#### Fabio Bevilacqua, Lidia Falomo\*

#### Towards a new web site of the DHST: participatory media for a community of scholars. Possibilities and choices

THE DIGITAL WORLD IS WITNESSING and participating in a new revolution that goes by the name of "Web 2.0" and deals with "participatory media" and "social networking"; together with other relevant recent developments it can offer great opportunities for the international community of historians of science.

The phenomenal rapid increase in sites that allow easy communications and exchange of information between members; the digitalisation of millions of printed books, images, movies, and music tracks that could within a decade cover the entirety of humankind's cultural production; cooperative work with tools (like wikis) that have led to new instruments that are used by millions of users daily and compete with well established printed ones; the use of "tags", that enable establishing a folksonomy rather than a taxonomy; the possibility of emergence of niches (like the one of history of science) previously lost in "the long tail"; lectures accessible to all (through podcasts); news available in real time (through "RSS") pose new opportunities and new challenges and question our pleasant, traditional academic scientific routine.

Today historians of science usually work individually within strict boundaries, gather around small local societies, interact just through email or by expensively participating in conferences, publish in traditional media (books and journals), often with financial costs and giving away the copyright of their results. This is possibly not the best way to face universal shortage of funds, of academic positions, of good students. We should try to improve matters and make extensive use of Web 2.0 technologies.

The site http://www.dhstweb.org is provided by the Division of History of Science and Technology (DHST) of the International Union of History and Philosophy of Science. It aims to improve communications and cooperation among historians of science and technology worldwide through Web 2.0 tools (such as Personal Pages, Blogs, Tags, Wikis, Podcasts, etc). It is mainly, but not exclusively, based on Google Applications for Your Domain.

The new DHST site still provides information on the Division's activities but its success will largely depend on an active role played by the community of historians. The success of this "experimental" site might foster the transformation of the Division into an organization with both national (today about sixty) and individual members (today not in the statutes).

This site can be read by everybody interested in History of Science and Technology worldwide. To use the interactive possibilities offered by Web 2.0 tools, which will be progressively added, historians of science (professional, students, amateurs) need to register.

In order to register historians have to send an email with their data to info@dhstweb.org. According to availability they will get an email account (like: j.smith@dhstweb.org) and a password (provided to DHST by Google Applications for Your Domain) that will let them have access to a number of tools (from number 6 on tools are not provided by Google Applications for Your Domain but can be accessed opening a Google account with your "j.smith"@dhstweb.org user name and password, without the need of another Gmail account). Registration is free. The tools already implemented or that will be progressively implemented are:

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- 1. Email: 2 Gbytes of disk space for your mail. It works like Gmail, and allows to easily use the list of contacts of all other members. Of course it is possible to readdress the incoming mail to your main account (or viceversa!).
- 2. Voip through Talk (chat, talk and exchange files with other members). You need to download the free software, make yourself "available", invite a contact to accept your calls. Moreover utilizing Skype you can have a conference call (up to 9 users +host) and broadcast live (up to 100 users).
- 3. Calendars: manage a number of personal Calendars (compatible with Outlook and others), access the DHST Calendar (DHST and other HST events) and all the other public calendars.
- 4. Personalise your own home page with a number of "gadgets" that will let you control at a glance most of the tools discussed so far (and others).
- 5. On line documents and cooperative tools: DHST web members can start using Google Docs and Spreadsheets through their dhstweb.org account and password.
- 6. Groups: access the DHST Groups (through Google Groups Beta), basically cooperation tools on specific topics. The Council and each Commission will have a Group. Groups endorsed by DHST can be added according to specific needs and will be moderated; in principle Groups discussions can be read by everybody, participation is allowed only to Group members (acceptance is under the responsibility of the moderator). Groups allow easy communication between group members (not necessarily through email!), easy uploading of files and (for the Group manager) publication of web pages (100 MBytes each group), publication of members own profiles (making it easier to identify colleagues with similar research interests). It is a basic tool to build and participate in a community without being submerged by email messages.
- 7. Blogs: DHSTweb members will be entitled to comment and/or post on the site Blog and on all the other DHST Blogs that will be published, allowing better interaction between members and DHST officials. Of course they will be able to contribute with their own blogs.
- 8. Web pages: publish easily your own web pages with Page Creator (with 100 MBytes of disk space to build your personal web site and upload your files).
- 9. News: Rss and Atom technology allow easy update of information (already widely adopted by the main news commercial sites that show the icon ). Information once selected is available through your own browser or special applications called readers (e.g.: Reader) or aggregators. It is possible for instance to receive the table of contents of the latest issue of the main HOST journals (a freely delivered "current contents"). We are working at making this available to all on the DHST website (here).
- 10. Tags: to informally generate internet taxonomies (folksonomies). If you classify web pages of interest, you can have at hands your bookmarks and share them with the community (social bookmarking). This would dramatically improve access to relevant HOST materials. Software is provided by Del.icio.us (Yahoo) and more recently by Notebook (Google).
- 11. Wikis: the extraordinary success of Wikipedia has publicised the possibility of collaborative authoring through appropriate software programmes (or web sites) called wikis.
- 12. Podcasts: Basically a recorded video or audio file that can be downloaded and utilized asynchronously. A form of narrowcasting ("broadband / narrowcast, narrowband / broadcast") "Podcasting is the method of distributing multimedia files, such as audio or video programs, over the Internet using syndication feeds, for playback on mobile devices and personal computers." Could be very useful for spreading talks, interviews, lessons and for educational purposes.

For further details on the subject see the presentation attached below.

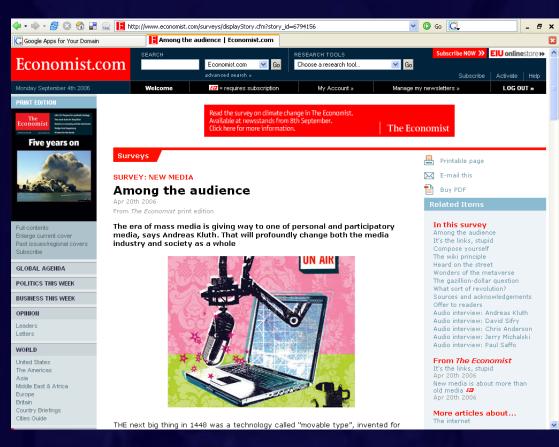
Towards a new web site of the DHST: participatory media for a community of scholars. Possibilities and choices

> Fabio Bevilacqua, Lidia Falomo Università di Pavia



#### Web 2.0

The digital world is witnessing and participating in a new revolution that goes under the name of "Web2" and deals with "participatory media" and "social networking"; together with other relevant recent developments it can offer great opportunities for the *international* community of historians of science.



#### Communities

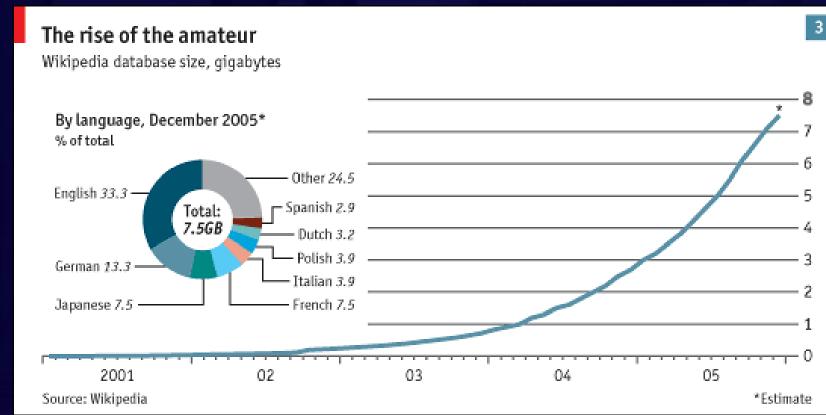
 Phenomenal rapid increase of sites that allow easy communications and exchange of information between members (like MySpace that has now reached 100 millions)





#### **Cooperative work**

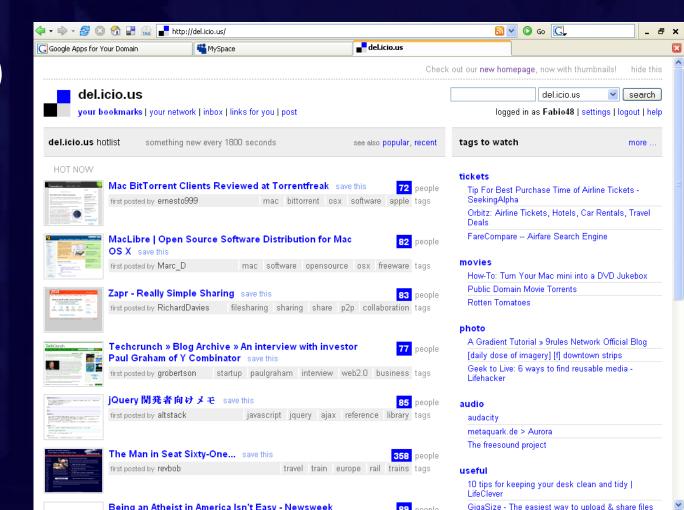
 New tools (like wikis) have led to new cultural projects that are used by millions users daily and compete with well established ones



# Indexing

# Powerful instruments of search and retrieve allow not only to find but also to reorder

(for instance using "tags") all sorts of documents



# Learning tools

 Lectures can be made available to all through podcasts



#### News

#### Are available in real time (through "RSS")

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#### **New Alexandria**

The digitalisation of millions of printed books, images, movies, music tracks could within a decade cover the entirety of humankind cultural production

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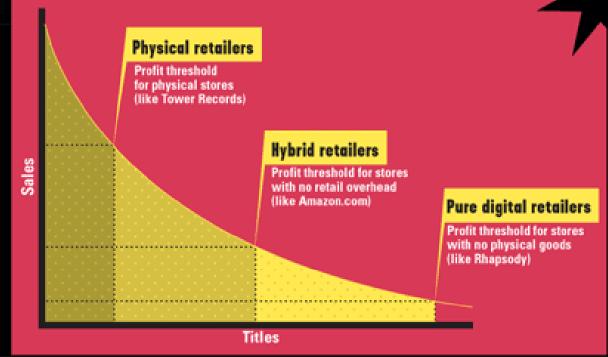
### The long tail

 Documents and books previously lost in "the long tail" acquire new importance

#### THE BIT PLAYER ADVANTAGE

Beyond bricks and mortar there are two main retail models – one that gets halfway down the Long Tail and another that goes all the way. The first is the familiar hybrid model of Amazon and Netflix, companies that sell physical goods online. Digital catalogs allow them to offer unlimited selection along with search, reviews, and recommendations, while the cost savings of massive warehouses and no walk-in customers greatly expands the number of products they can sell profitably.

Pushing this even further are pure digital services, such as iTunes, which offer the additional savings of delivering their digital goods online at virtually no marginal cost. Since an extra database entry and a few megabytes of storage on a server cost effectively nothing, these retailers have no economic reason not to carry *everything* available.





## **History of Science and Web 2.0**

- Today historians of science usually work individually within strict boundaries, gather around small local societies, interact just through email or expensively participating in conferences, publish in traditional media (books and journals) often with financial costs and giving away the copyright of their results.
- Possibly not the best way to face universal shortage of funds, of academic positions, of good students.



### **History of Science and Web 2.0**

 As a small step to improve matters I propose that the new edition of the DHST web site be based on these new tools (the present site has done a good job so far and has earned a reasonable page rank) and that an effort be made by the Division, but also by the other societies, to utilise them.

 The site would be accessible by registered historians of science (individual members?) and supervised by the Division's officials.



## **The Project**

 The new Web site should integrate the existing possibilities to search (the web, the site, the desktop, also utilizing clusters; books, scientific journals, libraries, catalogues, images, movies, blogs, wikis, podcasts, tags), to publish on the web (working papers, preprints, books, bibliographies, catalogues, biographies, animations, simulations, documentaries, teaching materials, presentations), to receive at will (not necessarily through email) news organised chronologically (scalable calendars) and geographically (interactive maps) (on current contents, conferences, publications, events, anniversaries, prizes, scholarships, grants),



# **The Project**

 to establish a community of individual members with the possibility to easily find, contact and work cooperatively with colleagues who share the same interests and fields of research (through profiles, groups, wikis, web mail, chat, talk (phone voip), videoconferencing) and to easily find and locate societies, research centers, university programmes, libraries, journals, archives, museums, exhibitions. The site should of course continue and improve the diffusion of information on the Division's life and activities.



 The guiding principles could be the ones of Open Access (Berlin declaration), Open Source, Creative commons.



### Choices

• The standard home page might gradually offer all these possibilities, and the individual member will be able to personalize her/his home page with the tools of choice. Given that most tools are scalable, a similar approach could be adopted by other societies and the result would be increased cooperation, greater visibility and scientific relevance.

• A choice should be made between joining together different available software or cooperating with a major global company.



#### A first example

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#### A first example

#### • Includes mail, calendar, news, groups

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Web 2.0

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As a small step to improve matters I propose that the new

### Tools

- Personalised home page
- News
  - Rss
  - Calendars
  - Maps
- Cooperation
  - Groups
  - Profiles
  - Wikis
  - Blogs
  - Tags
- Contacts
  - Web mail
  - Chat
  - Talk (phone voip)
  - Videoconferencing

- Teaching/Learning
  - Podcasts
- Search and/or publish
  - Books (catalogues or full content)
  - Papers (journals and citations)
  - Site
  - Images
  - Movies
  - Groups, Tags, Blogs
- Others
  - Browser (personalized bar)
  - Openoffice, writely
  - Citation manager
  - Images
  - Video
  - etc

