Stanford Encyclopedia of Philosophy: A Dynamic Reference Work

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The primary goal of the Stanford Encyclopedia of Philosophy project http://plato.stanford.edu/ is to produce an authoritative and comprehensive reference work devoted to the academic discipline of philosophy that will be kept up to date dynamically so as to remain useful to those in academia and the general public. To accomplish this goal we have designed and implemented web-based software by which academic philosophers can collaboratively write and maintain such a 'dynamic reference work'. Our implementation has features that are not found in any other online reference work in any discipline, and that enable the profession of philosophy to maintain such a reference work without the cost or level of staff support required for traditional reference work publishing.

A dynamic reference work is a new concept in digital libraries technology. We define this concept as follows: (1) it is published in a continuously revisable electronic medium, (2) it offers a comprehensive set of entries on topics in a target discipline, (3) it provides the authors of the entries with electronic access to the reference work's central web server, so that they can remotely edit and update private copies of their entries and submit them for publication according to a regular update schedule and at any other time it becomes necessary to revise, (4) it maintains quality by way of a distinguished Board of Editors, the members of which commission the entries and referee both the initial versions of the entries and subsequent substantive modifications, prior to publication on the web, and (5) it creates, and makes publicly available, archives of the entries on at least a quarterly basis (i.e., these contain fixed versions of the entries, which can be cited in scholarly publications). A dynamic reference work based on this model constantly evolves and becomes responsive to new research.

Clauses (3) and (4) of this definition indicate that a dynamic reference work is not merely a revisable reference work or one that is published online. Successful implementation of the dynamic aspects of this definition depend upon the ease with which the authors, subject editors, and the principal editor have access to the tools and information that allow entries at all stages of the work flow to be managed asynchronously. In such an environment, each entry has its own deadlines and it is necessary to track electronically the location of every entry in the work flow and provide automated reminders to individuals with work pending. Our success in organizing 75 distinguished editorial board members

to oversee 450 expert authors, working to a set of deadlines specified by our work flow, distinguishes our project from other, less formal, on-line encyclopedia projects.

We will demonstrate how our password-protected web interfaces and our back-end processing system and workflow system work together to facilitate this collaborative effort. Our system has several unique features designed to simplify the collaborative production of a dynamic reference work including tools for web-based editing of html source and sideby-side comparison of file versions. The web interface for authors allows them to: (1) download our templates and style sheets, (2) to upload their new entries into a private area of our web server, (3) to remotely edit copies of their entries which are stored in this private area, and (4) to submit their entries for editorial review. The web interface for subject editors allows them to: (1) add important or new topics in philosophy to our database, (2) commission authors to write entries, (3) examine and comment on the new or revised entries submitted by the authors prior to publication, (4) display, in their web browser, revised and original entries sideby-side, with the differences highlighted, and (5) accept or reject entries and revisions. The principal editor has a web interface, by which this collaborative workflow system is administered. Among other things, it tracks deadlines for each stage of the publication and revision process for each entry.

We have designed our software in such a way that authors and subject editors require only basic computer skills to participate effectively in the project. Authors may also use any html-authoring software to create their entries, which then are automatically formatted by our software and may be easily maintained by authors through the web interface. (This author-friendliness is an advantage of our html-based system over currently available xml-based alternatives.) Our use of cgi scripts also means that our browser-based interfaces are accessible from any internet-connected workstation without the installation of any special software. Thus the system enables an international collection of authors and subject editors to solicit, submit, review, revise, publish, and update high quality articles under the guidance of a principal editor, with minimal support from a programmer and other staff.

The technical specifications of our system are described in the project description of our NSF/DLI-2 proposal (accepted in August 2000), which may be found at the URL: http://plato.stanford.edu/NSF/project-description.pdf>

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