Linked Open Dime Novels; or, 19th Century Fiction and 21st Century Data

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Albert Johannsen Project

CLIR awarded a Hidden Collections grant to NIU and Villanova to digitize NIU's Johannsen Collection

- Digitize 5,400 dime novels (approx. 166K pages)
- Publish Johannsen's bibliography as open linked data via dimenovels.org
- Develop contextual materials and lesson plans



Nickels and Dimes



ABOUT

Dime novely years a format of ingreastive popular fiction produced in the United States from 1868 through 1630. Available for as little as a midzel or as much as a dime, they recened up betters reguling for the masses in a way previously not possible. Originally featuring stories about the American frontier and the West, backwoodsmen and cowbost eventually gave way to rietectives, like Nid: Carter, and boy adventurers and entrepreneurs, like Frank Reads Jr. This site contains materials from two major stime novel collections in Rare. Books and Special Collections at Northern Illinois University, the Albert Johannien and Edward T. LeBland Callections. It also bosts the Johannson Project, a collaboration between NIU and Villanova University generously supported by a Digitizing Histon Collections grant from the Council on Literary and Information Resources (CLIR), Visitors may provide the entire full-text collection, explore a particular series or author, or start at our about pages to learn more obsect dime person

NEWS & UPDATES

December 21, 2917

We're recently finished spinating our holdings of Beadley Half-Dime Library, including a whopping 1.111 issues—a major milestone for the Johanness Protect! A list of missing issues can be found here.

August 30, 2017

Our vebsite was recently referigned to improve performance and responsivenesh. Several contextual escays here also been added, including Pormants, Authorship, Genres, and Scholarship. While parts of the life are till under continution, pleate let in know what you think.

June 6, 2017

We're finished adding every issue we own of New Nick Carter weekly to the collection, encompassing what J. Ramfolph Con calls the Golden Are of the character.

RECENTLY ADDED

Aloy Ate, the dook sharp, or, The parson sports mysterious mission: the romance of a share cruite for sea sharks

The ex-newstoy detective's dum, or, Bot Buckle's tip

The Broadway Sport, or Flyer Frath clear case Buffalo Bills marseya-chais, or Dick Dearborn's death-ride: the mystary of the thick mustaing New Teck Nath deaths, or The unknown three Jack Lang, the privateer rooms or The man of many names: a remainee of the Frigate United States." first profile

Sonrcher Sum, the detertire on wheels, or, The sentation at Washington Heights

\$1000 reward, or. The rival raporters sleek scoop: a story of two printers-deril detectives Reddy Ruiber, the beliboy detective, or, Chowder Johnny's coapetrille

Scaler Sam, detective of Hook and Ladder 6, or, Scorching the sheary fire-bugs

- Project launched ca. 2012 at NIU to digitize the Johannsen and Edward T. LeBlanc Collections (approx. 55K volumes)
- >7,000 dime novels available to date
- PDFs free to download, with fulltext available

https://dimenovels.lib.niu.edu

NIU Links

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dimenovels.org

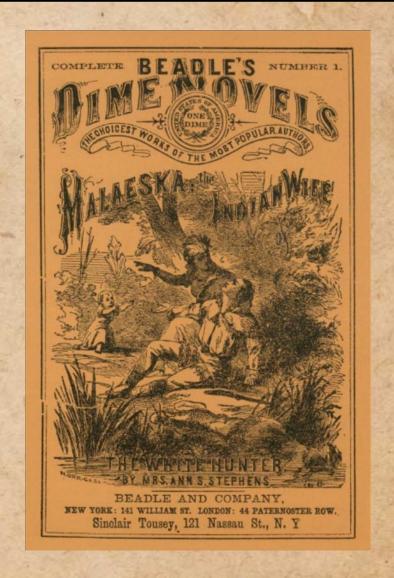


- Launched ca. 2012 by Villanova
- Online relational database with information about authors, series, publishers, stories, and editions
- Based on the work of Edward T.
 LeBlanc, a dime novel
 collector/bibliographer

https://dimenovels.org

What Are Dime Novels?

- Cheaply produced popular fiction sold in the United States in the 19th century (ca. 1860-1915)
- Popular among working classes, immigrants, and children
- Often deal with issues related to gender, class, race, and ethnicity
- Also where many genres of American popular fiction first evolved, especially the Western and detective fiction



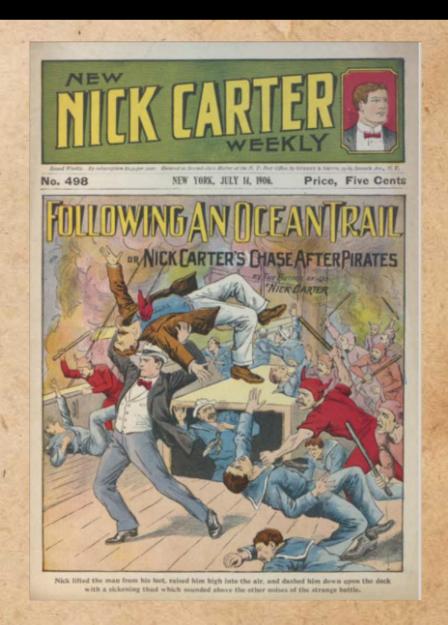
Bibliographic Nightmares

- Dime novels are always issued in a series, issues often contain multiple stories, and stories are sometimes serialized
- Stories are frequently reprinted or reissued, usually in different formats and with variations
- Stories are often attributed to pseudonyms, which may be shared by as many as a dozen real-world persons
- We usually know the real-world person responsible for a story through the work of bibliographers



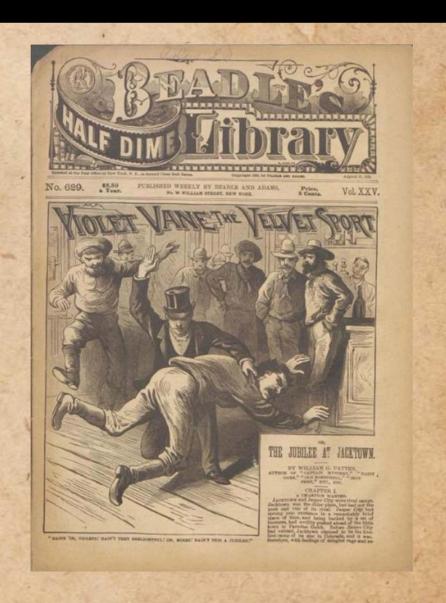
Digital Dime Novels, Everywhere

- Nickels and Dimes (Northern Illinois University)
- Dime Novel and Popular Literature (Villanova Digital Library)
- Dime Novel Collection (University of South Florida
- Nickel Weeklies (Bowling Green State University)
- Dime Novels and Penny Dreadfuls (Stanford University)
- + dozens of other collections



The Problems

- We need some way to talk about:
 - the complex relationships between stories and editions
 - the complex relationships between stories and their creators
- And we need to be able to share this information across institutions digitizing dime novels, so that we can coordinate our efforts



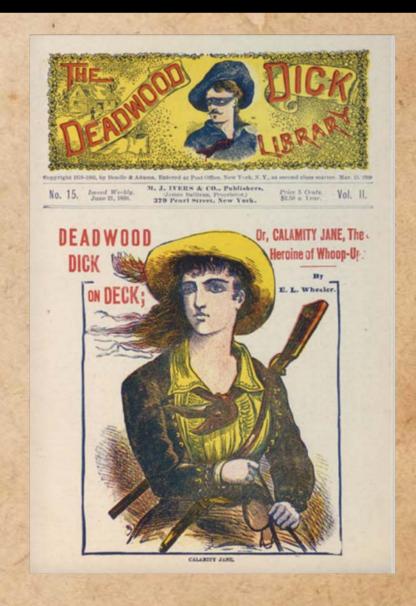
How We're Using Linked Data

- Agree on a shared meaning about what entities exist, what properties they have, and how they're related (an ontology)
- Map our existing bibliographic database at dimenovels.org to that ontology and publish it as open linked data
- Use URIs in our metadata, so that our cataloging can be used to build on dimenovels.org
- Harvest data from dimenovels.org and use it within Nickels and Dimes to expose relationships in context

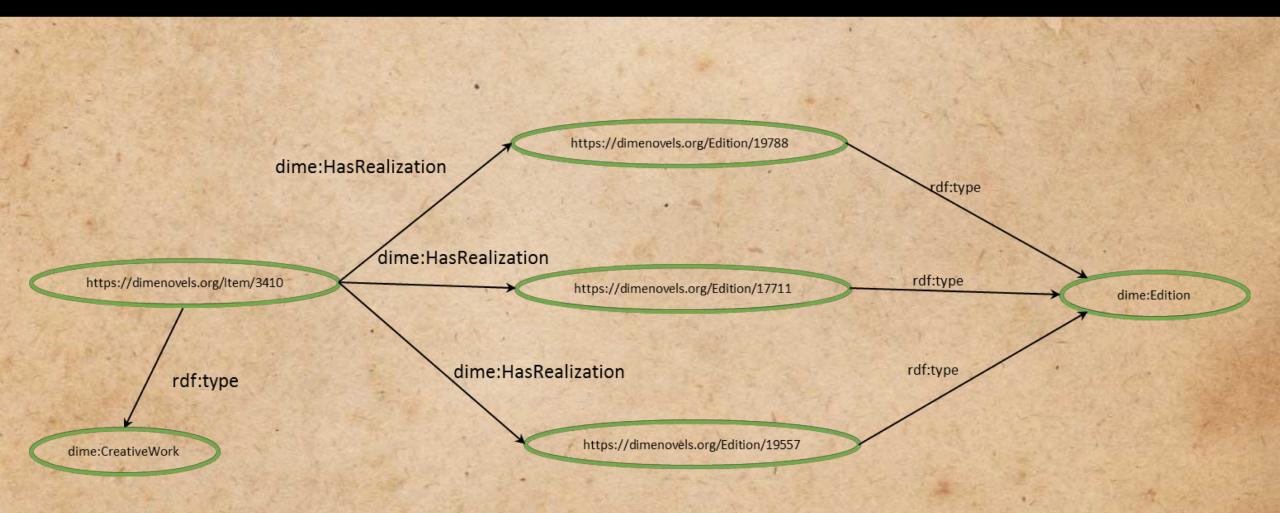


Dime Novel Ontology

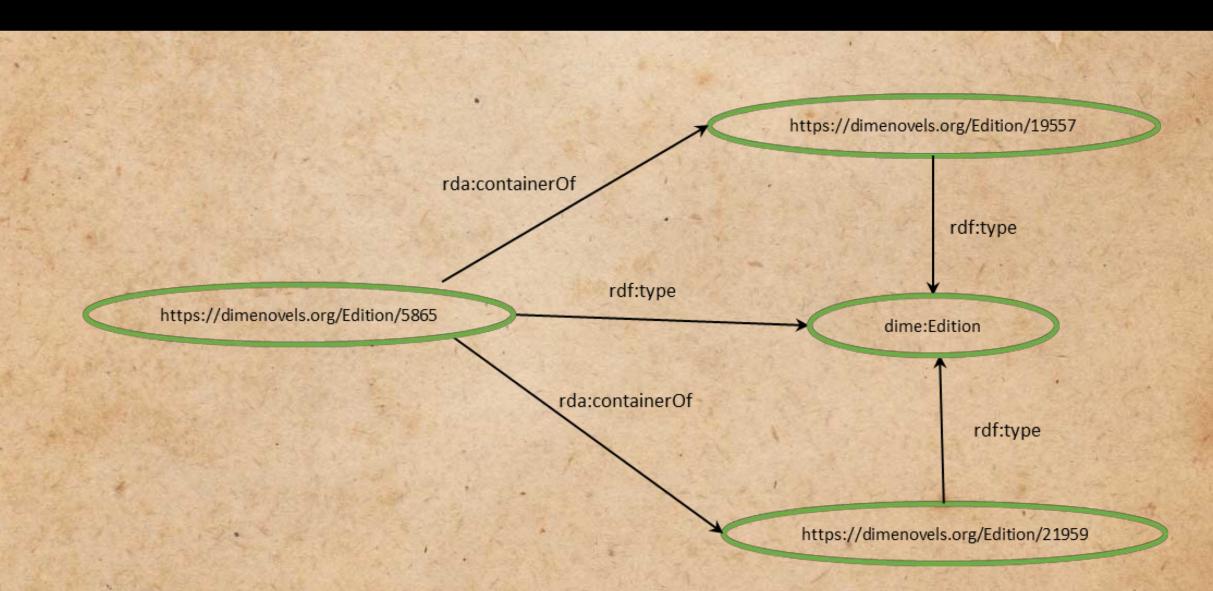
- Includes a limited number of local entities and properties, including CreativeWork, Edition, Copy, and Series
- Majority of properties taken from RDA Unconstrained
- Partial imports of FOAF, SKOS, and Dublin Core



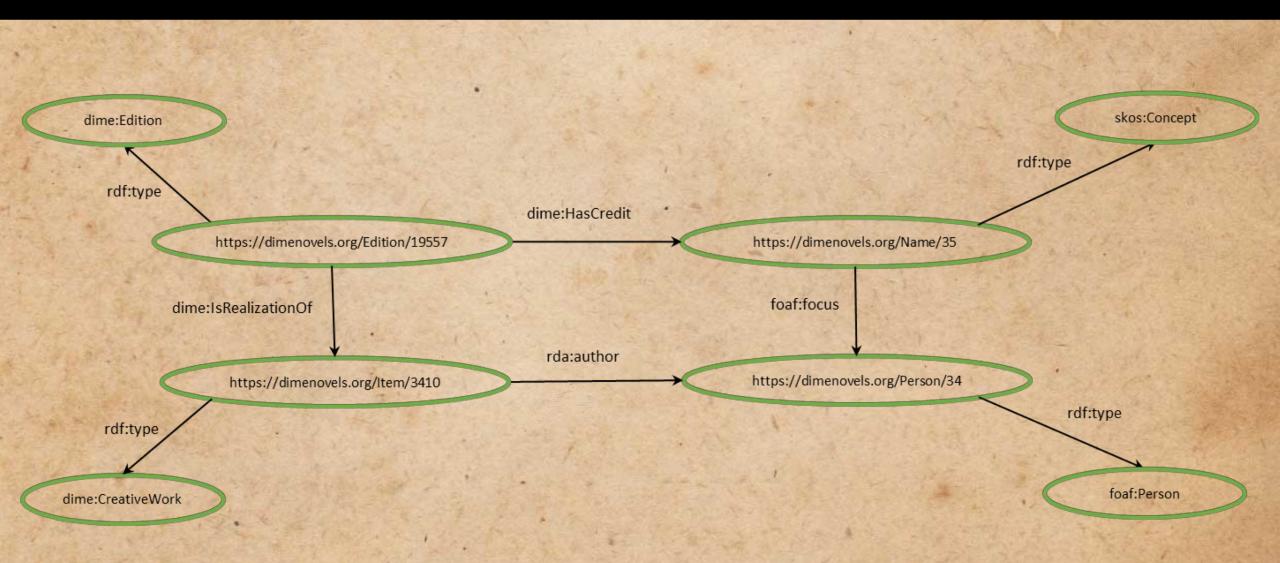
Complex Editions



Complex Containers



Complex Attributions



Publishing dimenovels.org as Linked Data

- Existing schema conceptually similar to ontology, with "pretty" URLs for all entities (CreativeWork, Edition, etc.)
- Mapped existing schema to ontology
- Created alternate views through content negotiation to render linked data at "/rdf"

```
@prefix dime: <https://dimenovels.org/ontology#> .
@prefix dc: <http://purl.org/dc/terms/> .
@prefix rda: <http://rdaregistry.info/Elements/u/> .
</https://dimenovels.org/Item/505>
   a dime:CreativeWork;
   dc:title "The Bride of the Tomb; and Queenie's Terrible Secret";
   rda:preferredTitleForTheResource "The Bride of the Tomb; and Queenie's Terrible Secret";
   dime:HasRealizationOfCreativeWork <https://dimenovels.org/Edition/534> .
```



https://dimenovels.org/Item/505

https://dimenovels.org/Item/505/rdf

Using Data from Nickels and Dimes

- NIU includes identifiers in MODS for names and subjects (through LC's reconciliation service and \$0)
- These identifiers are used to match data between Nickels and Dimes and dimenovels.org
- A custom import tool allows thousands of new dimenovels.org records to be created, uncovering numerous errors on both sides in the process



Using Data from Nickels and Dimes

```
Akatz@vu61162: /stage/local/gbdb
Adding date: 1890-08-06
Updating address to Beadle and Adams (1872-1898), No. 98 William St., New York
Adding OCLC number: 1021888561
Adding URL: https://dimenovels.lib.niu.edu/islandora/object/dimenovels:228210
Opening /tmp/pl/304.mods...
Working on Beadle's Pocket Library no. 344...
Added item ID 44317 (drummer sport, or, Captain Dasher's droll dilemma, The)
Added edition ID 81554
Attaching author ID 1508
Adding subject: Paducah (Ky.)
Adding subject: Tennessee River
Adding subject IDs: 849, 886, 1564, 1891, 899, 1557, 1534, 1394, 1803, 152, 1890, 3911, 3912
Adding date: 1890-08-13
Updating address to Beadle and Adams (1872-1898), No. 98 William St., New York
Adding OCLC number: 1021888651
Adding URL: https://dimenovels.lib.niu.edu/islandora/object/dimenovels:230322
Opening /tmp/pl/305.mods...
Working on Beadle's Pocket Library no. 345...
Found candidate(s) for match with Jaques, the hardpan detective; or, Captain Frisco, the road-agent by
Cowdrick, J. C. (Jesse C.), 1859-1899
A. Dominie Detective, or, The Deedham sensation, The by J. C. (Jesse C.) Cowdrick (confidence: 23%)
B. Billy the kid from Frisco (alt. title for Silver-Mask, the man of mystery, or, The cross of the gold
en keys) by J. C. (Jesse C.) Cowdrick (confidence: 23%)

    NONE OF THE ABOVE -- CREATE NEW ITEM.

Please select one:
```

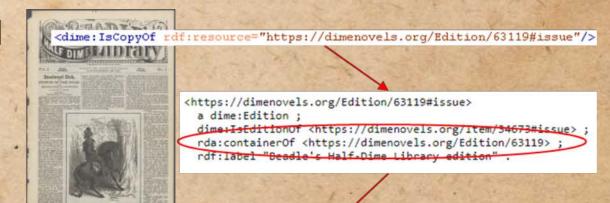
Harvesting Linked Data from dimenovels.org

- Built a linked data harvesting tool called Murpoint (because existing tools were too aggressive)
- Harvests all linked data from a single Internet domain to a single file
- Data is loaded into a Blazegraph instance at NIU for querying



Using Data from dimenovels.org

- An edition URI for the Issue is assigned to each dime novel on Nickels and Dimes via the dime:IsCopyOf property
- We search Blazegraph for all of the Work URIs that are contained in that Issue, then all related Edition URIs

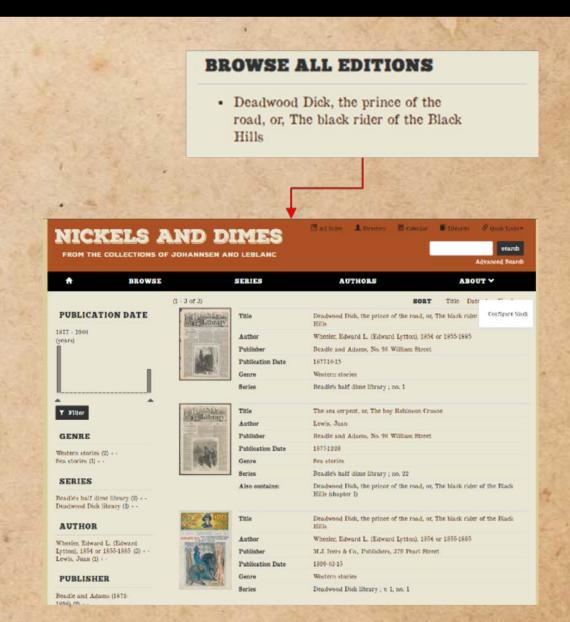


```
<https://dimenovels.org/Edition/63119>
   a dime:Edition ;
   rdf:label "Beadle's Half-Dime Library edition" ;
   dime:HasCredit <a href="https://dimenovels.org/Person/755#name">https://dimenovels.org/Person/755#name</a>;
   dime:IsRealizationOfCreativeWork
<a href="https://dimenovels.org/Item/34673">https://dimenovels.org/Item/34673</a>;
   rda:titleProper "Deadwood Dick, the prince of the road, or,
The black rider of the Black Hills";
```

```
<https://dimenovels.org/Item/34673>
a dime:CreativeWork;
dc:title "Deadwood Dick, the prince of the road, or, The black
rider of the Black Hills";
rda:preferredTitleForTheResource "Deadwood Dick, the prince of
the road, or, The black rider of the Black Hills";
dime:HasRealizationOfCreativeWork
<https://dimenovels.org/Edition/63119>,
<https://dimenovels.org/Edition/63115>,
<https://dimenovels.org/Edition/79674>,
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Using Data from dimenovels.org

- Edition URIs are used to search Nickels and Dimes for digitized copies
- If multiple editions or parts exist, those are presented to the end user for browsing
- No need to consult bibliographies or other reference sources!



Next Steps

- Map more data from dimenovels.org to ontology properties
- Make use of author and attribution data in Nickels and Dimes
- Enhance data and/or presentation with other data sets (DBPedia)
- Seek further grant funding to continue expanding the collection



Useful Links

Nickels and Dimes: https://dimenovels.lib.niu.edu/

Edward T. LeBlanc Memorial Bibliography: https://dimenovels.org/

Villanova Dime Novel Collection:

https://digital.library.villanova.edu/Collection/vudl:24093

Geeby-Deeby: https://github.com/demiankatz/Geeby-Deeby

Murpoint: https://github.com/FalveyLibraryTechnology/Murpoint