Annotating Scholarly Resources: an Update from the Open Annotation Collaboration

Robert Sanderson, Herbert Van de Sompel
(Los Alamos National Laboratory)
Tim Cole
(University of Illinois, Urbana-Champaign)
Jane Hunter
(University of Queensland)

Abstract:
The Open Annotation Collaboration (OAC) has published the final version of its Phase 1 data model guidelines, promoting an interoperable annotation environment for scholarly artifacts and online resources. Funded by the Andrew W. Mellon Foundation, OAC is the joint effort of five institutions towards unlocking annotations on scholarly collections through applying the principles of the Web architecture and concepts from the Linked Data effort. It is believed that the lack of interoperable tools and best-practices for the annotation of digital content is a critical stumbling block that must be overcome.

Data Model:
Improvements have been made in the data model in response to valued feedback from the community and to better harmonize with outcomes of other initiatives, such as the Annotation Ontology modeling work that was also released this year. Further use cases have been identified and this has advanced thinking about the requirements for the data model. The collaboration’s goal is a model for annotation interoperability that is rich enough to support a broad range of scholarly needs in both the sciences and humanities, while remaining flexible enough and easy enough to adopt, implement and use for simple annotation scenarios.

Figure 1: OAC Data Model Example
The data model allows for sections of resources to be either the Body or the Target of the Annotation, as well as multiple targets. The number of relationships is kept to a minimum, while still being more expressive than other similar systems. Resources may also be included within the Annotation document, using a W3C standard. Annotations of resources that change over time are handled in a method consistent with that of segments of resources.

**Phase 2:**
Pending commitment of new funding, Phase 2 will begin in January 2011. New work will extensively test the applicability and usefulness of the OAC data model in real world, scholarly contexts. We will continue to refine the data model based on the experimental results from a range of additional international partners, including:

- **Stanford University:**
  Using Annotations to transcribe and display medieval manuscripts
- **AustLit:**
  Using Annotations to support the collaborative development of scholarly editions
- **Alexander Street Press:**
  Annotation of streaming video, including synchronization between multiple targets
- **Herzog August Bibliothek & University of Illinois:**
  Annotation of digital emblem books, at multiple levels of FRBR granularity

Four further experiments will be funded, running from June 2011 until May 2012. The experiments will be selected based on an open, competitive RFP-based process, and funding will be between $30,000 and $45,000. A partner from the collaboration will play an active role in the selected experiments to ensure that the feedback is appropriate and useful.

A workshop on Using OAC will be held in March, 2011. A call for participation will be issued, including that attendees must submit a 1 to 2 page brief describing an Annotation use case of particular interest to them. A maximum of 20 participants can be accommodated, and funding will be provided for travel. Participation in the workshop is not a pre-requisite for submission to the experiment RFP, although the information presented at the workshop is likely to be of interest to anyone intending to submit.

**Select 2010 Bibliography:**

- "Interoperable Annotation: A Reference Implementation for the Open Annotation Collaboration", Reside D. Lester D. and Owens T. *CNI Spring Forum 2010*, Baltimore, MD, April 2010
- "Making Web Annotations Persistent over Time", Sanderson R. and Van de Sompel, H. *Procs. of the 10th Joint Conference on Digital Libraries*, Surfer’s Paradise, Australia, June 2010

**More Information:**

- [http://www.openannotation.org/](http://www.openannotation.org/)
- [http://groups.google.com/group/oac-discuss](http://groups.google.com/group/oac-discuss)