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

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What are Dime Novels?

- Cheaply produced popular fiction sold in the United States in the late 19th century (1860-1915)
- Popular among working class people and children
- Often dealt with issues of gender, class, and race
- Early American genre fiction, including westerns, romance, detective stories, and science fiction
Always issued in a series, issues often contain multiple stories, stories sometimes serialized

Frequently reprinted, usually in different formats and with major or minor variations

Stories often attributed to pseudonyms, which may be shared by several real-world persons
Johannsen and LeBlanc

The House of Adams and Its Dime and Nickel Novels
The Story of a Vanished Literature
By Albert Johannsen
Online

A project of the Northern Illinois University Libraries DeKalb, Illinois 60115
DimeNovels@nii.edu
Digital Dime Novels

- Dime Novel and Popular Literature (Villanova Digital Library)
- Nickels and Dimes (NIU Digital Library)
- Dime Novel Collection (University of South Florida)
- American Women Dime Novel Project
- Nickel Weeklies (Bowling Green State University)
- Dime Novels and Penny Dreadfuls (Stanford University)
Dime Novel Ontology

- Local classes and properties, including CreativeWork, Edition, Copy, and Series
- Intended to align with existing dimenovels.org data model
- Majority of properties taken from RDA Unconstrained
- Partial imports of FOAF, SKOS, Dublin Core
Complex Containers
Complex Attributions
Built on Geeby-Deeby (PHP/MySQL/Zend Framework 2 application) https://github.com/demiankatz/Geeby-Deeby

Already structured in an RDF-friendly way, with “pretty” URLs (e.g. https://dimenovels.org/Item/505)

Underlying database schema conceptually similar to the desired RDF representation
Incorporating RDF into Geeby-Deeby

- Introduce content negotiation (using \Zend\Http\Header\Accept)
- Create alternate views to render RDF for content (using EasyRDF library)
- Adjust database schema / data entry UI to allow external RDF associations
NIU includes linked data identifiers in MODS.
These identifiers can be used to match up data between systems.
A custom import tool was written to load NIU data; result: hundreds of new dimenovels.org records, plus numerous errors discovered and corrected on both sides.
The dimenovels.org RDF data contains information about relationships (alternate editions, other full text copies) not expressed in NIU’s MODS.

With the help of dimenovels.org Edition URIs stored in Fedora and a SPARQL query, NIU could display additional links in their user interface.
Attempt 1: Hosted at dimenovels.org

- Wrote Murpoint to harvest all RDF to a single n-triples file: https://github.com/FalveyLibraryTechnology/Murpoint
- Loaded Murpoint output into Fuseki for SPARQL query support
- This allowed a successful implementation.
- Problem: Makes NIU interface dependent on dimenovels.org infrastructure
Problem: limited available infrastructure at NIU
Solution: ARC2, a PHP/MySQL-based library and triplestore
With a simple change of SPARQL endpoint address, the existing solution continues working
Key takeaway: RDF is very portable!

Attempt 2: Hosted at NIU
Nickels and Dimes: http://dimenovels.lib.niu.edu/
Edward T. LeBlanc Memorial Bibliography: https://dimenovels.org/
Dime Novel Ontology: https://dimenovels.org/ontology
Villanova Dime Novel Collection: http://digital.library.villanova.edu/Collection/vudl:24093
Geeby-Deeby: https://github.com/demiankatz/Geeby-Deeby
Murpoint: https://github.com/FalveyLibraryTechnology/Murpoint