OAI-ORE experiments at the University of Illinois Library at Urbana-Champaign

Timothy W. Cole (*t-cole3@uiuc.edu*)
Grainger Engineering Library Information Center
University of Illinois at Urbana-Champaign

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Experiments

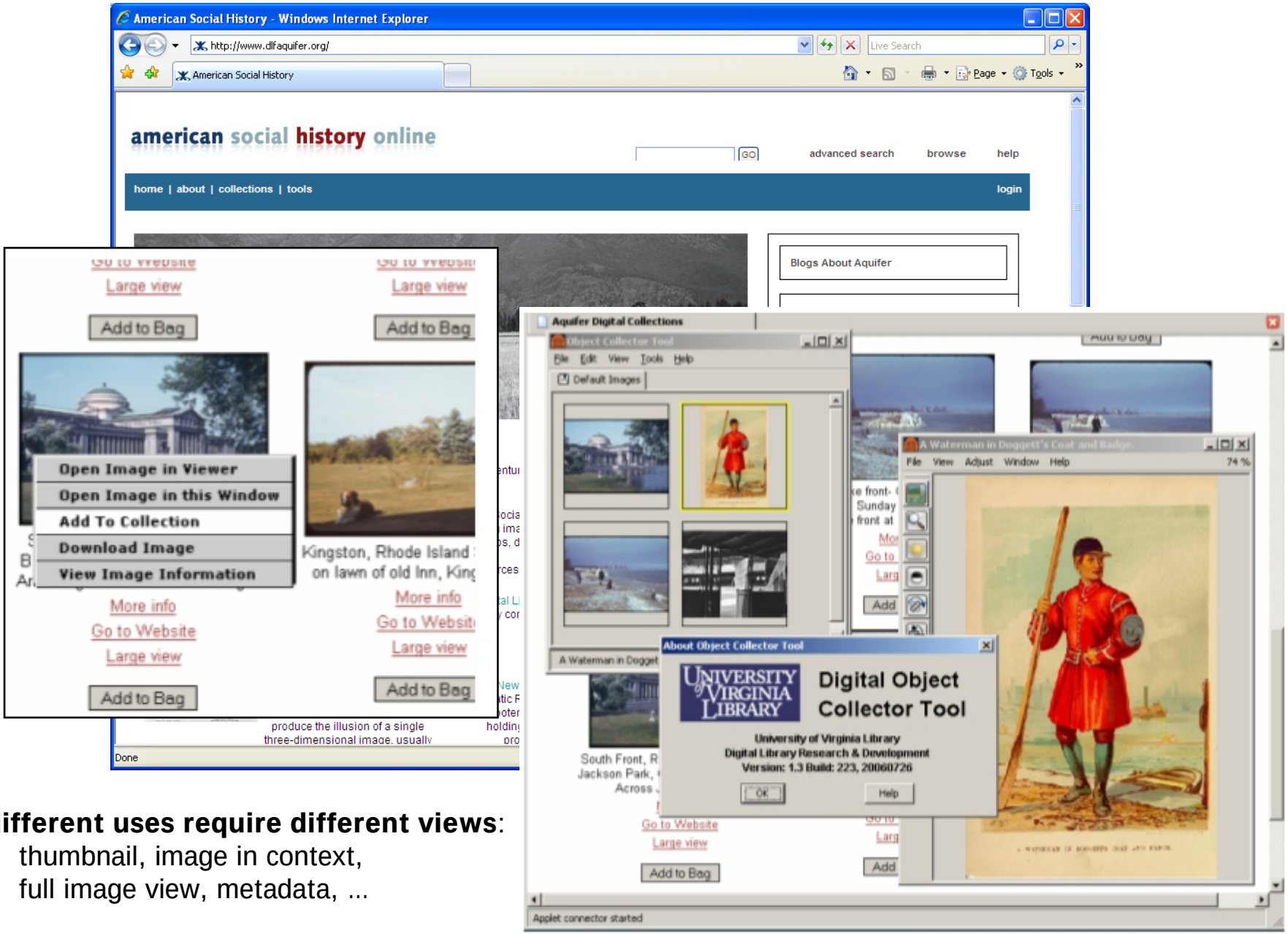
1. DLF Aquifer Asset Actions in ORE

   Typed, actionable URLs for representations (views) of distributed objects
   (see: *Chavez, et al., D-Lib Magazine 12 (10) [Oct. 2006]*)

   Related: *American Social History Online Portal*

   Tom Habing, Bill Ingram, Esha Datta, Jody Deridder, ... & Aquifer Tech WG

2. Using ORE Resource Maps to support scholarly annotation of digitized books (an ORE project funded by Mellon Foundation)
   - Manage granular annotations over multiple representations and across a range of bibliographic and lexical scopes
   - Focused on literary analysis use cases & projects (e.g., MONK Project)
   - Tim Cole, Bill Parod, Michael Norman, MJ Han, Bill Ingram, ...



different uses require different views:

thumbnail, image in context,
full image view, metadata, ...

Aquifer asset action semantics define classes of resources and associated "actions"

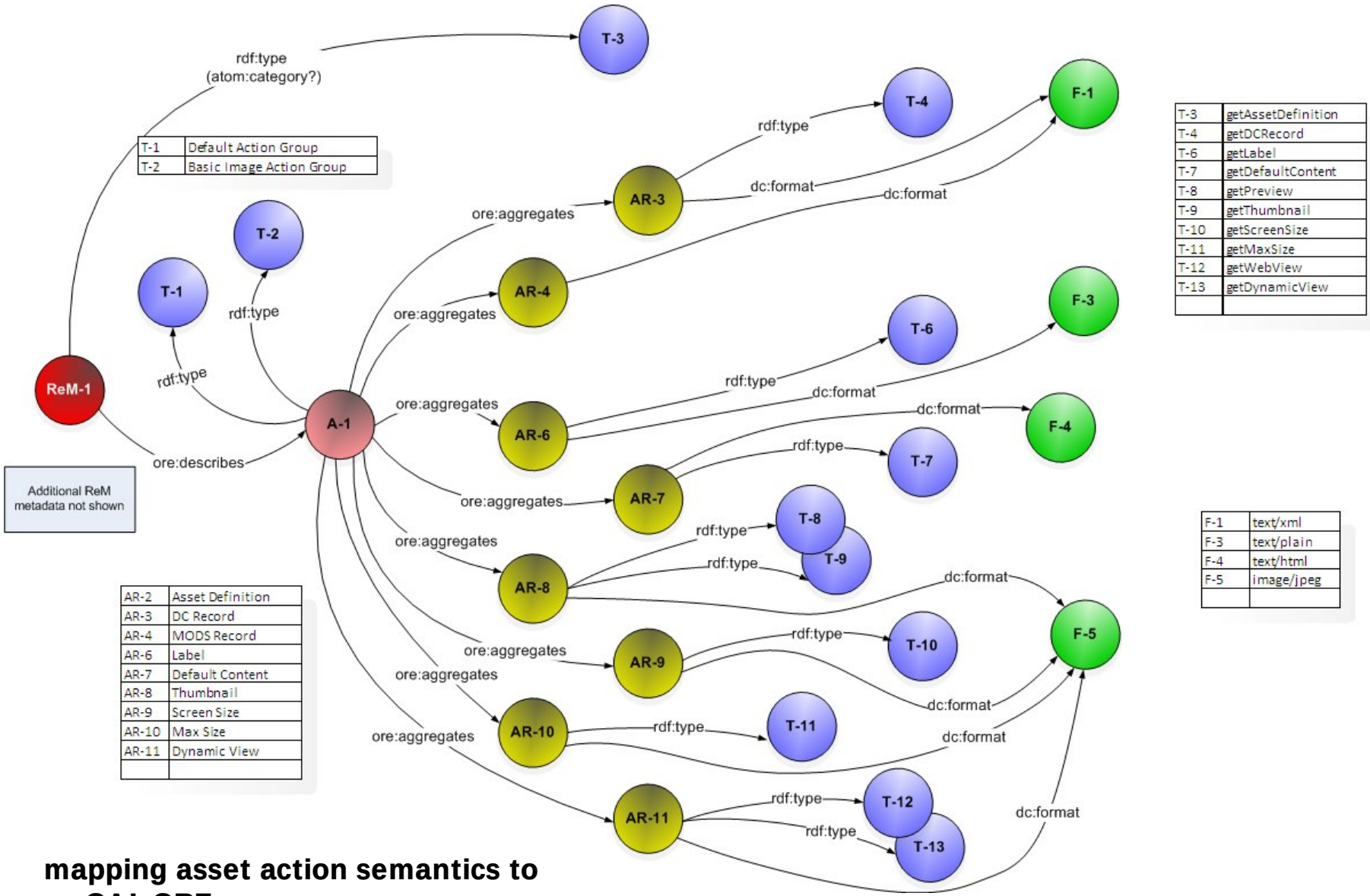
For example

actionGroups (incomplete list):

- default
- basicImage, layeredImage, addressableImage, …
- viewStructuredText, getStructuredText, viewImageText, getImageText, …

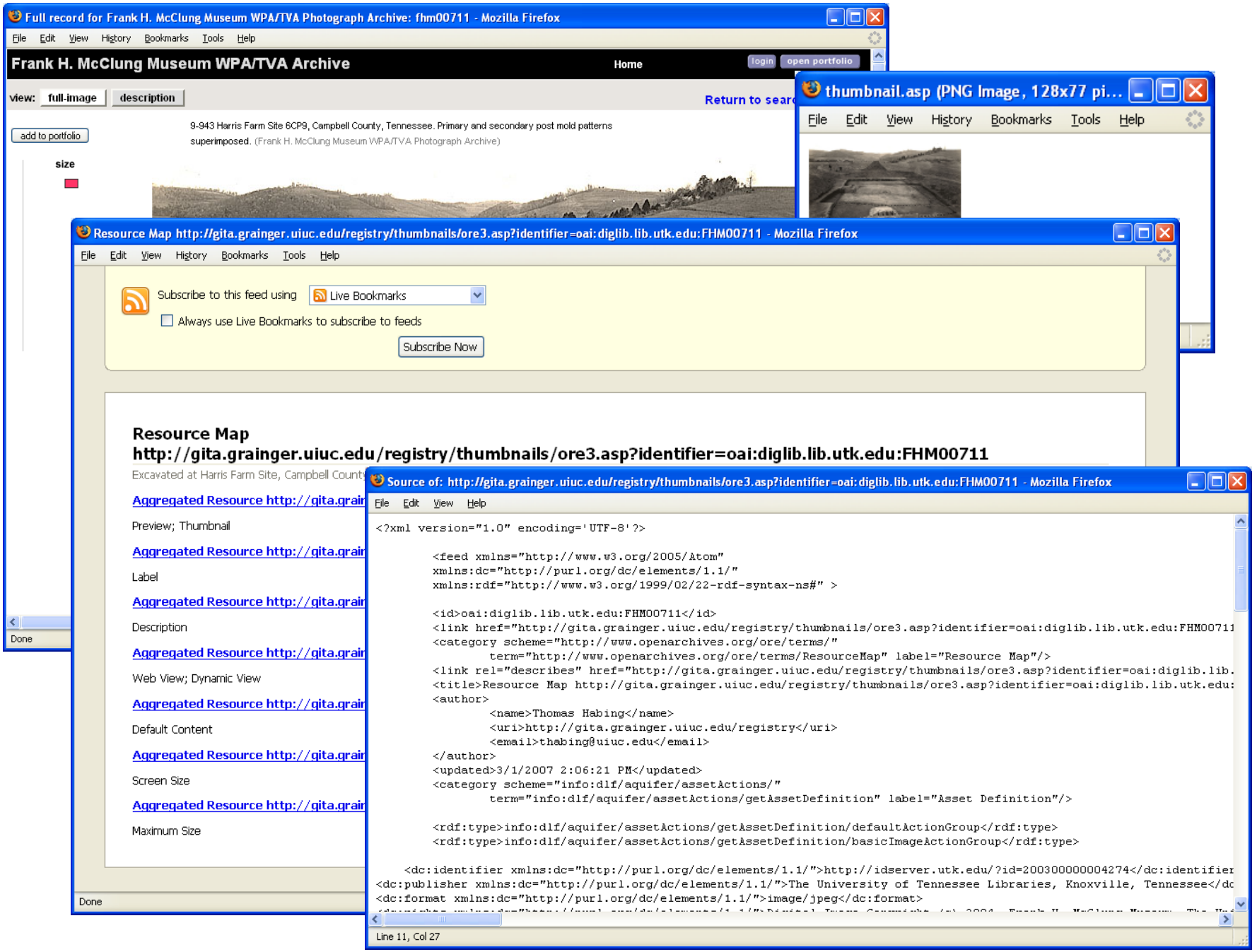
Members of default actionGroup class must support:

- getPreview
- getLabel
- getDCRecord
- getDefaultContent
- getWebView
- getAssetDefinition (reflexive)



mapping asset action semantics to OAI-ORE resource maps

(first attempt)


Full record for Frank H. McClung Museum WPA/TVA Photograph Archive: fhm00711 - Mozilla Firefox
File Edit View History Bookmarks Tools Help
Frank H. McClung Museum WPA/TVA Archive
Home
login
open portfolio
view: full-image description
Return to sear
add to portfolio
9-943 Harris Farm Site 6CP9, Campbell County, Tennessee. Primary and secondary post mold patterns superimposed. (Frank H. McClung Museum WPA/TVA Photograph Archive)
size
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thumbnail.asp (PNG Image, 128x77 pi...
File Edit View History Bookmarks Tools Help
Resource Map http://gita.grainger.uiuc.edu/registry/thumbnails/ore3.asp?identifier=oai:diglib.lib.utk.edu:FHM00711 - Mozilla Firefox
File Edit View History Bookmarks Tools Help
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Always use Live Bookmarks to subscribe to feeds
Subscribe Now
Resource Map
http://gita.grainger.uiuc.edu/registry/thumbnails/ore3.asp?identifier=oai:diglib.lib.utk.edu:FHM00711
Excavated at Harris Farm Site, Campbell Count
Aggregated Resource http://gita.grair
Preview; Thumbnail
Aggregated Resource http://gita.grair
Label
Aggregated Resource http://gita.grair
Description
Aggregated Resource http://gita.grair
Web View; Dynamic View
Aggregated Resource http://gita.grair
Default Content
Aggregated Resource http://gita.grair
Screen Size
Aggregated Resource http://gita.grair
Maximum Size
Done
Source of: http://gita.grainger.uiuc.edu/registry/thumbnails/ore3.asp?identifier=oai:diglib.lib.utk.edu:FHM00711 - Mozilla Firefox
File Edit View Help
<?xml version="1.0" encoding='UTF-8'?>
<feed xmlns="http://www.w3.org/2005/Atom"
xmlns:dc="http://purl.org/dc/elements/1.1/"
xmlns:rdf="http://www.w3.org/1999/02/22-rdf-syntax-ns#" >
<id>oai:diglib.lib.utk.edu:FHM00711</id>
<link href="http://gita.grainger.uiuc.edu/registry/thumbnails/ore3.asp?identifier=oai:diglib.lib.utk.edu:FHM00711
<category scheme="http://www.openarchives.org/ore/terms/"
term="http://www.openarchives.org/ore/terms/ResourceMap" label="Resource Map"/>
<link rel="describes" href="http://gita.grainger.uiuc.edu/registry/thumbnails/ore3.asp?identifier=oai:diglib.lib.
<title>Resource Map http://gita.grainger.uiuc.edu/registry/thumbnails/ore3.asp?identifier=oai:diglib.lib.utk.edu:
<author>
<name>Thomas Habing</name>
<uri>http://gita.grainger.uiuc.edu/registry</uri>
<email>thabing@uiuc.edu</email>
</author>
<updated>3/1/2007 2:06:21 PM</updated>
<category scheme="info:dlf/aquifer/assetActions/"
term="info:dlf/aquifer/assetActions/getAssetDefinition" label="Asset Definition"/>
<rdf:type>info:dlf/aquifer/assetActions/getAssetDefinition/defaultActionGroup</rdf:type>
<rdf:type>info:dlf/aquifer/assetActions/getAssetDefinition/basicImageActionGroup</rdf:type>
<dc:identifier xmlns:dc="http://purl.org/dc/elements/1.1/">http://idserver.utk.edu/?id=200300000004274</dc:identifier
<dc:publisher xmlns:dc="http://purl.org/dc/elements/1.1/">The University of Tennessee Libraries, Knoxville, Tennessee</dc
<dc:format xmlns:dc="http://purl.org/dc/elements/1.1/">image/jpeg</dc:format>
Line 11, Col 27

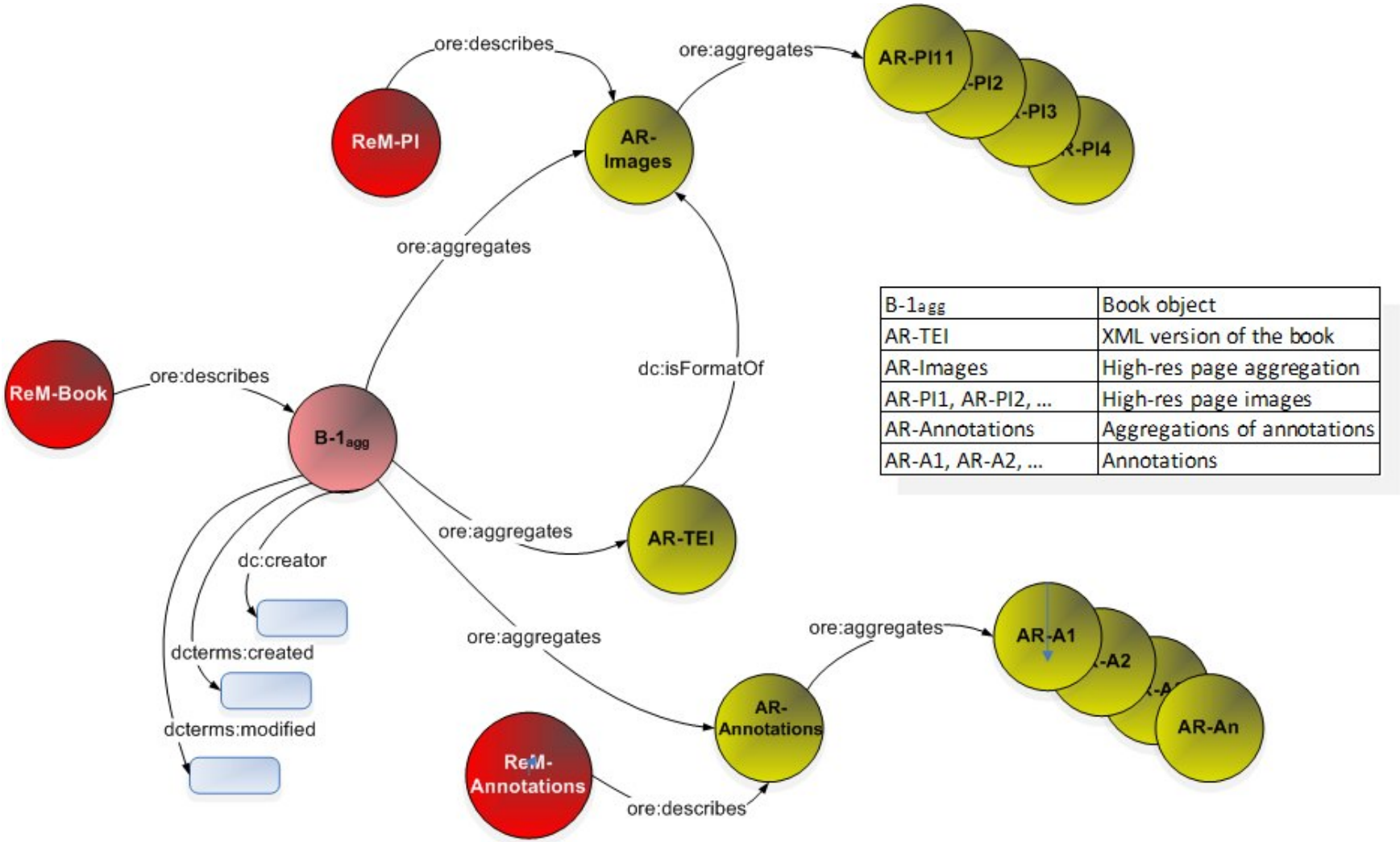
Work in progress

Aquifer asset action aware applications

- U. of Virginia Collectus Tool (in production)
  - Currently uses existing asset action package in XML
- Zotero custom translator for Aquifer (in development)
  - Checks resources as imported into Zotero for associated asset actions
  - If found, prompts user to select URI(s) for preferred representation(s)

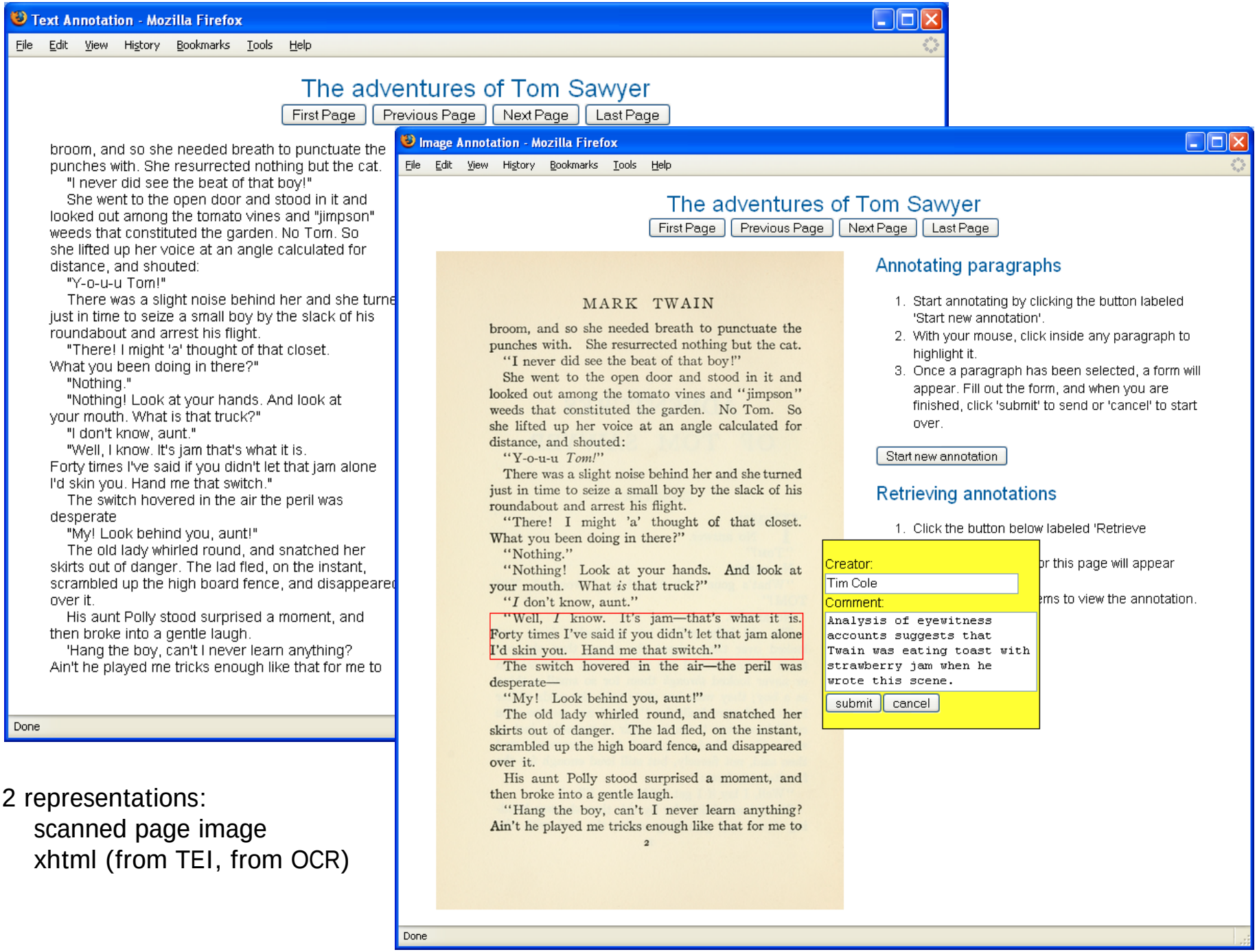
Scholarly annotations for individual & small group collaborative research

- Annotation is broad domain – we're looking at annotation as scholarly commentary or elaboration at level of pages, paragraphs, lemmas.
  - Current models & literature – Pliny (John Bradley, King's College), Electronic Variorum Editions (e.g., for Quixote, Eduardo Urbina [TAMU]), Google Book Annotation, OCVE (Online Chopin Variorum Edition), ...
  - A number of issues remain – (see forthcoming report of the Eranos WG)
- Task: investigate whether ORE can help address a subset of needs:
  - Managing annotation targets at arbitrary granularity
  - Facilitating making annotations that are representation-independent & persistent
  - Enabling annotations over bibliographic and lexical scopes (think FRBR)
  - Enabling exchange of / interoperability of annotations in a standard way
- Content: digitized books (Open Content Alliance & Wright American Fiction)



B-1agg	Book object
AR-TEI	XML version of the book
AR-Images	High-res page aggregation
AR-PI1, AR-PI2, ...	High-res page images
AR-Annotations	Aggregations of annotations
AR-A1, AR-A2, ...	Annotations

Candidate ReM for a digitized book (some detail omitted)

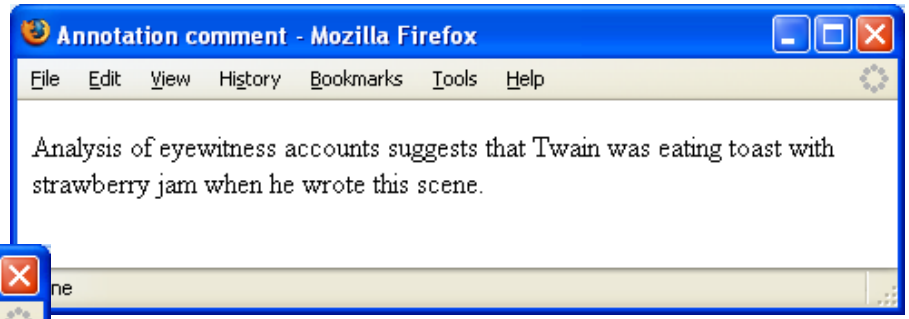


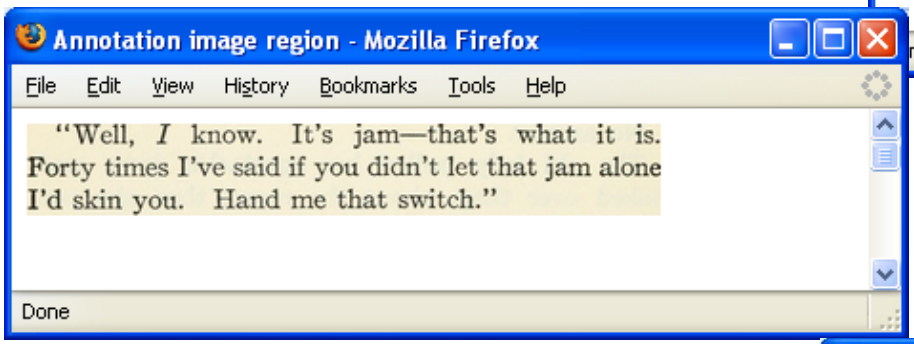
2 representations:

- scanned page image
- xhtml (from TEI, from OCR)

To create ReM for annotation requires (among other things):

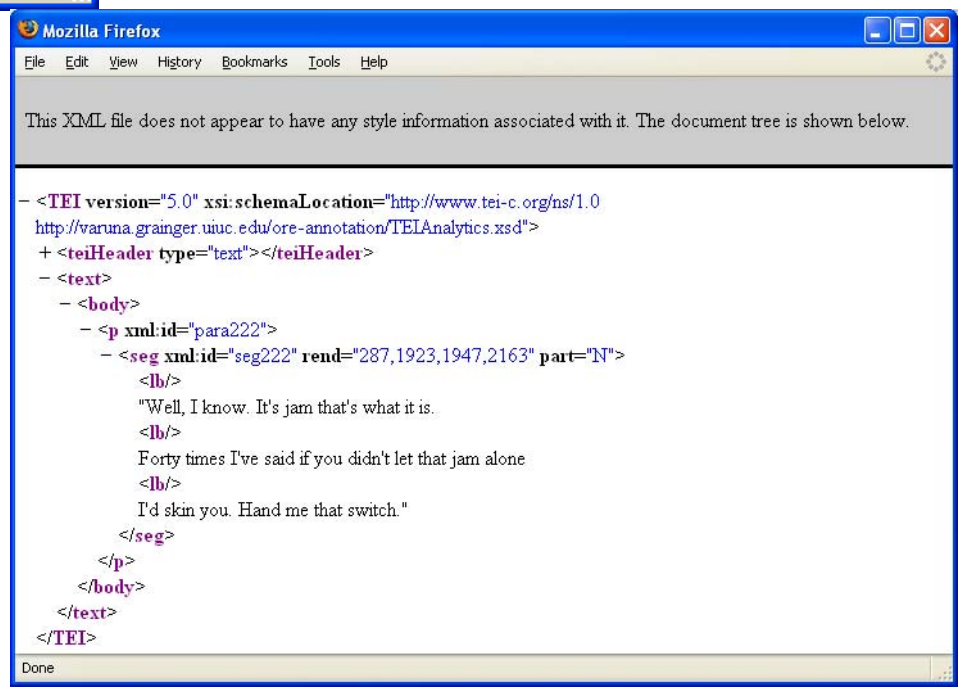
1. minting URI for annotation text, etc.

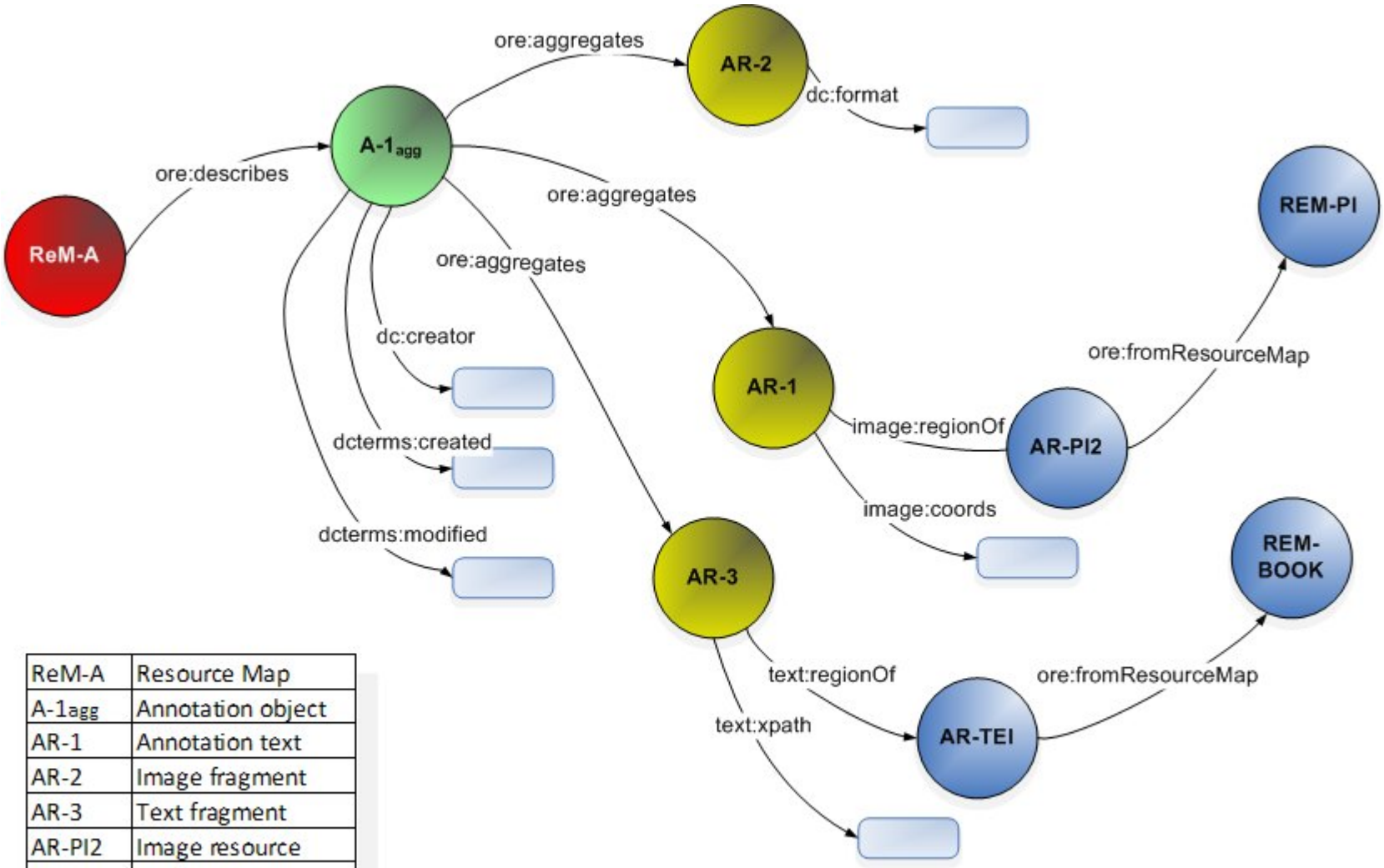




2. Minting URI for image representation target

3. Identifying targets in other views / scopes & minting URIs for these





ReM-A	Resource Map
A-1agg	Annotation object
AR-1	Annotation text
AR-2	Image fragment
AR-3	Text fragment
AR-PI2	Image resource
AR-TEI	Text resource

Candidate ReM for an annotation (some detail omitted)

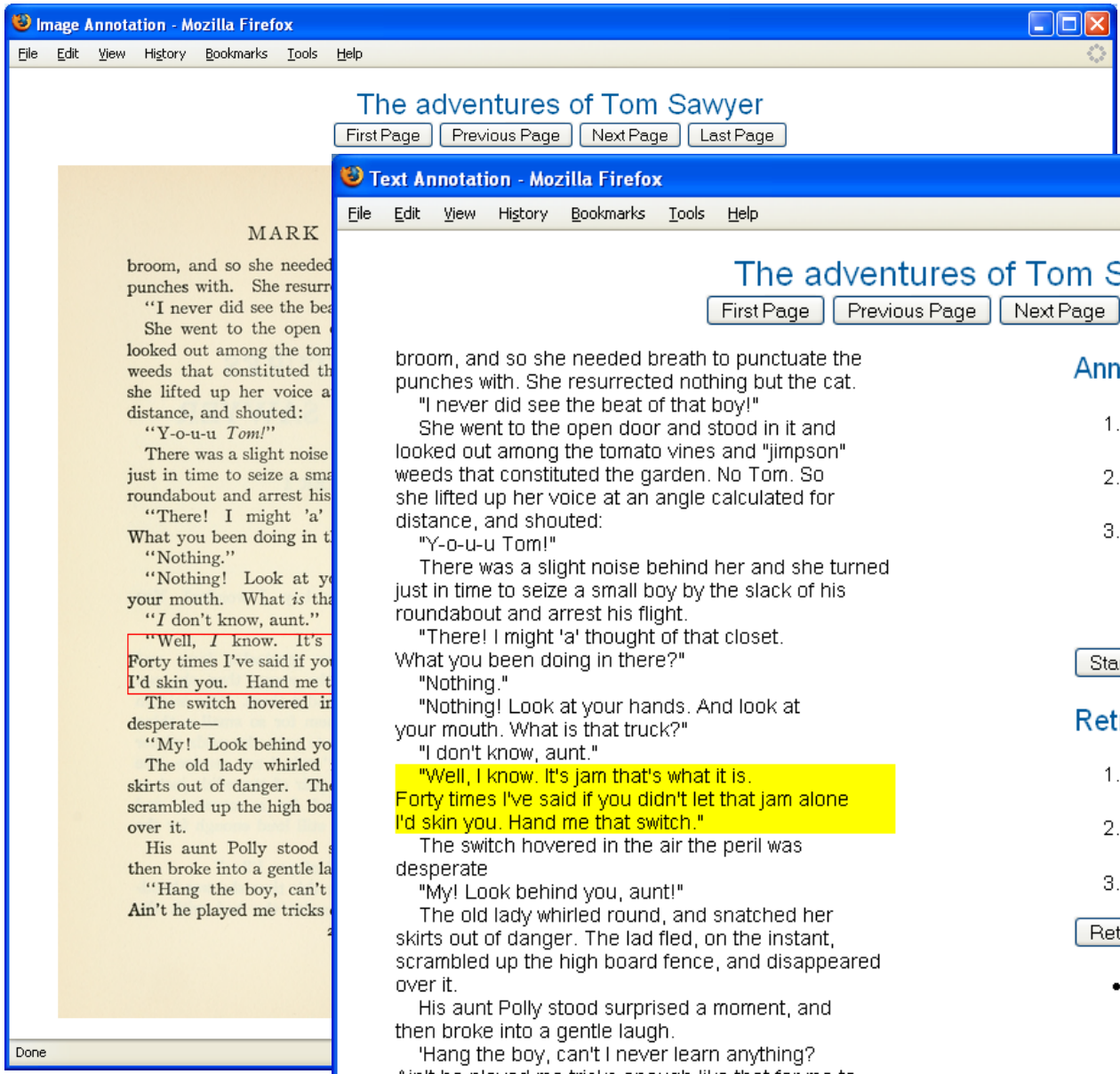


Image Annotation - Mozilla Firefox
File Edit View History Bookmarks Tools Help
The adventures of Tom Sawyer
First Page
Previous Page
Next Page
Last Page
MARK
broom, and so she needed
punches with. She resurr
"I never did see the bea
She went to the open
looked out among the tom
weeds that constituted th
she lifted up her voice a
distance, and shouted:
"Y-o-u-u Tom!"
There was a slight noise
just in time to seize a sma
roundabout and arrest his
"There! I might 'a'
What you been doing in t
"Nothing."
"Nothing! Look at y
your mouth. What is tha
"I don't know, aunt."
"Well, I know. It's
Forty times I've said if yo
I'd skin you. Hand me t
The switch hovered i
desperate—
"My! Look behind yo
The old lady whirled
skirts out of danger. The
scrambled up the high boa
over it.
His aunt Polly stood
then broke into a gentle la
"Hang the boy, can't
Ain't he played me tricks
Done
Text Annotation - Mozilla Firefox
File Edit View History Bookmarks Tools Help
The adventures of Tom Sawyer
First Page
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broom, and so she needed breath to punctuate the punches with. She resurrected nothing but the cat.
"I never did see the beat of that boy!"
She went to the open door and stood in it and looked out among the tomato vines and "jimpson" weeds that constituted the garden. No Tom. So she lifted up her voice at an angle calculated for distance, and shouted:
"Y-o-u-u Tom!"
There was a slight noise behind her and she turned just in time to seize a small boy by the slack of his roundabout and arrest his flight.
"There! I might 'a' thought of that closet. What you been doing in there?"
"Nothing."
"Nothing! Look at your hands. And look at your mouth. What is that truck?"
"I don't know, aunt."
"Well, I know. It's jam that's what it is. Forty times I've said if you didn't let that jam alone I'd skin you. Hand me that switch."
The switch hovered in the air the peril was desperate
"My! Look behind you, aunt!"
The old lady whirled round, and snatched her skirts out of danger. The lad fled, on the instant, scrambled up the high board fence, and disappeared over it.
His aunt Polly stood surprised a moment, and then broke into a gentle laugh.
'Hang the boy, can't I never learn anything? Ain't he played me tricks enough like that for me to
Annotating paragraphs
1. Start annotating by clicking the button labeled 'Start new annotation'.
2. With your mouse, click inside any paragraph to highlight it.
3. Once a paragraph has been selected, a form will appear. Fill out the form, and when you are finished, click 'submit' to send or 'cancel' to start over.
Start new annotation
Retrieving annotations
1. Click the button below labeled 'Retrieve annotations'.
2. A list of annotations for this page will appear below.
3. Click one of the list items to view the annotation.
Retrieve annotations
Tim Cole - 2008-02-29T23:23:22Z highlight
Analysis of eyewitness accounts suggests that Twain was eating toast with strawberry jam when he wrote this scene.
Done

Work in progress

To do:

- Modeling ReMs to support annotation across scopes
  - In particular across different editions of same work
  - In particular across different digitization instances of same edition
- Modeling ReMs to support annotation at level of lemma
  - Will use morphadorner tool from NWU (WordHoard, MONK)
- Investigating how minting of URIs for annotation targets might be done in repository systems like Fedora