**Collaborative Scholarship through Micro-Publications**

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The use case of a group of scholars collaborating to produce a detailed analysis of the treatment of a topic in ancient literature provides an interesting example of the challenges and opportunities for new forms of scholarly discourse.

In the tradition of print culture, publications are typically produced individually, and collaboration is reduced to exchanges at conferences and informal communication among scholars. For instance, in preparation for a conference on a targeted theme, a Classical scholar prepares their analysis by combing the literature for references to the subject, searching perhaps on a lemma, declined forms of the lemma and synonyms. She keeps track of the passages which she wants to reference by noting their canonical citation (e.g. Hom. *Il*. 21.1-383), making a copy of the source text, and locating or creating a translation. She might then examine images of artifacts for appearances of the theme, and review secondary sources to gain an understanding of the history of scholarship on the theme.

The group of scholars then come together to discuss their findings, each equipped with their documents, many of which reference the same or overlapping sources, each with their own transcription and translations, the words of interest highlighted in bold or other typographic emphasis. Images are referenced by their museum location or other, with regions of interest on these images described verbally or with copies of the image highlighted manually. Discussion and Q/A sessions take place and changes or enhancements are suggested. Later, each scholar writes a narrative argument detailing their findings, which is usually peer-reviewed, prompting changes of varying significance as the case may be. Finally, publication takes place in a joint volume. Such volumes are often termed “collaborative” or “common” publications, but they are usually fairly disjointed in style and focus, with the editor writing a general introduction in an effort to bring out the commonalities in theme across chapters that take varying approaches to the question and can even come to radically different conclusions.

In a digital space, this entire process can and should be a living collaboration happening in real time. We can reduce the manual labor-intensive and redundant work of recording and transcribing citations through the use of text repositories, catalogs and search tools which return stable, machine-actionable and resolvable references to canonical citations, lemmas and forms. Textual annotation tools can then provide the ability to target instances of specific words or phrases in these texts (also using and creating stable resolvable identifiers for them) to support the scholarly argument and point to the references in an unambiguous way. Image annotation tools can be used to produce stable, resolvable identifiers for regions of interest on images. As the research is ongoing, discussion and argument of individual findings can be captured as annotations on the text and image annotations themselves, using unambiguous identifiers for the scholars contributing to the discussion. In this model, peer-review is an ongoing process that takes place in numerous iterations as the publication takes shape. The result is not only a single, cohesive scholarly publication of the findings, but also a large set of micro-publications made up of single assertions about texts and objects, linked both to the scholars who asserted them, their role in the overall work, and the larger publication.

In order to realize this goal we must be able to leverage the world of linked data and digital tools to take these modern day scholarly discussions out of their small silos. The objective is to build and sustain a collective knowledge base of such micro publications that can be used to support novel research into the texts and artifacts. The following are key enabling factors:

* Standards for identification, representation and retrieval of text and object citations.
  + CTS[[1]](#footnote-2) and CITE[[2]](#footnote-3) are examples of two such standards in the field of digital classics, but we might also look to other domains including the sciences for solutions.
* Shared data models for representation of assertions and provenance of these assertions
  + the LAWD[[3]](#footnote-4) ontology provides a reference ontology for the world of Linked Ancient World data, leveraging and filling the gaps in standards such as Dublin Core, Open Annotation, CIDOC/CRM and PROV
* Tools and services which use these identifiers and data models
  + Pleiades[[4]](#footnote-5), Perseids[[5]](#footnote-6), Papyri.info[[6]](#footnote-7), the Digital Latin Library[[7]](#footnote-8), and Pelagios[[8]](#footnote-9) are among projects in the field of digital classics that are collaborating to build interoperable tools and services.
* Commitments by the libraries and institutions to preserve these identifiers and data, in the same way they preserved the original data in the form of manuscripts and other physical artifacts.

With the structures for this in place then, we might move on to representing the millenium of scholarship which came before and on which we build today's knowledge using the same representations as the modern day discourse, thus preserving the cultural heritage of knowledge for the next generation.

As we move forward with the Perseids project, we will continue to refine this model in collaboration with our partner projects and with scholars in the field.

1. http://www.homermultitext.org/hmt-docs/specifications/ctsurn/specification.html [↑](#footnote-ref-2)
2. http://cite-architecture.github.io/citeurn\_spec/ [↑](#footnote-ref-3)
3. https://github.com/lawdi/LAWD [↑](#footnote-ref-4)
4. http://pleiades.stoa.org/ [↑](#footnote-ref-5)
5. http://sites.tufts.edu/perseids/ [↑](#footnote-ref-6)
6. http://papyri.info/ [↑](#footnote-ref-7)
7. http://apaclassics.org/publications-and-research/digital-latin-library-project [↑](#footnote-ref-8)
8. http://pelagios-project.blogspot.com/ [↑](#footnote-ref-9)