

PORTICO

Portico

An Important Component of a New Preservation  
Infrastructure

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## This Is a Very Challenging Problem

- Technological challenges are plentiful.
- Collaboration is essential.
- Access to archived literature is a key issue for publishers and libraries, but they come at it from different perspectives.
- Financial sustainability must be secured.



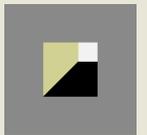
## Portico's Mission

To preserve scholarly literature published in electronic form  
and to ensure that these materials remain available  
to future generations of scholars, researchers, and students.



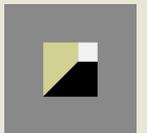
## Portico's Governance Structure

- Portico is an enterprise being incubated within Ithaka.
- Ithaka is an independent 501(c)(3) not-for-profit organization affiliated with JSTOR. It has its own governing Board of Trustees. This structure enables the community to benefit from connections between JSTOR and Ithaka/Portico while also enabling and facilitating independent innovation in a dynamic environment.
- Portico has established an advisory committee comprised of librarians and publishers with a vested interest in electronic preservation of scholarly journal literature. The first meeting of the advisory committee was in September 2005.



## Portico Assumes Archiving Requires

- A trusted archival partner with an appropriate:
  - Mission: Preservation should be mission-central.
  - Economic model: Long-term sustainability is best secured through diverse funding sources.
  - Technological infrastructure: Technology must support unique preservation functions and be updated as technology evolves.
  - Collaborative relationships with libraries and publishers: Both parties have preservation needs and will benefit from an archival service.
- Adoption and ongoing watch of preservation and publishing standards, best practices, and format evolution with action taken well in advance of technology or format obsolescence.



## What Portico Is

- An organization with a mission and singular focus to provide a permanent archive of born-electronic scholarly journals to ensure that over the long-term a valid, reliable copy of the work exists and is accessible.
- A centralized archive that is open to all peer-reviewed journals. Archived journals may have a print version in addition to an electronic version or they may be available only in electronic form.
- Portico preserves the intellectual content of the journal, including the text, images, and limited functionality such as internal linking. “Look and feel” and publishers’ value-add features are not preserved.



## Portico's Approach to E-Journal Archiving

- Publishers deliver to Portico the "source files" of electronic journals (SGML, XML, PDF, etc).
- Portico converts or "normalizes" the files from their original proprietary format to an archival format based on the NLM Archival DTD and deposits the content in the Portico repository.
- Where possible, Portico utilizes open standards (NLM DTD) and open source tools (JHOVE).
- Portico supports the development of independent repository certification mechanisms and is participating in the Center for Research Libraries Audit and Certification of Digital Archives project.



## Portico's Approach to E-Journal Archiving

- By normalizing content at the time of deposit, Portico:
  - Stores files in non-proprietary formats that can be effectively managed over the long term.
  - Can identify problematic or missing files and conduct follow-up intervention with publishers.
  - Is positioned to render files to supporting libraries, under appropriate conditions.
- Portico retains the source files for the long term; the normalized files will be migrated as needed to new formats.
- Portico offers access to archived content to participating libraries under specific trigger event conditions.



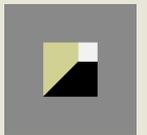
## Portico Archive Service & Access Model

- For participating libraries, trigger events initiate campus-wide access. Trigger events include:
  - When a publisher ceases operations and no entity purchases and makes titles accessible
  - When a publisher ceases to publish a title and it is not offered by another publisher
  - When back issues are removed from a publisher's site and not available elsewhere
  - Upon catastrophic failure by publisher delivery platform for a sustained period of time
  - When a publisher chooses to rely upon Portico to meet perpetual access obligations.
- Pre-trigger event, select librarians at participating libraries are granted password-controlled access for verification purposes.



## Sustainability

- Diversified revenue streams are important to the longevity of the archive. Support for the archive comes from the primary beneficiaries of the archive - publishers and libraries.
- Government agencies and charitable foundations are also expected to provide support.
- JSTOR, The Andrew W. Mellon Foundation, Ithaka, and the Library of Congress are investing significantly in Portico's infrastructure development.



## Sustainability

- Publisher Contribution
  - An annual Supporting Publisher Contribution to fund initial conversion tools development and to defray the cost of adding new content as it is published.
  - Contributions are tiered and vary according to the size of the publisher's annual journals revenue (subscription and advertising)
- Library Contributions
  - A one-time Archive Development Contribution to fund infrastructure development and to prepare for future migrations.
  - An annual Archive Support Contribution to defray the cost of adding new content as it is published.



Urgent Call for Action:  
Qualified preservation archives provide a minimal  
set of well-defined services.

- Receive files in a standard form from a reliable source.
- Store files in non-proprietary formats.
- Use a standard means of verifying the integrity of files.
- Limit the processing of files, in order to keep costs down, but provide sufficient processing in order to adequately render files.
- Restrict access except under specific conditions.
- Offer transparent means of auditing archival practices.



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