Project Bamboo:
Planning Approach and Preliminary Results

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CAMP: Campus Architecture & Middleware Planning
Registering, Discovering, and Using Distributed Services in Academia
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Why Bamboo?

In the natural world, bamboo is a highly flexible organic material that serves multiple purposes: it can live as a single stalk on a desk or grow quickly into renewable forests; be used for constructing buildings or decorating them; become as strong as hardwood or as flexible as cloth; and can be lashed together to keep water out as in a boat or transport water as in a pipe. We envision the project as being quite similar: sustainable, configurable, flexible, and reliable – hence the name Bamboo.

Project Bamboo: the Grantees

PRINCIPAL INVESTIGATORS

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LEADERSHIP COUNCIL

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PROGRAM DIRECTORS

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Project Bamboo: 90+ institutions

American Council of Learned Societies (ACLS)

American School of Classical Studies at Athens

American Federation of Scientists

American Numismatic Society

Andrew W. Mellon Foundation

Arts & Humanities Research Council (AHRC)

Australian National University

The British Library

Brown University

Cambridge University

Carleton College

Chicago State University

City University of New York

Columbia University

Cornell University

Council on Library & Information Resources (CLIR)

Dartmouth College

Digital Library Federation (DLF)

Documents Compass

Dominican University

Eastern Kentucky University

Eastern Michigan University

Fine Arts Museums of San Francisco

Freiburg Institute for Advanced Studies, Freiburg University

George Washington University

Getty Research Institute

Harvard University

Institute of Museum & Library Services (IMLS)

Johns Hopkins University

Joint Information Systems Committee (JISC)

Lake Forest College

The Long Now Foundation

Loyola Marymount University

Massachusetts Institute of Technology

Miami University of Ohio

National Endowment for the Humanities (NEH)

New York Public Library

New York University

Open University

Oxford University

Princeton University

Purdue University

San Jose State University

Smith College

Stanford University

Sun Microsystems

Technische Universität Darmstadt

UC California Digital Library

Université François-Rabelais, Tours

Université Paris IV, Sorbonne

University at Buffalo, State University of New York

University of California, Berkeley

University of California, Irvine

University of California, Irvine

University of California, Los Angeles

University of California, Santa Cruz

University of California, San Diego

University of California Press

University of Chicago

University of Louisiana at Lafayette

University of Melbourne

University of Michigan

University of Minnesota

University of North Carolina, Chapel Hill

University of Pennsylvania

University of Puget Sound

University of Tennessee, Knoxville

University of Toronto

University of Virginia

University of Washington

University of Wisconsin-Madison

Willamette University

Western Jersey University of New Jersey

Community Colleges

Research Universities

Liberal Arts Colleges
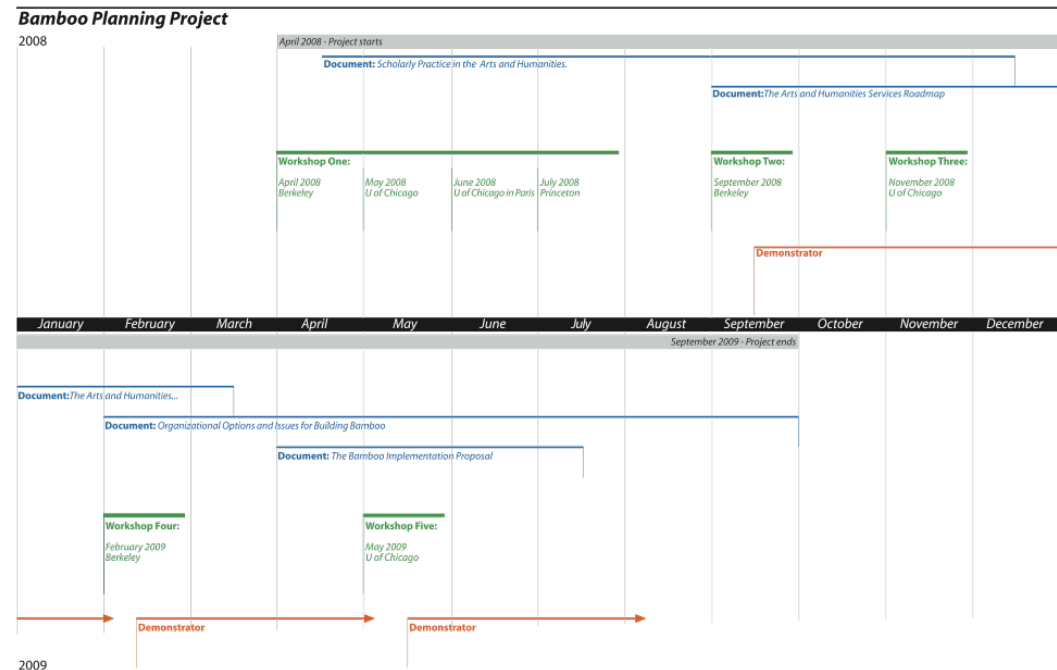
Libraries and Museums

Disciplinary Societies

Funding Agencies

How can we advance
arts and humanities research
through the development
of shared technology services?

Workshops:

1. Understanding Arts & Humanities (x 4)
2. Exploring Scholarly Practices
3. Identifying Services
4. Defining Partnerships
5. Forming a Consortium

Bamboo Planning Project

2008

April 2008 - Project starts

Document: *Scholarly Practice in the Arts and Humanities.*

Document: *The Arts and Humanities Services Roadmap*

Workshop One:
April 2008
Berkeley

May 2008
U of Chicago

June 2008
U of Chicago in Paris

July 2008
Princeton

Workshop Two:
September 2008
Berkeley

Workshop Three:
November 2008
U of Chicago

Demonstrator

January	February	March	April	May	June	July	August	September	October	November	December

September 2009 - Project ends

Document: *The Arts and Humanities...*

Document: *Organizational Options and Issues for Building Bamboo*

Document: *The Bamboo Implementation Proposal*

Workshop Four:
February 2009
Berkeley

Workshop Five:
May 2009
U of Chicago

Demonstrator

Demonstrator

2009

Deliverables:

- Documents
    - Scholarly Practice in the Arts and Humanities
    - Arts and Humanities Services Roadmap
    - Organizational Options and Issues for Building Bamboo
- Shared Services Roadmap
- Demonstrator Projects
- Implementation Proposal

18-month Planning Phase

Workshop One:
Understanding Arts and Humanities Scholarship

- ☑ April 28 - April 30: Berkeley
- ☑ May 15-17: Chicago
- ☑ June 9-11: Paris
- ☐ July 14-16: Princeton

Discovery & Analysis

- Federated, deep, semantic search across databases, archives, and disciplines

- Trusted evaluation & classification

- Identify patterns & relationships across sources and multiple disciplines: looking at material in (deep) context

- Challenge and reform hypotheses, ontologies, and interpretations

- Compare editions/versions of a work/piece

Annotate & Manage

- Persistent, trusted storage; stable URIs
- Data and tools that are interoperable on the basis of relatable ontologies
- Citation hyperlinking (follow citation trails)
- Compile bibliographies
- Tools for marking up text and other digital objects
- Folksonomic tagging with identifiable levels of authority

Serendipity, 'Chains of credit', Modeling & Visualization

- **Gathering / Foraging != Search**

- **Provenance and citation are key aspects of usable discovery**

- **Modeling and visualization have Arts & Humanities applications**
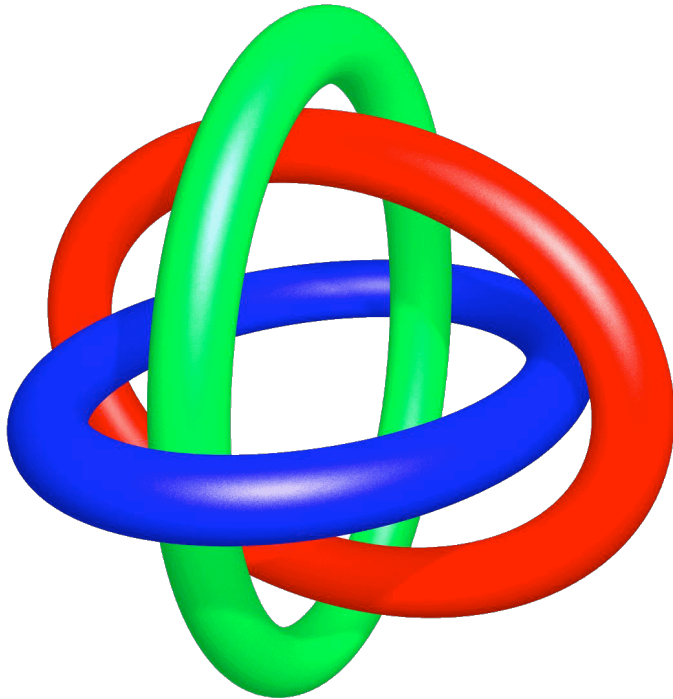
Open Source Scholarship & Transparency

- **Intellectual Property pain and accelerating interdisciplinarity are helping to motivate "commons-based peer production" of scholarship (cf. Yochai Benkler)**

- **Social networking + interdisciplinarity may be driving an evolution away from solitary scholarship**

Social Networking & Policy Shifts

- **Community / Networking on a platform oriented to scholarly "lattices of interest" and expertise**

- **Advocacy around legal and institutional policy: boundaries of fair use in law; authority and validation in the academy**

Emerging Aspects of Scholarly Practice:

- **Shared Standards & Services**
- **Social/Scholarly Networks**
- **Deep Consortia across disciplines and national borders**

Where might these needs drive Project Bamboo as a cyberinfrastructure project?

Borrow and they will come…

– Build on, beside, & with Arts and Humanities tool and infrastructure projects across the globe ... DARIAH, CLARIN, et al. ... not a U.S.-only effort.

– Less emphasis on service/tools development

– More emphasis on standards-profiling (like SCORM?)

– Services to facilitate interoperability, 'building out the blanks'

– Scholarly-networking platform???
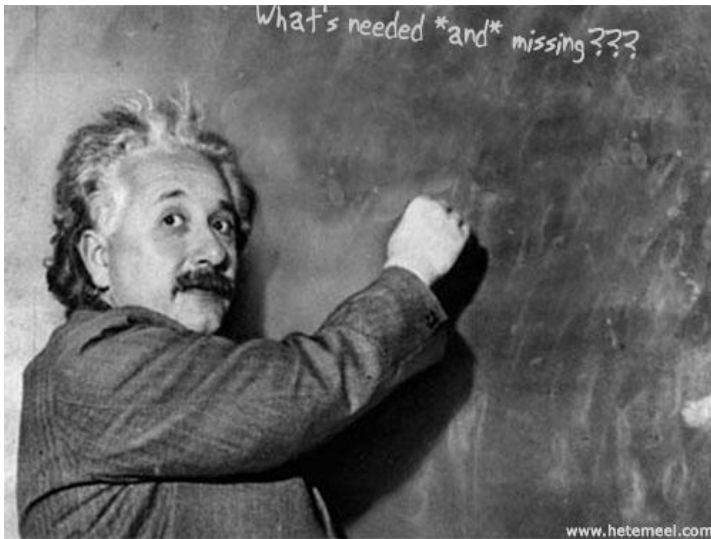
Are transaction services an A&H need?

What's needed *and* missing???

www.hetemeel.com
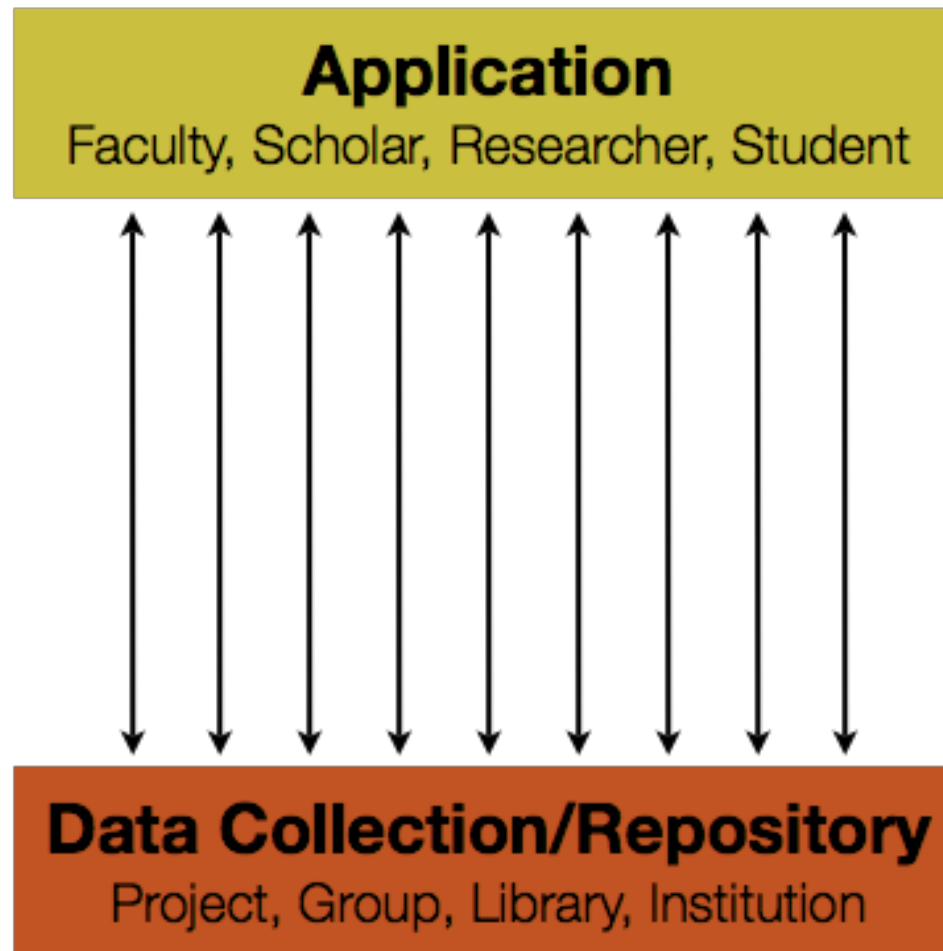
Image thanks to http://www.hetemeel.com

Might it be useful to decorate existing tools & archive interfaces with a set of services to track & record:

– Who used a resource, in what context & for what purpose?
– Who provided a resource to the digital commons?
– How a resource is measured, described, and evaluated?

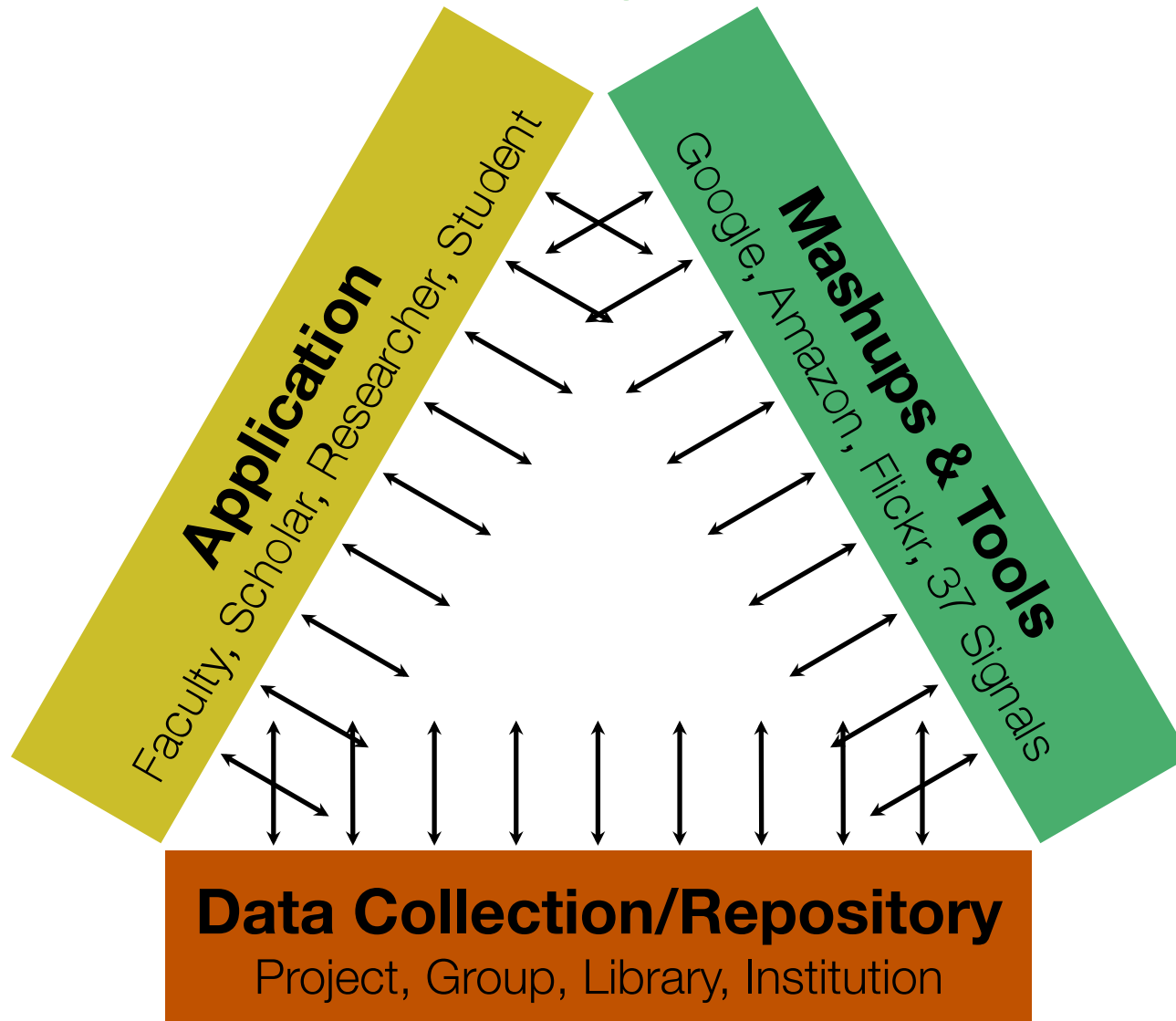We can already track website traffic. Why track deeper transaction detail?

- to feed business/financial models supporting digital humanities?
- to feed algorithms that derive scholarly value based on peer-citation?
- to suggest scholarly context?
- to suggest scholarly value (e.g., as input to tenure review)?
- to facilitate sophisticated citation maps of origin, quality, and reliability?

Middleware ∩ Project Bamboo (1)

Middleware ∩ Project Bamboo (2)

Application
Faculty, Scholar, Researcher, Student

Mashups & Tools
Google, Amazon, Flickr, 37 Signals

Data Collection/Repository
Project, Group, Library, Institution

Middleware ∩ Project Bamboo (3)

- Interoperability standards
- Standards-based service delivery platforms
- REST meets SOAP: mashup with all the security, transactionality, and reliability of WS-*
- You tell us…

Where to find Project Bamboo

- http://www.projectbamboo.org
- Flickr and del.icio.us tags: projectbamboo
- bamboo_feedback@lists.berkeley.edu

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