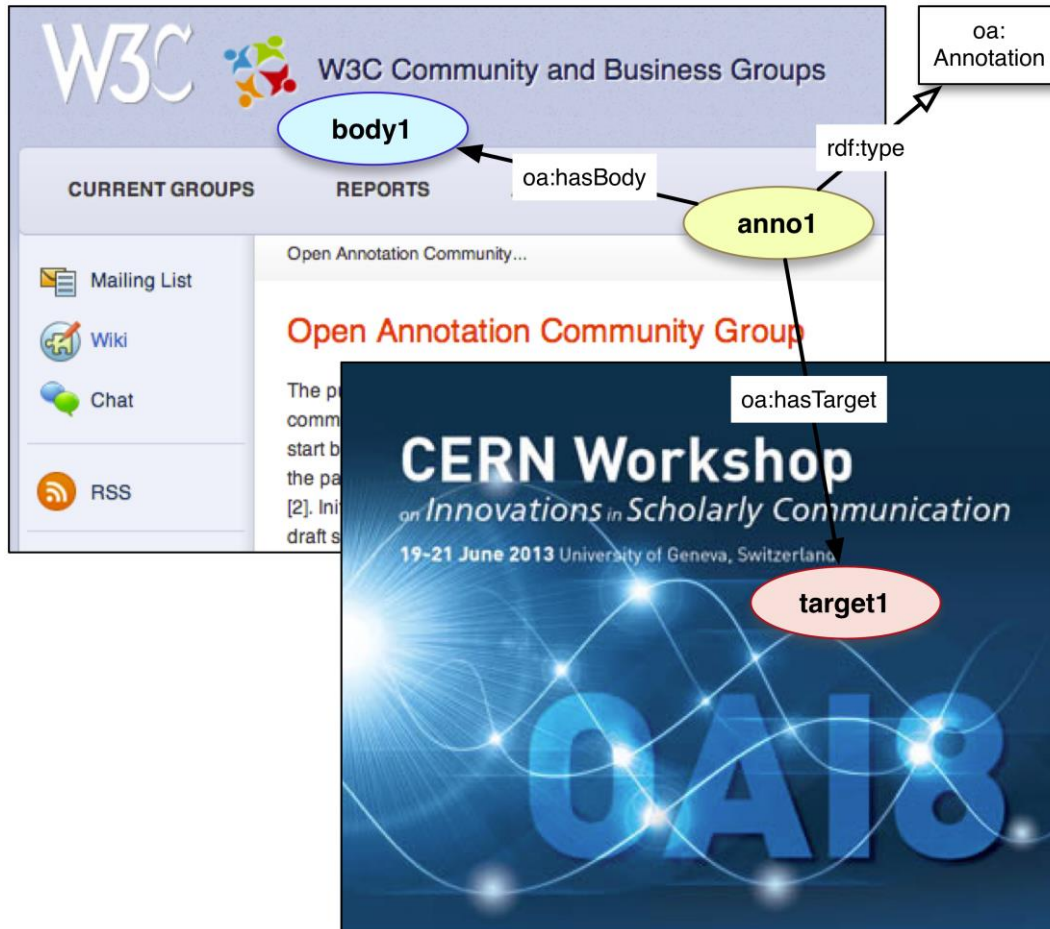


W3C Open Annotation: Status and Use Cases



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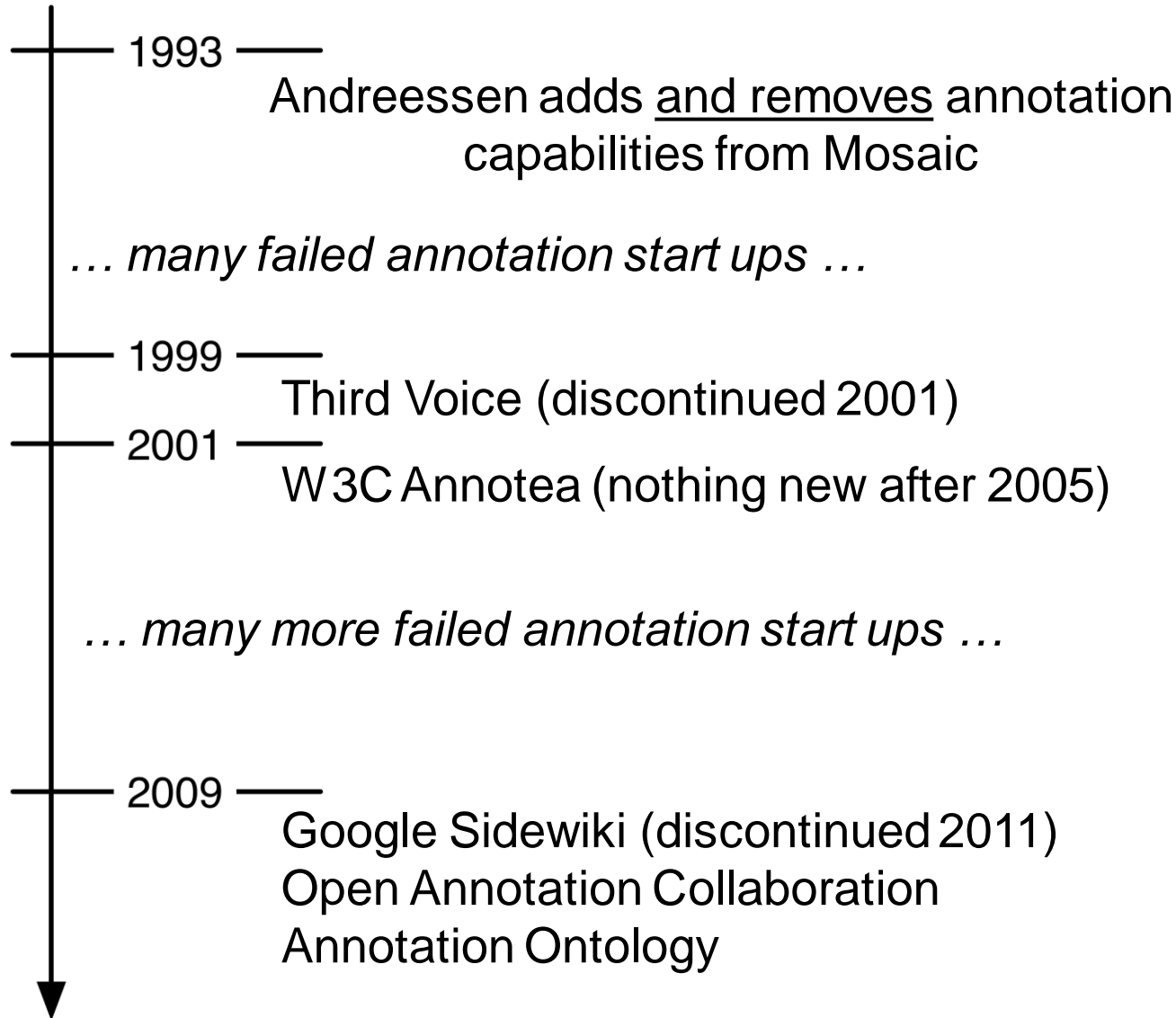
HARVARD
MEDICAL SCHOOL



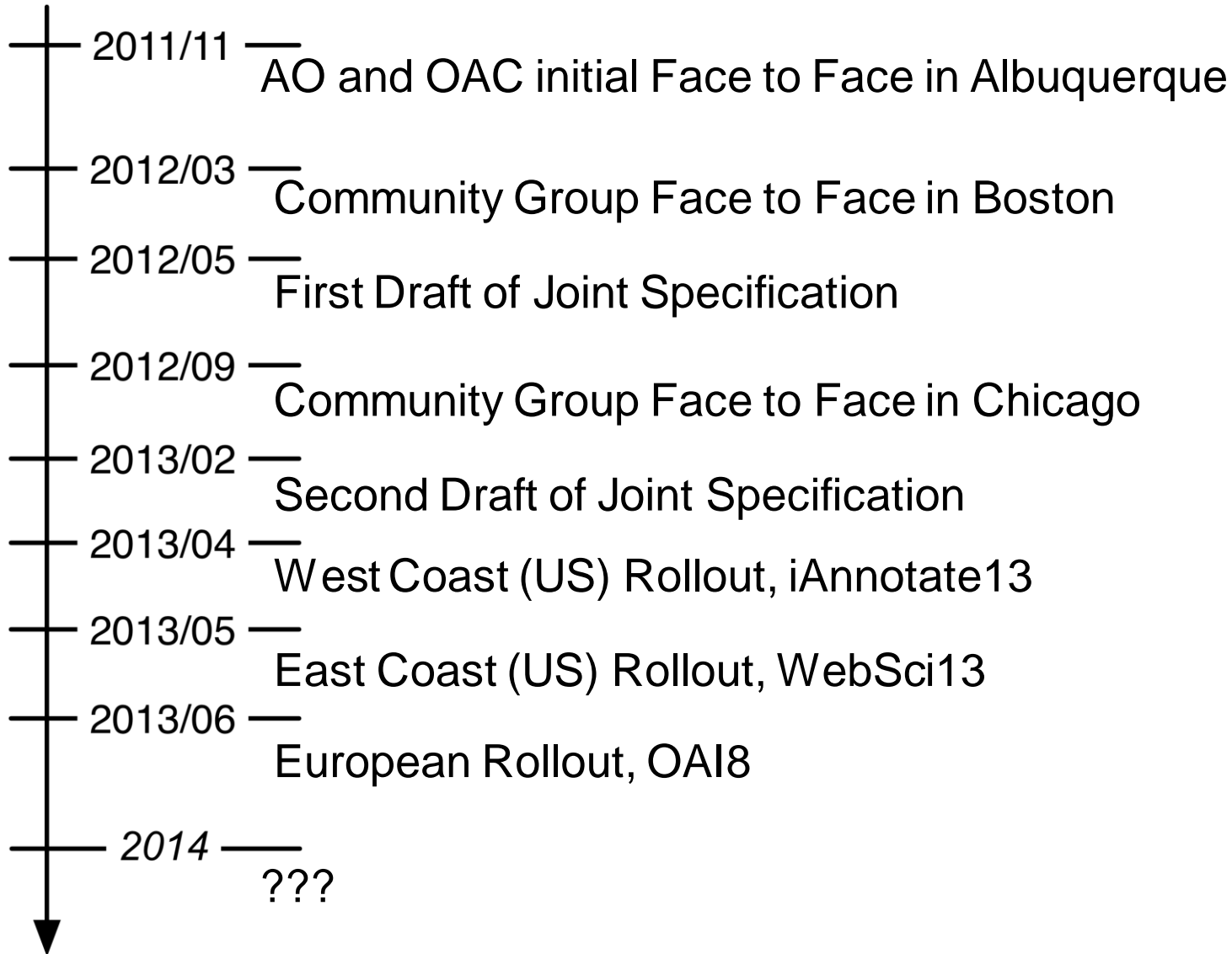
Open Annotation Community Group
<http://www.w3.org/community/openannotation/>

OAI8: Innovations in Scholarly Communication
June 19-21 2013, Geneva, Switzerland

Web Annotation History



Community Group History



Why a Community Group?



Interoperability is made of People



<http://www.w3.org/community/openannotation/>



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Drilling Down a Little...



W3C Open Annotation Community Group

- Established after reconciliation of Open Annotation Collaboration and Annotation Ontology models
- 89 participants from around the world: 6th largest of 128 groups
Many universities, also commercial and not-for-profit

Mission:

Interoperability between Annotation systems and platforms, by

- ...following the Architecture of the Web
- ...reusing existing web standards
- ...providing a single, coherent model to implement
- ...which is orthogonal to the domain of interest
- ...without requiring adoption of specific platforms
- ...while maintaining low implementation costs

Why Care About Interoperability?

Users:

- Avoid vendor lock-in
- Avoid end-of-life loss of content
- Share with yourself or others using different systems



Why Care About Interoperability?

Developers:

- Build on existing code libraries, tools and systems
- Community of developers for questions
- Data model covers a myriad of use cases,
No need to think them all up again



Why Care About Interoperability?

Content Providers:

- Leverage what your users are saying, where they say it
- Build community around your resources
- Consumer as Producer (Web 2.0)
- Semantic Web (Web 3.0)
- Someone else will do it...

The collage features several prominent digital content providers and search engines:

- ELSEVIER**: A search bar with the text "Type here to search on Elsevier.com" and a magnifying glass icon.
- Cornell University Library**: A logo featuring the Cornell University crest.
- arXiv.org**: A red banner with the text "arXiv.org" and a search bar.
- europaena exhibitions**: A logo featuring a stylized 'G' and the text "europaena exhibitions".
- PLOS**: A logo with the text "PLOS" and a search bar.
- Temple Grandin on 'Genetics and the of Domestic Animal'**: A snippet of text from a PLOS article.
- elsevierconnect**: A logo with the text "elsevierconnect".
- PLOS ONE**: A logo with the text "PLOS ONE" and a search bar.
- Wiki Loves Glam**: A logo with the text "Wiki Loves Glam" and a search bar.
- Leaving Europe: A new life in America**: A snippet of text from a PLOS article.
- Untold stories of the First World War**: A snippet of text from a PLOS article.



Why Care About Interoperability?

Annotation is made of People!



What is Annotation?

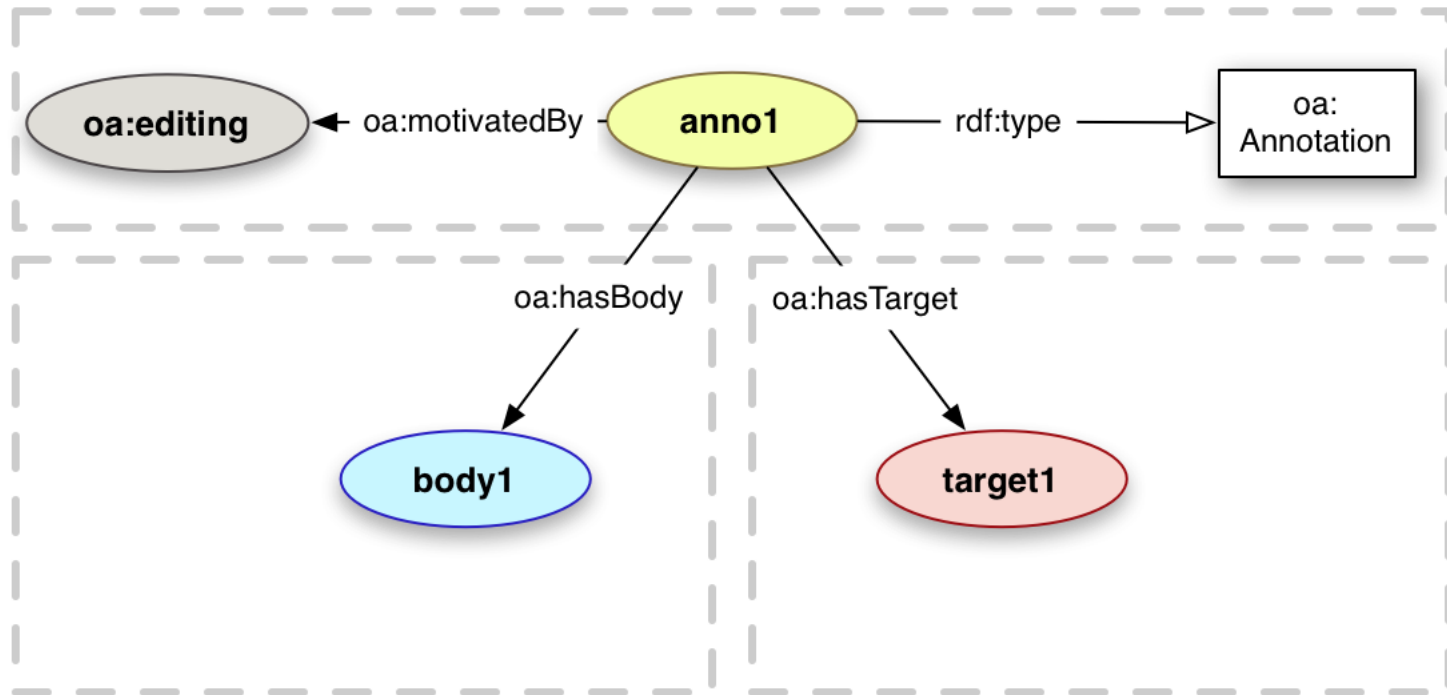
“ An Annotation is considered to be a set of connected resources, typically including a body and target, where the body is related to the target. ”

Users Annotate To:

- ...Provide an Aide-Memoire
- ...Share and Inform
- ...Improve Discovery
- ...Organize Resources
- ...Interact with Others
- ...Create as well as Consume

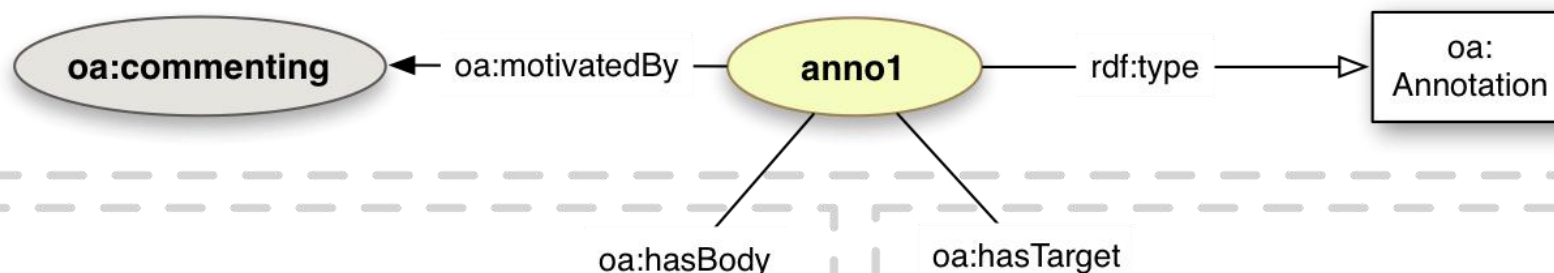
- Highlighting, Bookmarking
- Commenting, Describing
- Tagging, Linking
- Classifying, Identifying
- Questioning, Replying
- Editing, Moderating

Basic Data Model



<http://www.openannotation.org/spec/core/>

Use Case: Peer Review



----- REVIEW 2 -----
PAPER: 17
TITLE: Designing the W3C Open Annotation Data Model
AUTHORS: Robert Sanderson, Paolo Ciccarese and Herbert Van de Sompel

OVERALL EVALUATION: 2 (accept)
Ideal Presentation Mode: 2 (short talk)
Confidence in your opinion: 1 (! (STRONG): I'm sure I'm right about this)

----- REVIEW -----
This papers presents the W3C Open Annotation Data Model specifications, as well as the rationale behind the design choices of the community.
Overall, the paper is well-written and structured, and the points made are thorough with sound underlying reasoning. The authors discuss several aspects of the model, which covers at large extent most of the intrinsic requirements of the issue of sharing resource annotations following open directives. The main aspect of any core model is that it should drive interoperability between and across remote, heterogeneous and independent environments. With this in mind, the community has taken care of specifying a universally applicable model for resource annotation, keeping in mind to provide a portable model with low complexity.
The model covers functional as well as non-functional characteristics of annotations, such as annotation timestamps, supporting different annotation types (such as text, video and so on), as well as providing the ability to indicate specific fragments of the target resource that are annotated, and diverse fragment types (mostly depending on the data format of the target resource).

Designing the W3C Open Annotation Data Model

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ABSTRACT

The Open Annotation Core Data Model specifies an interoperable framework for creating associations between related resources, called annotations, using a methodology that conforms to the Architecture of the World Wide Web. Open Annotations can easily be shared between platforms, with sufficient richness of expression to satisfy complex requirements while remaining simple enough to also allow for the most common use cases, such as attaching a piece of text to a single web resource. This paper presents the W3C Open Annotation Community Group specification and the rationale behind the scoping and technical decisions that were made. It also motivates interoperable Annotations via use cases, and provides a brief analysis of the advantages over previous specifications.

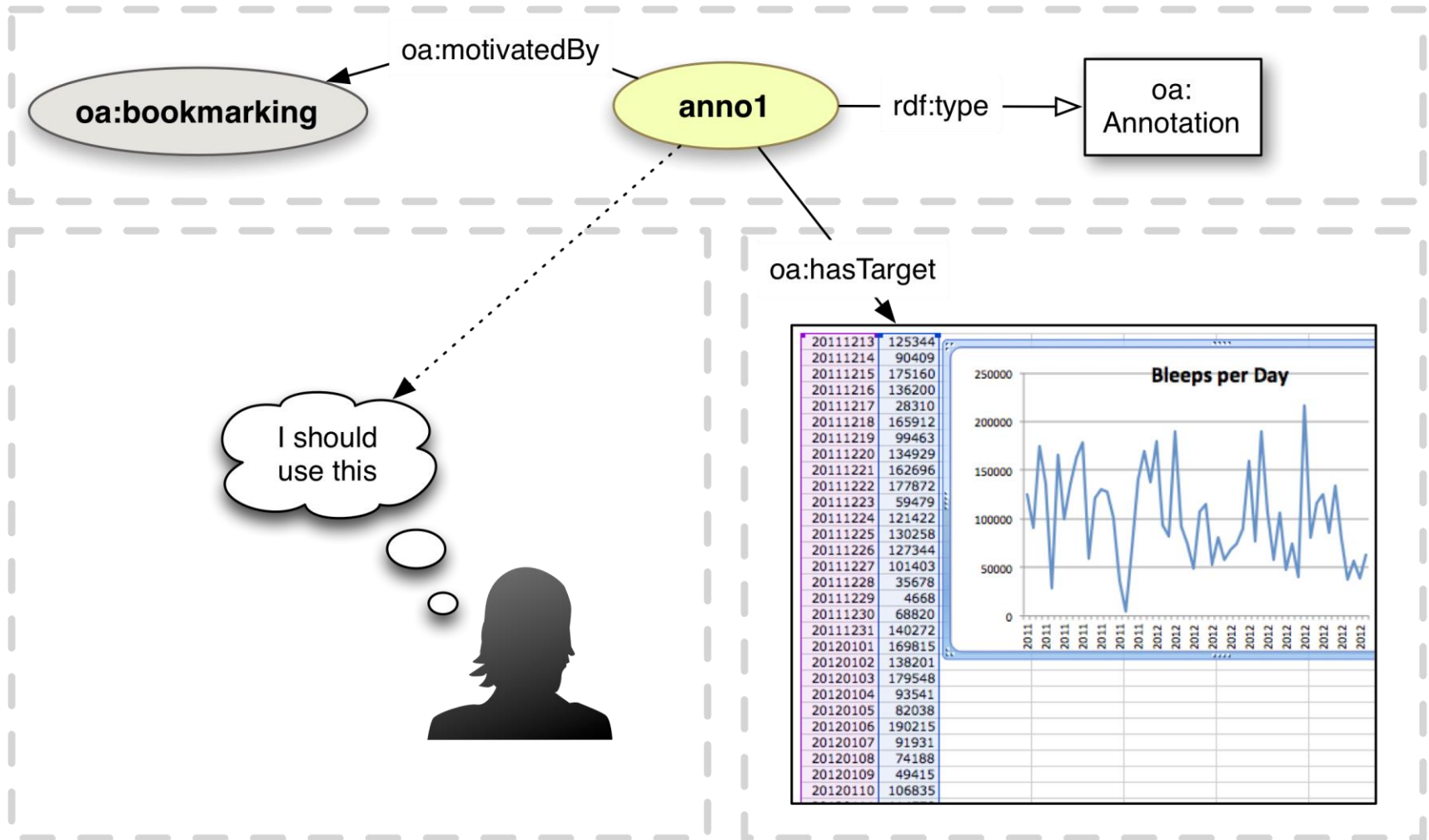
Author Keywords

Annotation; Web Architecture; Interoperability

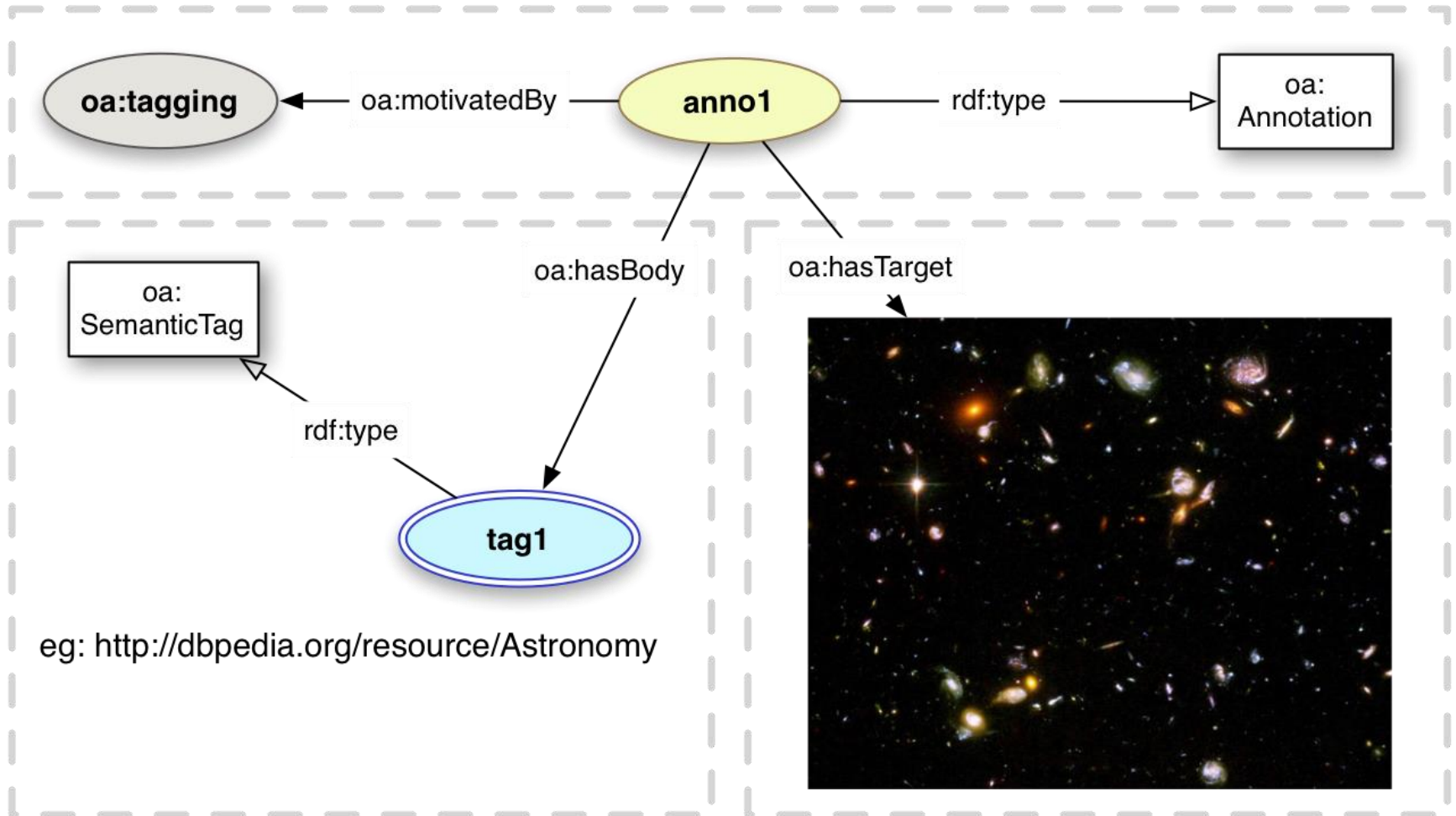
the user-created annotations cannot be shared or reused due to a deliberate "lock-in" strategy within the environments where they were created. The minimum requirement for any solution in this domain is a common approach to modeling and expressing annotations, and this is the primary aim of the Open Annotation work.

The Open Annotation data model provides an extensible, interoperable framework for expressing annotations such that they can easily be shared between platforms, with sufficient richness of expression to satisfy complex requirements while remaining simple enough to also allow for the most common use cases, such as attaching a piece of text to a single web resource. The intended use of this interoperability is either for sharing public annotations with others or for the migration of private annotations between systems or devices. Therefore, the annotations must be able to be integrated into existing collections and reused without

Use Case: Organization - Bookmarking



Use Case: Organization - Tagging



Further Specification of Resources

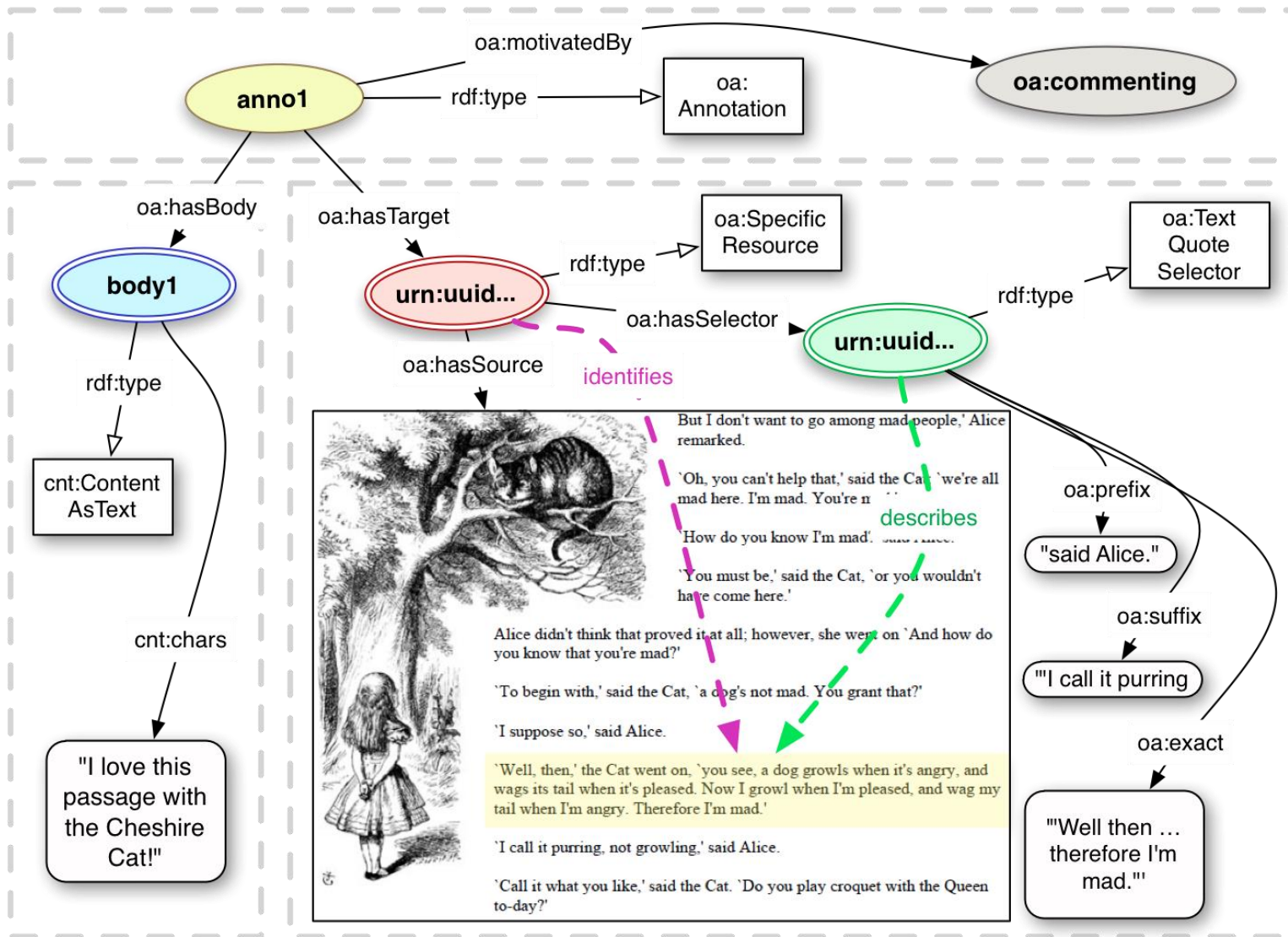
Specific Body and Specific Target resources identify the region of interest, and/or the state of the resource.

Need to be able to describe the state of the resource, the segment of interest, and potentially styling hints for how to render it.

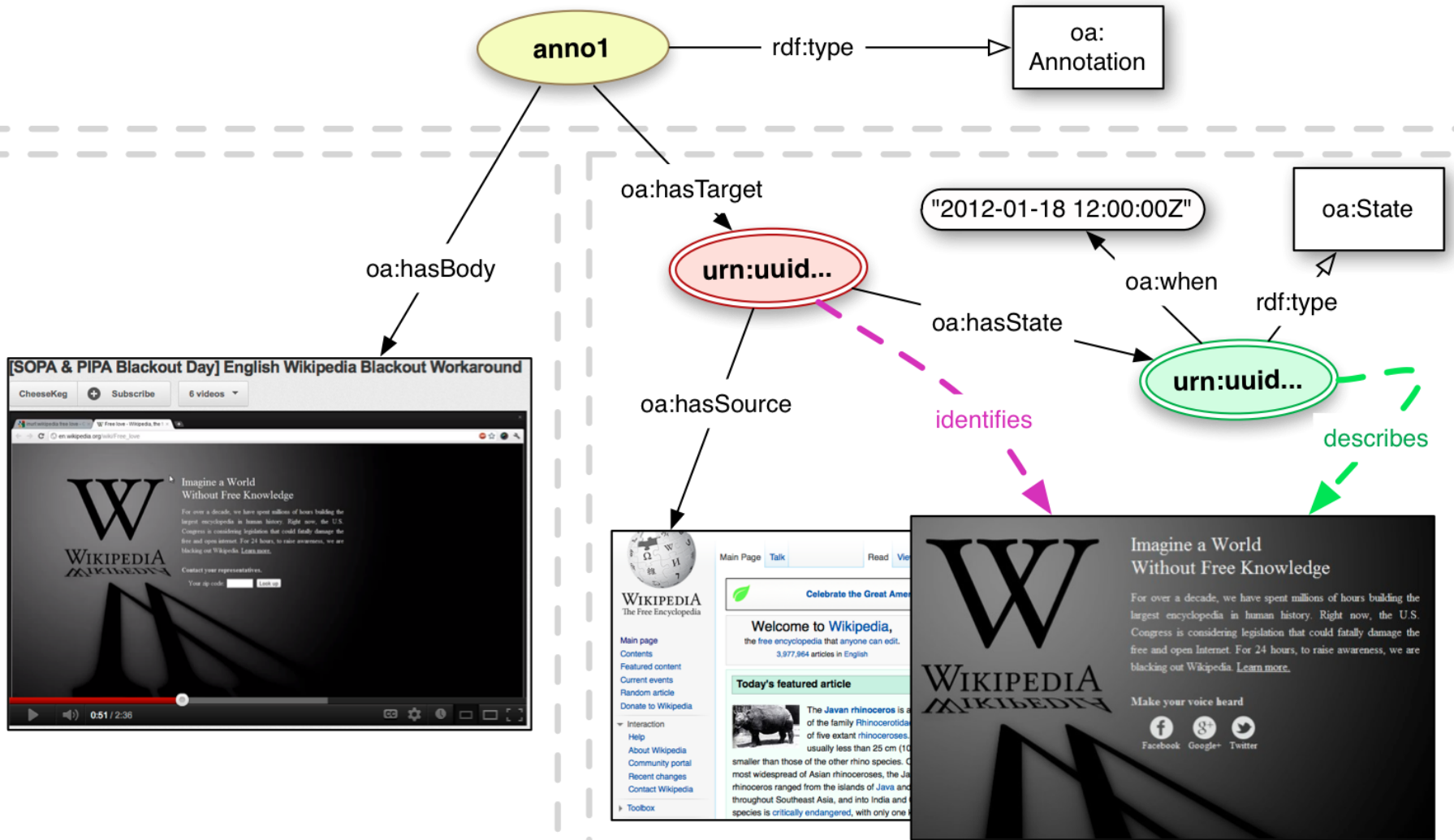
We introduce:

State	Describes how to retrieve representation
Selector	Describes how to select segment
Style	Describes how to render/process segment
Scope	Describes context of the resource

Use Case: Specific Note Taking



Use Case: Dynamic Knowledge



Future of Annotation

Model:

- Selectors for new media types
- More explicit motivations
- Collections of Annotations

Protocols:

- REST
- Search and Ranking Results

Trust:

- Reputation and Identity
- Controlling Access and Digital Signatures

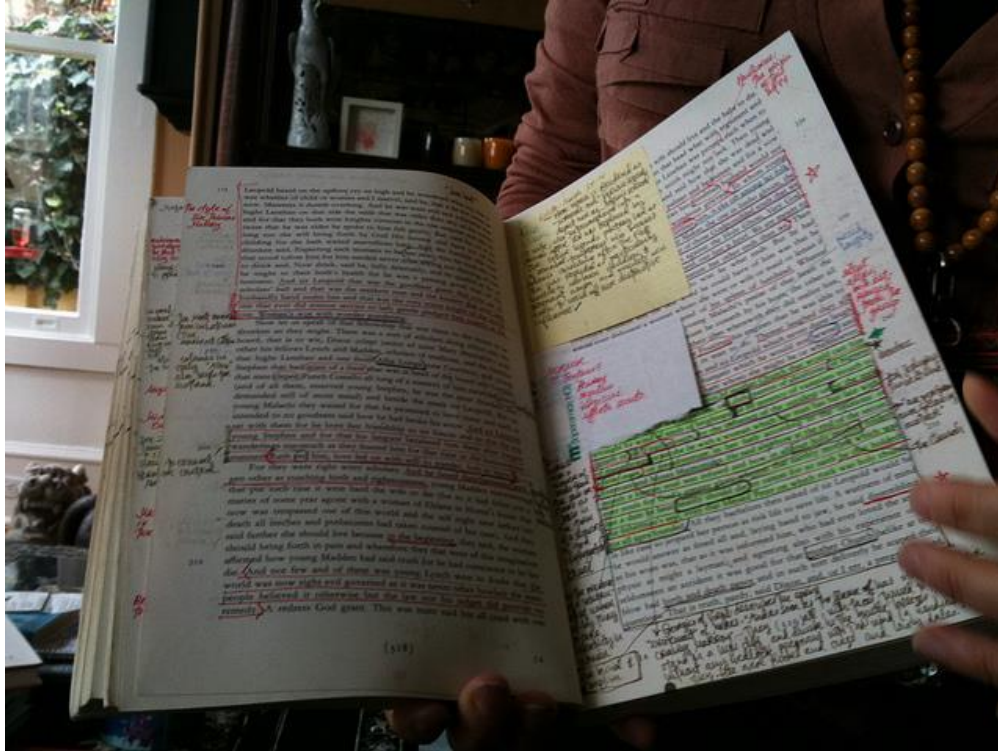
Future of Annotation?

Challenge to know if/when to move to formal standards process

- Informal (Community Group):
 - More flexible
 - No membership requirements
 - Important for short term engagement
- Formal (Working Group):
 - Actually becomes a standard
 - Important for long term adoption

Likely move to formal process in 2014,
unless objections or significant changes required

Thank You



<http://www.flickr.com/photos/hinkeb/5232293964/>

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