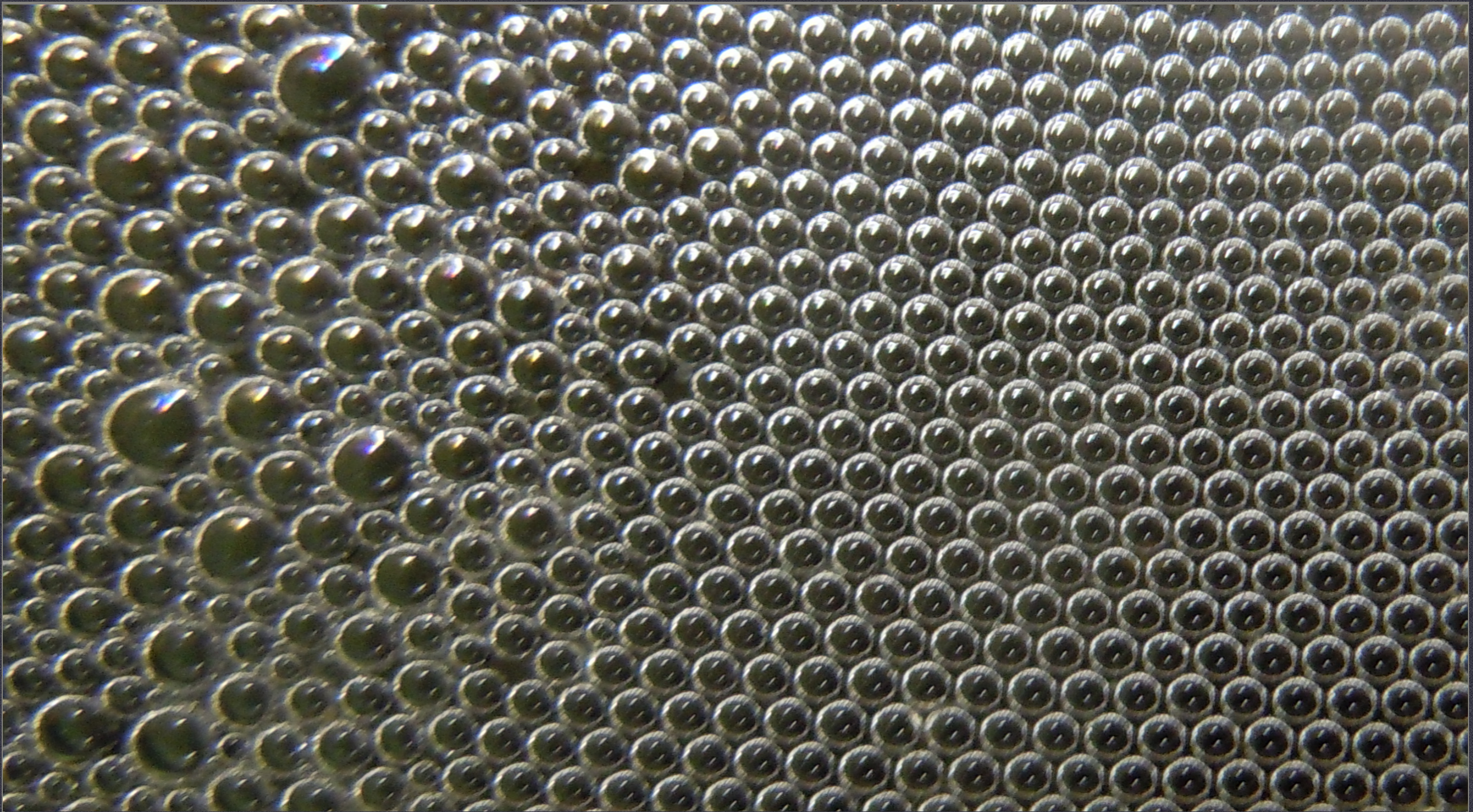


BRINGING CHAOS INTO ORDER

FUNCTIONAL DESCRIPTION FOR LIBRARY LINKED DATA

Presented by Annie Glerum, FSU Libraries



PROJECT

BRINGING CHAOS INTO ORDER

FUNCTIONAL DESCRIPTION FOR LIBRARY LINKED DATA

DATE

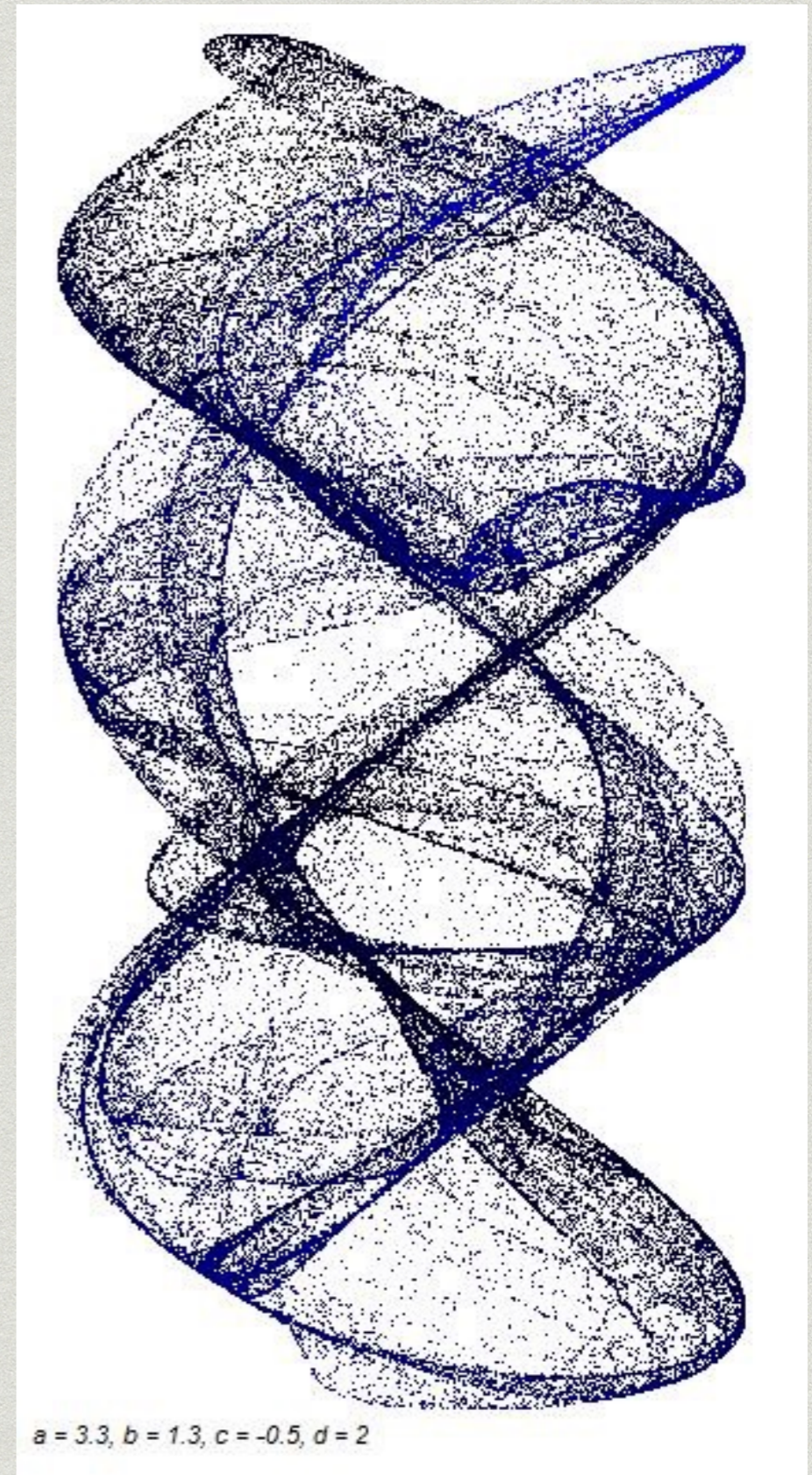
MARCH 29, 2016

CLIENT

LIS 5703, DR. RICHARD URBAN

Scope

- * FRBR and RDA
- * BIBFRAME and WorldCat Entities
- * Library of Congress Linked Data, FAST, and VIAF
- * Simplified Framework for Bibliographic Data
- * Visualizing Relationships



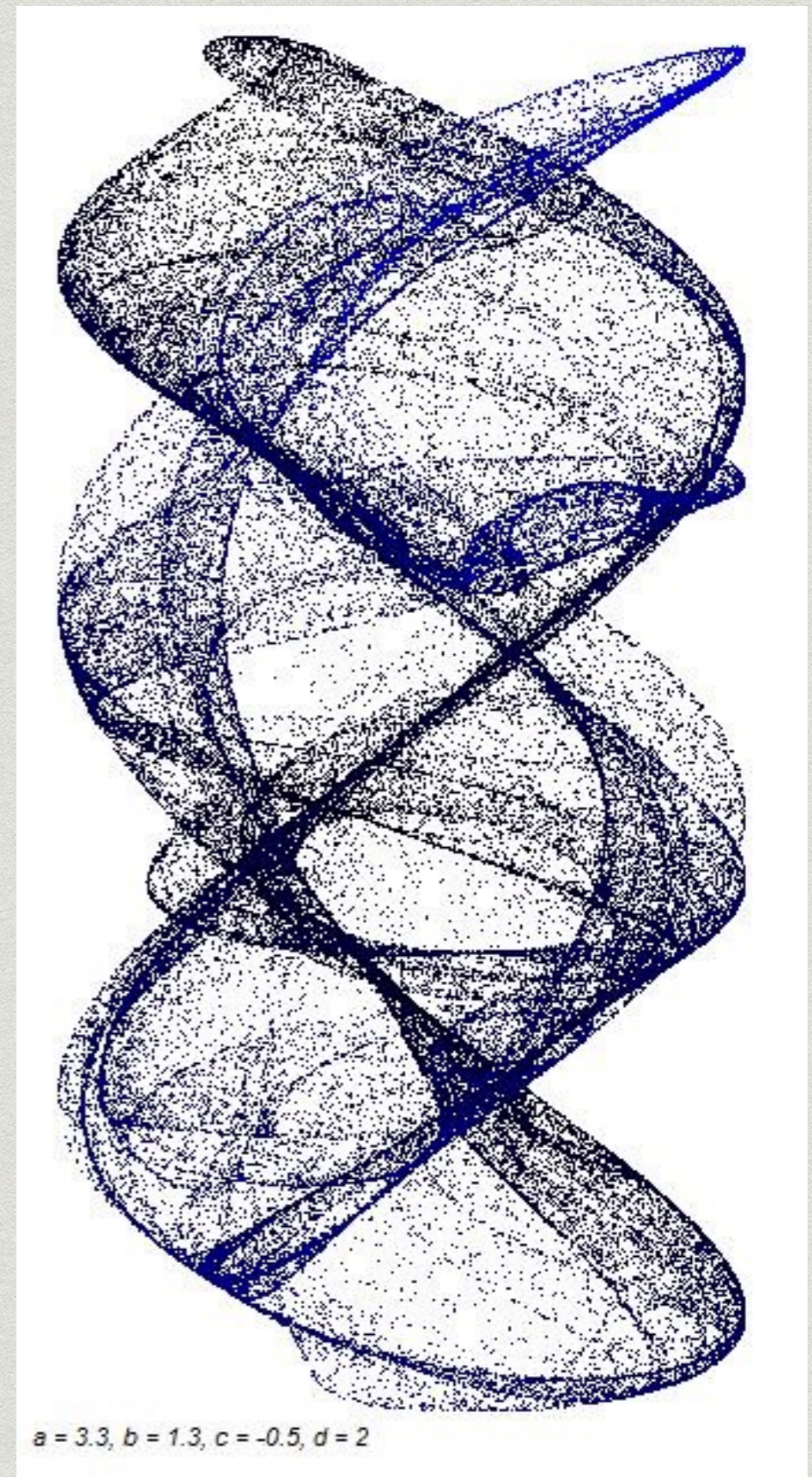
Disclaimers

Simplified Framework is...

- * For exploring concepts
- * Not a replacement for BIBFRAME

Visualizing Relationships

- * Illustrates Linked Data concepts
- * Is not functional linked data, yet



FRBR AND RDA

FRBR 1.0

Functional Requirements for Bibliographic Records

Entity-Relationship Conceptual Model

- * *Group 1:* Work, Expression, Manifestation, Item
- * *Group 2:* Person, Corporate Body, Family
- * *Group 3:* Concept, Object, Event, Place
- * *User Tasks:* Find, Identify, Select, Obtain

FRBR 2.0

Functional Requirements for Bibliographic Records: Library Reference Model (FRBR-LRM)

Entity-Relationship Conceptual Model

- * *Entities:* Res, Work, Expression, Manifestation, Item, Agent, (Person, Group), Nomen, Place, Time-span
- * *User Tasks:* Find, Identify, Select, Obtain, Explore

<http://library.ifla.org/1084/1/207-riva-en.pdf>

RDA

Resource Description and Access

Instructions for describing resources

- * Based on the original FRBR entity model
- * *RDA/ONIX Framework*: [http://
www.rdaregistry.info/rgAbout/rof.html](http://www.rdaregistry.info/rgAbout/rof.html)
- * *RDA Toolkit*: <http://www.rdatoolkit.org>
- * *RDA Vocabularies*: <http://rdvocab.info>

LC LINKED DATA, FAST, VIAF

LC Linked Data

LC Linked Data

Linked Data Service: <http://id.loc.gov>

- * More than just LC Subject Headings and Name Authority File
- * *Technical Center:* <http://id.loc.gov/techcenter/>
- * *Download authorities:* <http://id.loc.gov/download/>

LC Linked Data

File formats

Turtle (Terse RDF Triple Language): <http://www.w3.org/TR/2012/WD-turtle-20120710/>

N-Triples .nt: <http://www.w3.org/TR/n-triples/>

RDF (Resource Description Framework).rdfxml: <http://www.w3.org/RDF/>

OCLC FAST

FAST (Faceted Application of Subject Terminology)

OCLC Research: <http://www.oclc.org/research/themes/data-science/fast.html>

- * *searchFAST:* <http://fast.oclc.org/searchfast/>
 - URI (Uniform Resource Identifier)
- * *assignFAST:* <http://experimental.worldcat.org/fast/assignfast/>

OCLC FAST

Links to Full Record

Permanent Link: [http://id.worldcat.org/fast/\[XXX\]](http://id.worldcat.org/fast/[XXX]) —
a URI (Uniform Resource Identifier)

MARC-21 record: [http://id.worldcat.org/fast/\[XXX\]/
marc21.xml](http://id.worldcat.org/fast/[XXX]/marc21.xml)

RDF record: [http://id.worldcat.org/fast/\[XXX\]/rdf.xml](http://id.worldcat.org/fast/[XXX]/rdf.xml)

VIAF

Virtual International Authority File

VIAF home page: <http://viaf.org>

- * Search for entity-level Works and Expressions as well as names and titles
- * VIAF ID: [XXX]
- * Permalink: [http://viaf.org/viaf/\[XXX\]](http://viaf.org/viaf/[XXX])
 - URI (Uniform Resource Identifier)

BIBFRAME AND OCLC ENTITIES

BIBFRAME

LC BIBFRAME home page: <http://www.loc.gov/bibframe/>

- * *BIBFRAME Tools & Downloads:* <http://www.loc.gov/bibframe/tools/>
- * *BIBFRAME Vocabulary:* <http://bibframe.org/vocab.rdf>
- * *MARC21 to BIBFRAME examples:* <http://bibframe.org/resources/sample-oclc/exhibit.html>

WorldCat ENTITIES

WorldCat home page: <http://www.worldcat.org/>

- * *OCLC Data strategy and linked data: <http://www.oclc.org/data.en.html>*
- * *OCLC Linked Data: <http://www.oclc.org/developer/develop/linked-data.en.html>*
- * *OCLC WorldCat Entities: <http://www.oclc.org/developer/develop/linked-data/worldcat-entities.en.html>*

WorldCat ENTITIES

Harry Potter and the Philosopher's Stone
(Rowling, J. K.)

<http://worldcat.org/entity/work/id/298916>

SIMPLIFIED FRAMEWORK FOR BIBLIOGRAPHIC DATA

Simplified Bib Framework

Limited data set for a specific purpose

- * For visualizing FRBR WEMI relationships
- * Is a static data set, not an example of linked data
- * Two exchangeable formats
 - XML (eXtensible Markup Language)
 - JSON (Javascript Object Notation)

Simplified Bib Framework

Describing Works

Core Elements:

- * RDA 6.2 Title of the Work
- * RDA 6.8 Identifier for the Work
- * RDA 6.9 Content Type
- * RDA19.2 Creator Associated with the Work

Simplified Bib Framework

Describing Works (cont.)

Should be...

- * RDA 23.4.1.2.1 Identifier for the Subject
- * RDA 23.4.1.2.2 Authorized Access Point Representing the Related Subject

However, with the current practice of manifestation level description (both MARC and MODS), subjects are assigned to manifestations.

Simplified Bib Framework

Describing Expressions

Core Elements:

- * RDA 6.11 Date of Expression
- * RDA 6.13 Identifier for the Expression
- * RDA 20.2 Contributor Associated with the Expression

Simplified Bib Framework

Describing Manifestations

Core Elements:

- * RDA 2.3 Title Statement
- * RDA 2.4 Responsibility Statement
- * RDA 2.5 Edition Statement

Simplified Bib Framework

Describing Manifestations (cont.)

- * RDA 2.8 Publication Statement:
- * RDA 2.8.2 Publication Place
- * RDA 2.8.4 Publisher's Name
- * RDA 2.8.6 Date of Publication

Simplified Bib Framework

Describing Manifestations (cont.)

- * RDA 2.3 Carrier Type
- * RDA 2.3 Media Type
- * RDA 2.11 Copyright Date
- * RDA 2.12 Series Statement
- * RDA 2.15 Identifier for the Manifestation

Simplified Bib Framework

[http://
myweb.fsu.edu/
aglerum/
LIS5703_160329
/assets/related-
manifestations_
book1.xml](http://myweb.fsu.edu/aglerum/LIS5703_160329/assets/related-manifestations_book1.xml)

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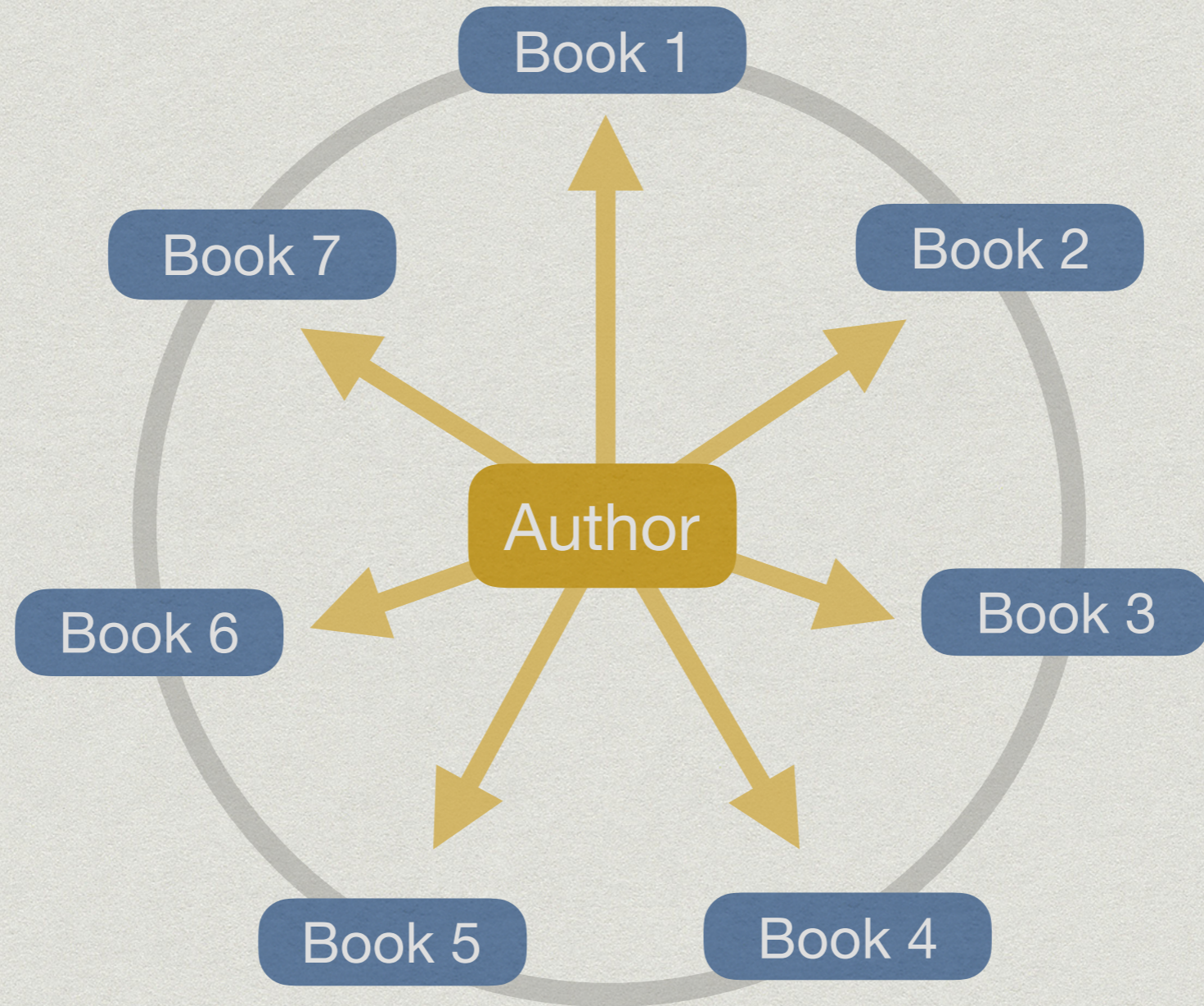
VISUALIZING BIBLIOGRAPHIC ENTITY RELATIONSHIPS

Visualizing Relationships

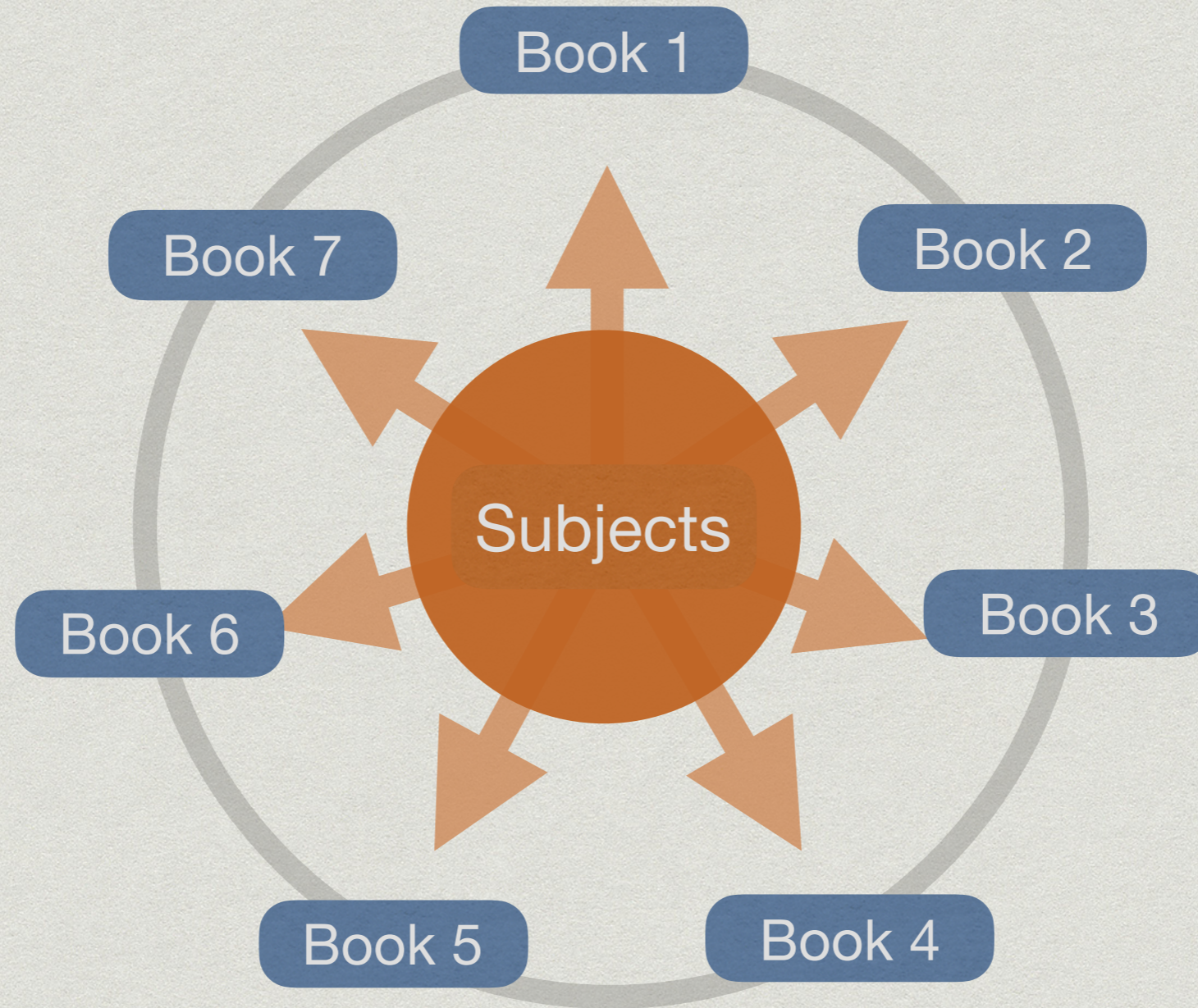
HARRY POTTER SUBJECTS CLOUD



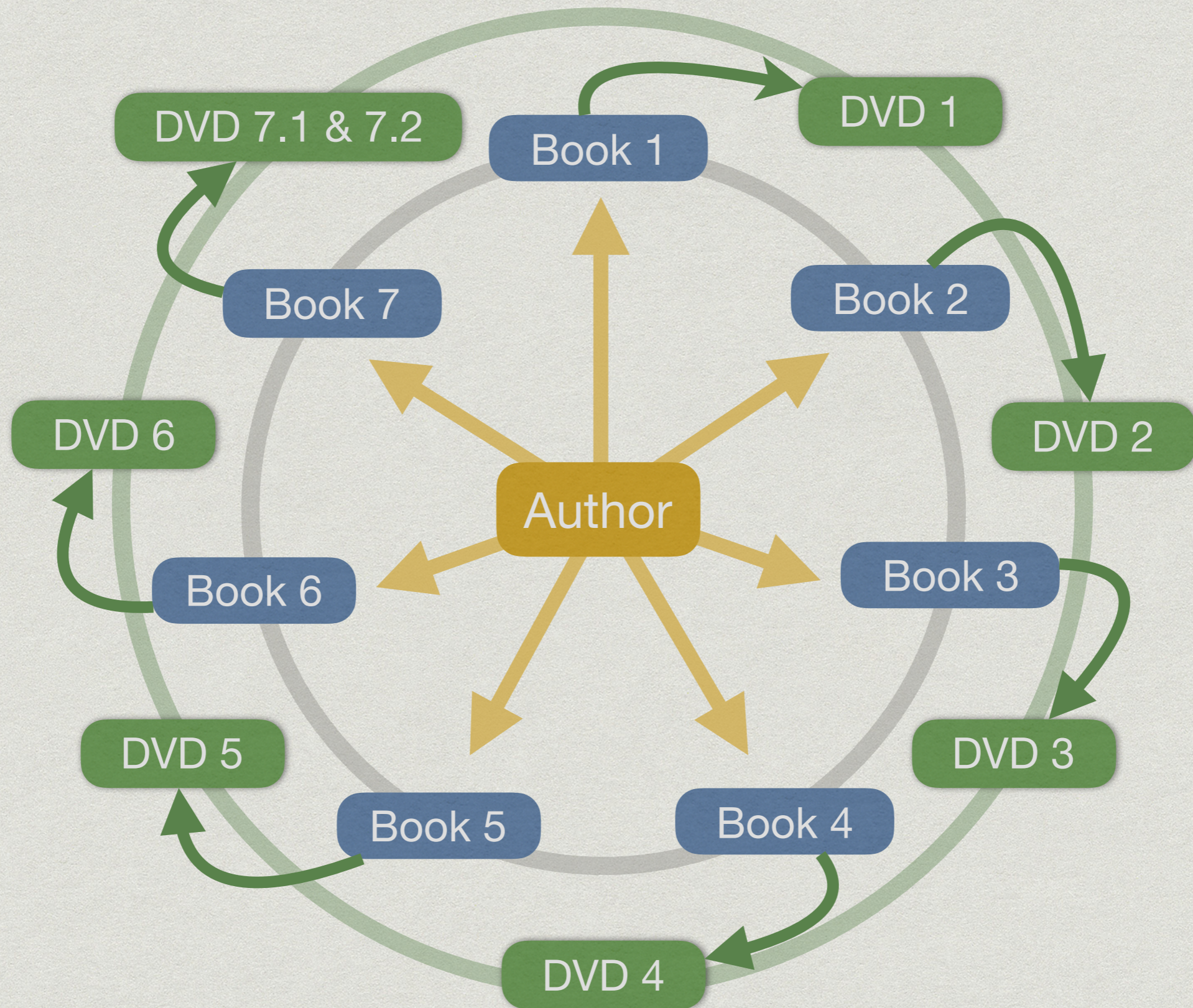
Related Works: Series



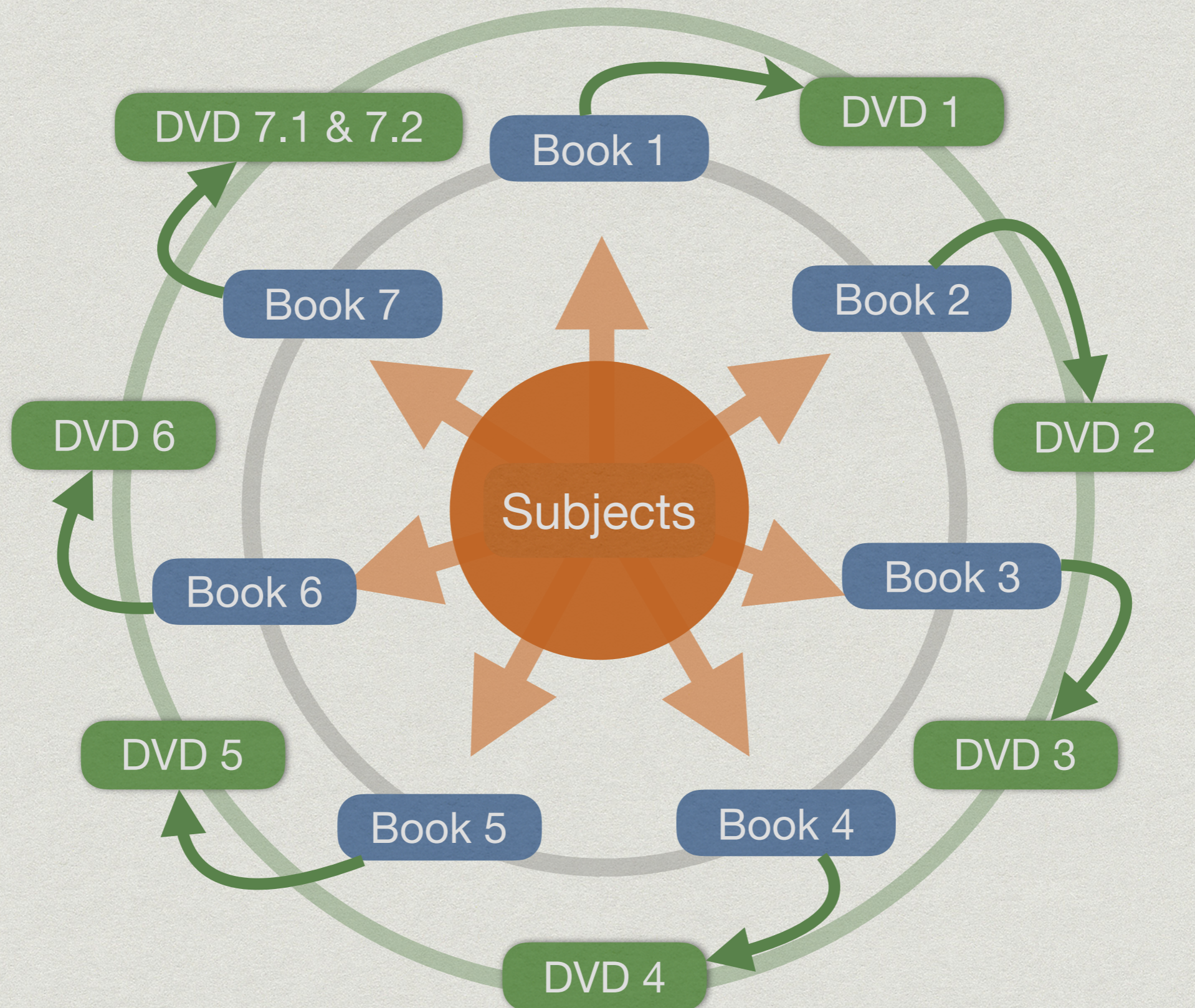
Related Works: Series



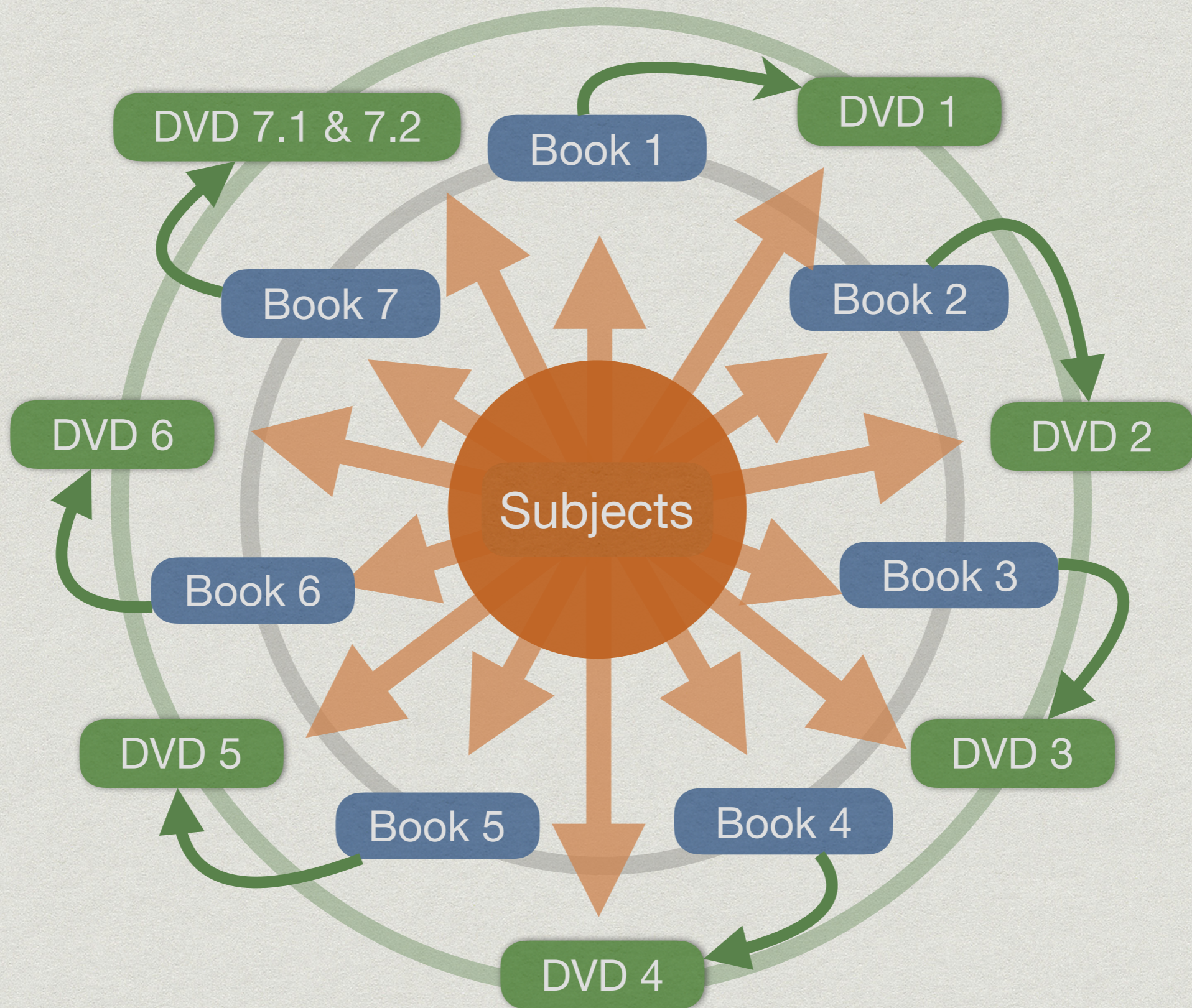
Related Works: Derivatives



Related Works: Derivatives

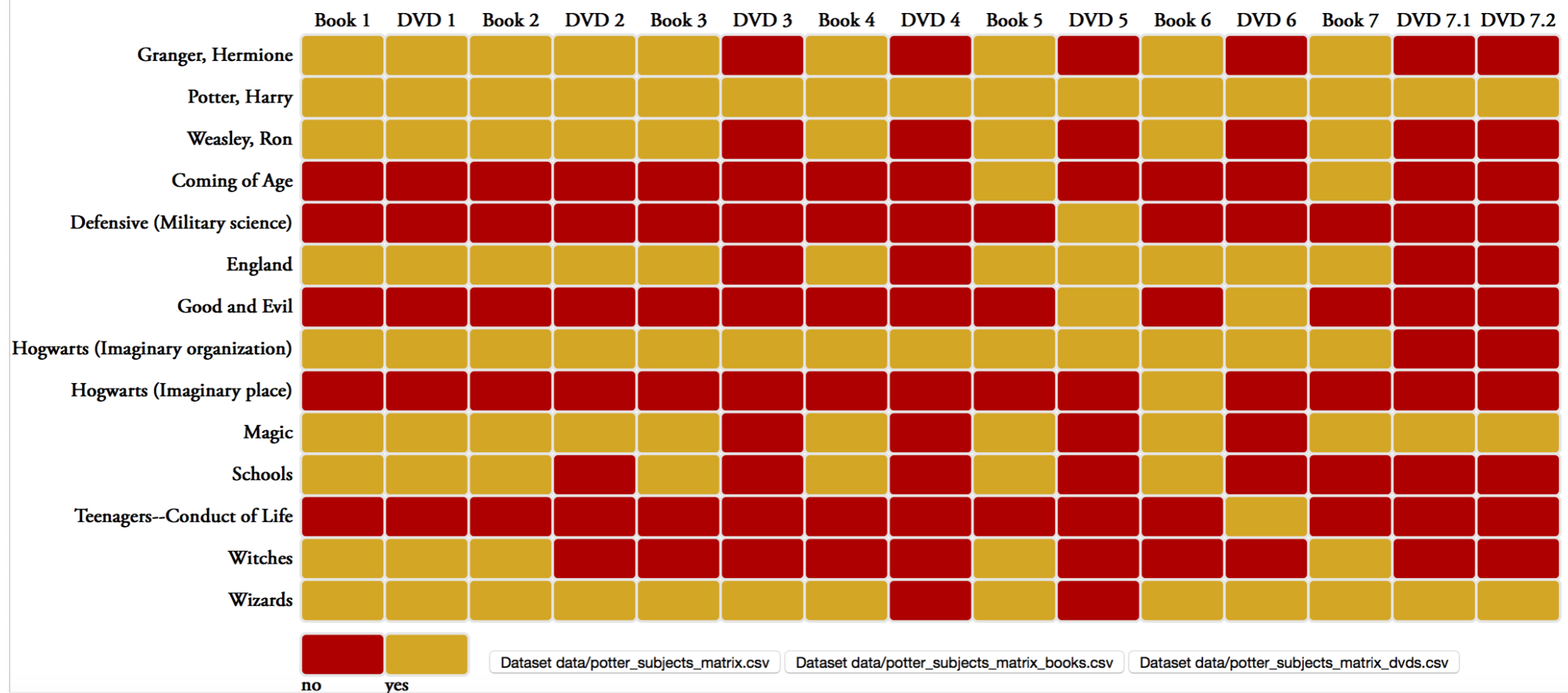


Related Works: Derivatives

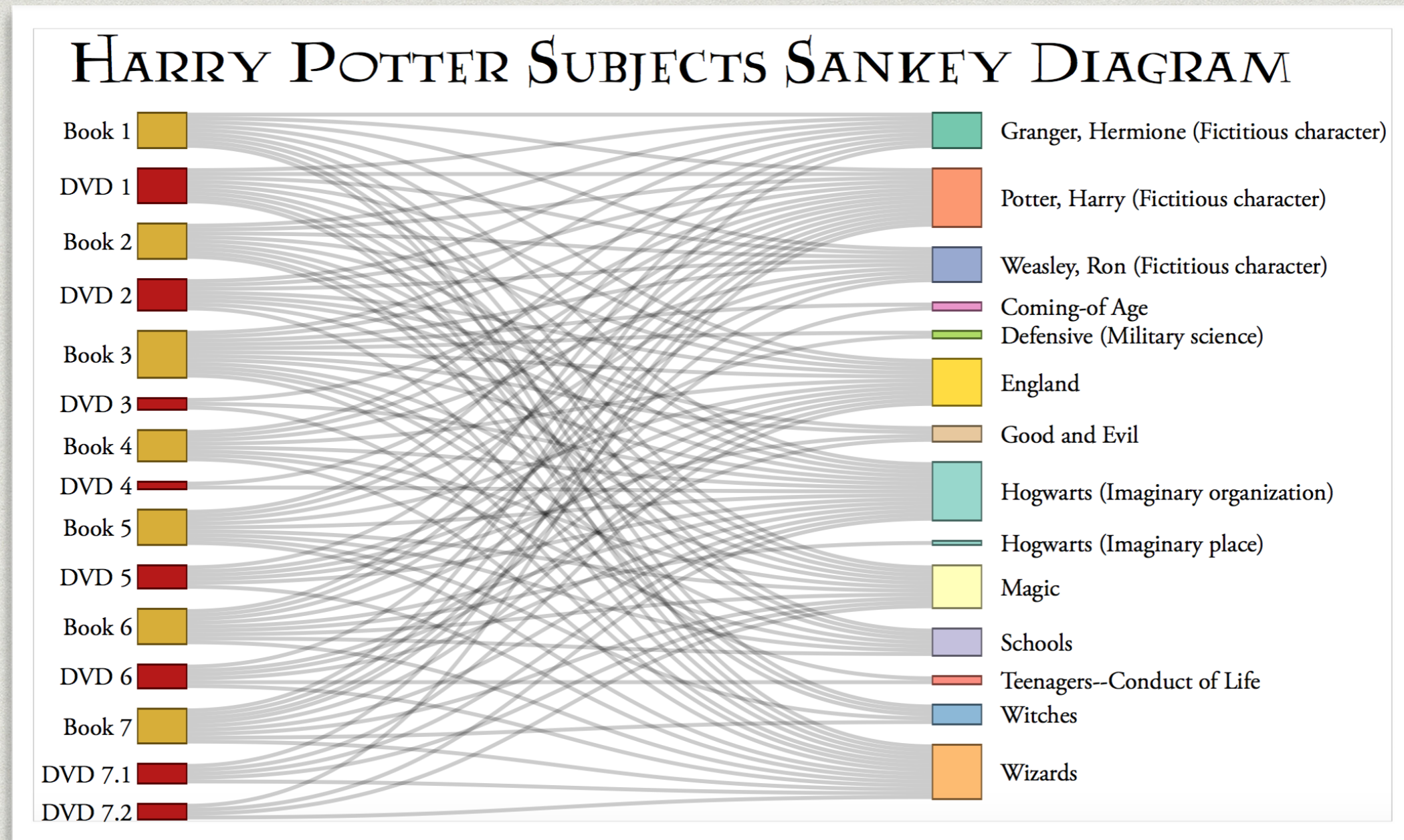


Related Manifestations of Related Works

HARRY POTTER SUBJECTS HEAT MAP



Related Manifestations of Related Works



Comparing Res Linked to Manifestation vs. Work

Manifestation

Refresh

Work

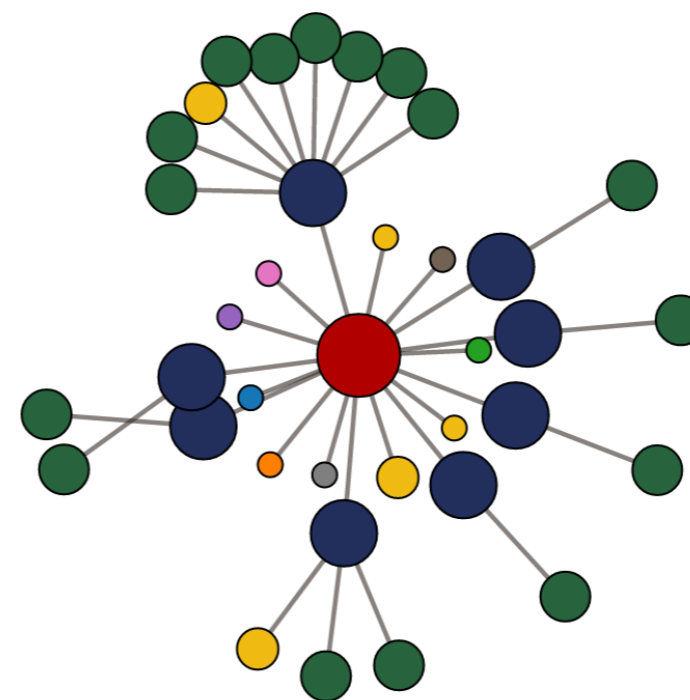
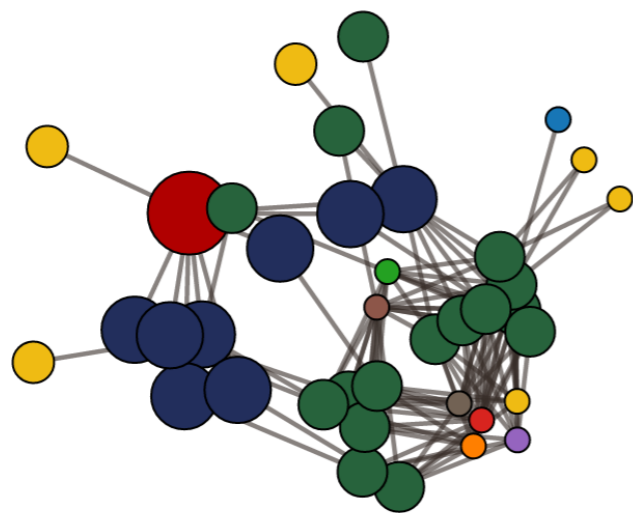
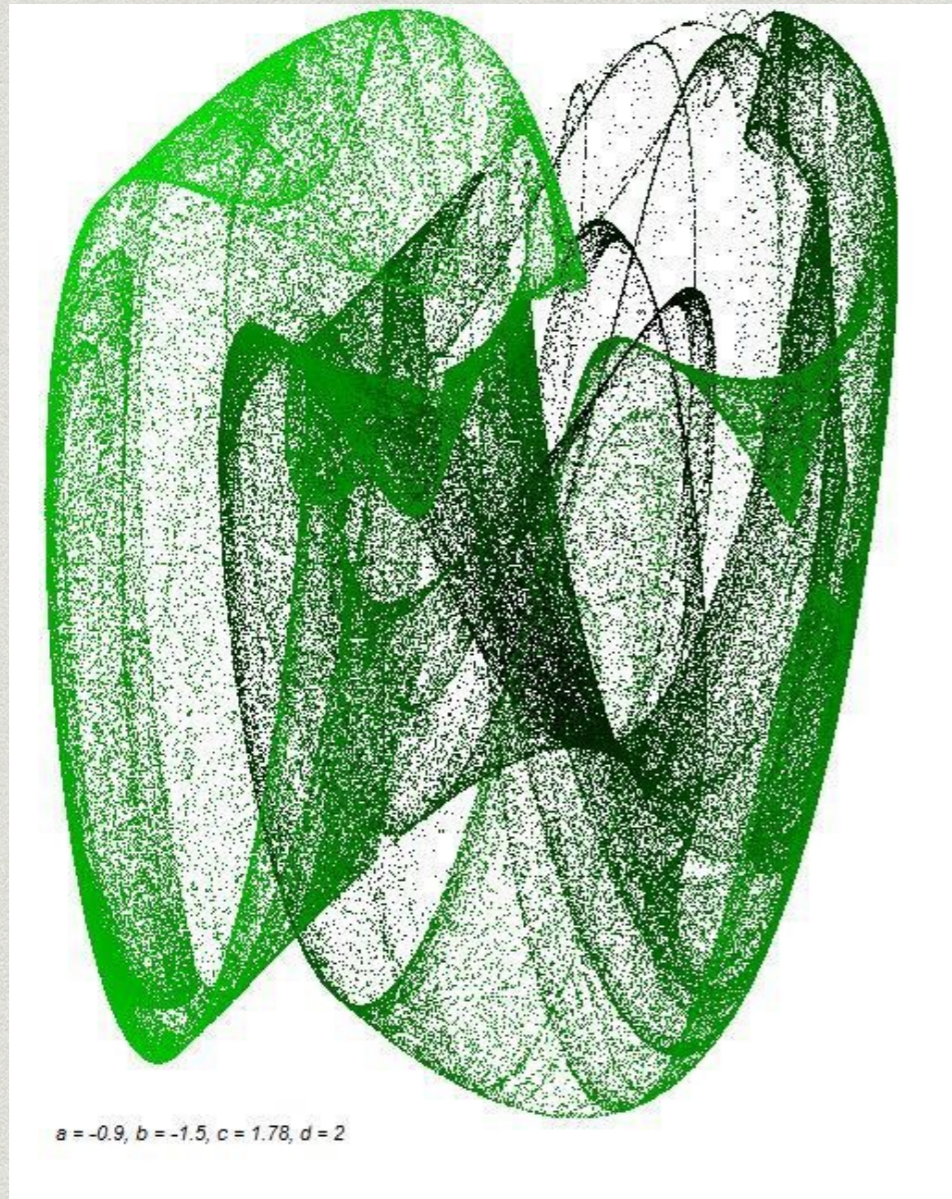


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Questions?



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aglerum/index.html](http://myweb.fsu.edu/aglerum/index.html)

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