to pull apart contextual metadata and descriptive metadata
• Explore how to leverage the new contextual metadata in end-user applications
Questions?

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