Title: The Wiki: An Environment for Scholarly Conversation and Publishing (IT tools for Science)

Date: Sep 09, 2008 06:00 PM

URL: http://pirsa.org/08090056

Abstract: \The Medium Is The Message ... The Audience Is The Content\, Marshall McLuhan, Understanding Media: The Extensions of Man, New York: McGraw-Hill, 1964. A \'wiki is a ... collaborative space ... because of its total freedom, ease of access, and use, [and] simple and uniform navigational conventions ... .\'\'[It] ... is also a way to organize and cross-link knowledge ...\', Ward Cunningham, Father of The Wiki (Leuf and Cunningham, 2001, 16). Most wikis provide the user with a set of navigation or utility tools such as the ability to create and edit a page, view recently changed pages, and rollback to previous page versions. In addition, many wikis include a discussion forum for proposed page changes. Among its many perceived benefits are its potential for facilitating a more creative environment and expanding knowledgebase, and a significant ability to harness the power of diverse point-of-views in creating collaborative works. In this presentation, we will speculate on the Wiki as a digital environment that not only supports current scholarly practices, but more importantly, offers a framework for their enhancement and transformation.

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# The Wiki: An Environment For Scholarly Conversation And Publishing

**Gerry McKiernan** 

Science and Technology Librarian

**Iowa State University Library** 

Ames, Iowa

USA

#### Science in the 21st Century

#### WHAT

- Science, Society, and Information Technology
- WHERE
  - The Perimeter Institute, Waterloo, Canada
- WHEN
  - September 9 2008 | 18:00 18:20 |

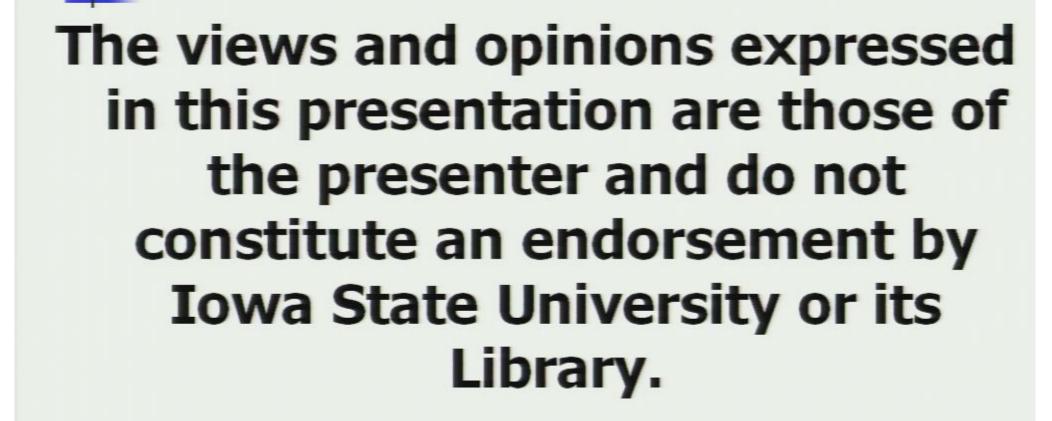
http://www.science21stcentury.org/



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- Sabine
   Hossenfelder,
   Perimeter
   Institute
- Michael Nielsen,
   Perimeter
   Institute



## 4

#### <Quote> (1)

"The basic [idea] of the Web is that [it is] an information space through which people can [not only] communicate [in general], but communicate in a special way: communicate by sharing their knowledge in a pool.

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#### <Quote> (2)

The idea was not just that it should be a big browsing medium.

The idea was that everybody would be putting their ideas in, as well as taking them out."

**Tim Berners-Lee** 

Father of the Web





#### Wikis

- Definition
- Features and functionalities
- Advantages / Disadvantages
- Scholarly Conversation and Publishing

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#### Wiki (1)



"A wiki is a freely-expandable collection of interlinked Web 'pages', a hypertext system for storing and modifying information - a database, where each page is easily editable by any user ...."

(Leuf and Cunningham 2001, 14)

#### Wiki (2)

"Wiki is a ... collaborative space ... because of its total freedom, ease of access, and use, [and] simple and uniform navigational conventions ... ." "[It] ... is also a way to organize and cross-

> Ward Cunningham Father of the Wiki

(Leuf and Cunningham 2001, 16)

link knowledge ... ."



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56 000+ articulos

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52 000+ articoli



## Features and Functionalities (1)

Most wikis provide the user with a set of navigation or utility tools such as:

- Ability to edit a page
- View recently changes pages
- 'History' feature to view or roll back to a previous version of a page

(Peterson 2004, 14)

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- 'Discuss' offline changes or proposed changes to a page
- A 'backlinks' function (view all the pages that link to the page currently displayed)
- Search function

(Peterson 2004, 14)

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## Features and Functionalities (3)

- Most public wikis do not generally require that readers register
- Additions or modifications made by readers typically are not reviewed prior to publication within a wiki

(en.wikipedia.org/wiki/Wiki)

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#### Wiki Advantages (1)

- Asynchronous benefit of incorporating the assistance of experts, peers and other professionals
- Excellent means to annotate evolving issues where spare notes, thoughts, and a meandering collection of file formats exist
- Facilitate the exchange of ideas for small group projects
- Provides for a more creative environment and expanding knowledgebase in project

management



#### Wiki Advantages (2)

- Level the playing field and allow all opinions to be heard
- Increase communication efficiency and productivity over 'back-and-forth' exchanges of e-mail attachments and discussion boards
- Provide a way to get everyone on the same pag through the writable Web
- Harness the power of diverse individuals to create collaborative works



#### Wiki Advantages (3)

#### Wikis have the potential to

- provide individuals with a forum for improving knowledge and advancing thought processes
- form collaborative social research communities with respect to project management, and
- provide innovative reference repositories for all aspects of planning, operation, and implementation

(Bean and Hott 2005, 8)

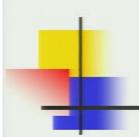
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#### Wiki Advantages (4)

Wikis Have the Potential and Power to Change **How We Think About** How We Live and Work.

(Bean and Hott 2005, 6-7)



#### **Cited Works**

- LuAnn Bean and David D. Hott, "Wiki: A Speedy New Tool to Manage Projects," Journal of Corporate Accounting & Finance 16, no. 5 (July/August 2005):3-8.
- Bo Leuf and Ward Cunningham, <u>The Wiki Way:</u> <u>Quick Collaboration on the Web</u>. Boston: Addison-Wesley, 2001.
- Gerry McKiernan, "WikimediaWorlds: Part I. Wikipedia," Library Hi Tech News 22, no. 8 (September/October 2005): 46-54.

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### Scholarly Conversation And Publishing

#### Conversational Technologies (1)

- Discussion forums, wikis, and weblogs
- Knowledge creation and sharing is carried out through a process of discussion with questions and answers (discussion forum), collaborative editing (wikis), or through the process of storytelling (weblogs)
- Conversational systems capture and represent conversations and accommodates contextualization, search, and community
- Offer ease and efficiency of representation and

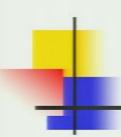
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#### Conversational Technologies (2)

- "The wiki ... has as its basic information unit the Comment-on-Topic.
- Neither time nor user are relevant (for information presentation), and the information unit in its most updated form represents the best and most timely version of thoughts on that topic.
- Wikis thus permit incremental improvement of an information unit."

Christian Wagner and Narasimha Bolloju, "Supporting Knowledge Management in Organization with Conversation Technologies: Discussion Forums, Weblogs, and Wikis," *Journal of Database Management* 16, no. 2 (April-June 2005): i-viii.



#### Disruptive Scholarship

In view of its collaborative features and functionalities, and the nature and character of alternative methods of quality management outlined, the Wiki environment could provide an outstanding framework for

- \* PREPARING
- \* EDITING
- \* REVIEWING
- \* ASSESSING
- \* PUBLISHING

for a range of scholarly work, including manuscripts, articles, journals, and monographs.

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Meeting Minder...

Pointer Options

Speaker Notes

Help

End Show

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#### **Disruptive Scholarship Model**



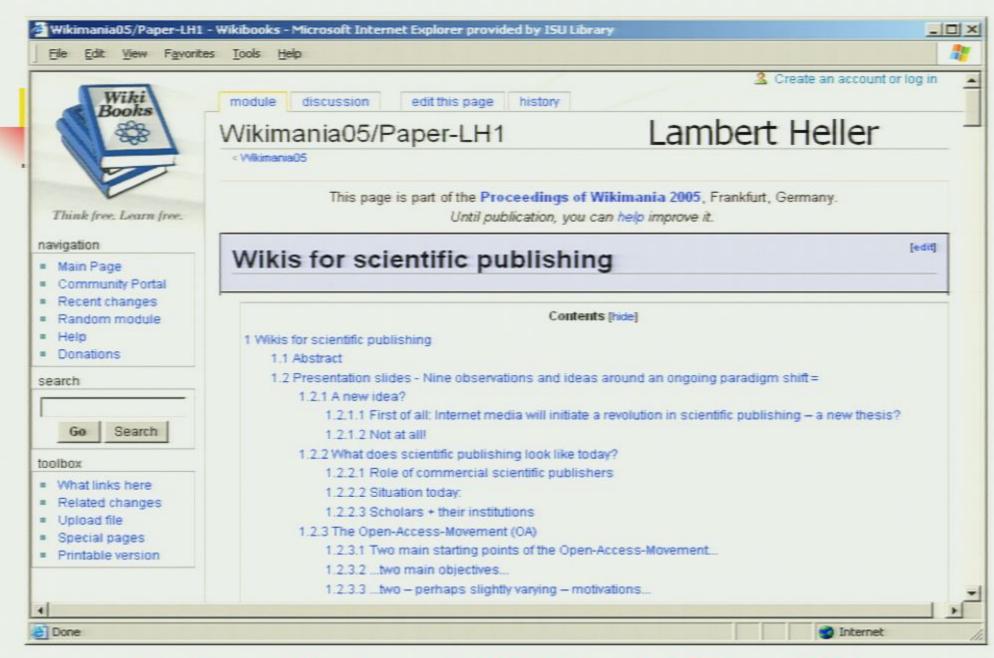
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#### **Disruptive Scholarship Model**

```
| COMPOSE | REVIEW | EDIT | REVISE | PUBLISH |
| REVIEW | EDIT | REVISE | PUBLISH | COMPOSE |
| EDIT | REVISE | PUBLISH | COMPOSE | REVIEW |
| REVISE | PUBLISH | COMPOSE | REVIEW | EDIT |
| COMPOSE | REVIEW | EDIT | REVISE | PUBLISH |
| REVIEW | EDIT | REVISE | PUBLISH | COMPOSE |
| EDIT | REVISE | PUBLISH | COMPOSE | REVIEW |
| REVISE | PUBLISH | COMPOSE | REVIEW | EDIT |
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#### Mememoir: The Radical Scientific Wiki Engine



http://www.mememoir.org/

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- Reporting in Nature Genetics, scientist Robert Hoffmann develops the first Wiki where authorship really matters.
- Based on a powerful authorship tracking technology, this next generation wiki links every word to its corresponding author.
- This way readers can always know their sources and authors receive due credit.

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- Apart from being an important guidance to the reader, authorship is often key to a successful academic and professional career.
- Authorship provides an important basis to establish priority of ideas and discoveries and to build a reputation among peers. "It is only fair to duly acknowledge authors, who invest time and knowledge in their contributions," Hoffmann says in his article.

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- Clear authorship attribution in this next generation wiki makes it also possible that users can rate each other based on their contributions.
- For the first time, collaborative publishing can therefore be enhanced with the advantages of a reputation system. Hoffmann describes how a selfregulating reputation system can help to settle editing conflicts, ....

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- "This release is an important proof of principle, but our ambitious aim with the Mememoir project is to revolutionize publishing in all of science," says Dr. Hoffmann,
- "with a knowledge base that is open access, interdisciplinary and combines the altruistic possibilities of wikis with explicit authorship."

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- The scientific wiki project, introduced in the September issue of Nature Genetics and released online today, is the first of its kind and a milestone in the Mememoir project.
- The first scientific wiki system of the Mememoir project has been released online today at WikiGenes.

http://www.wikigenes.org/

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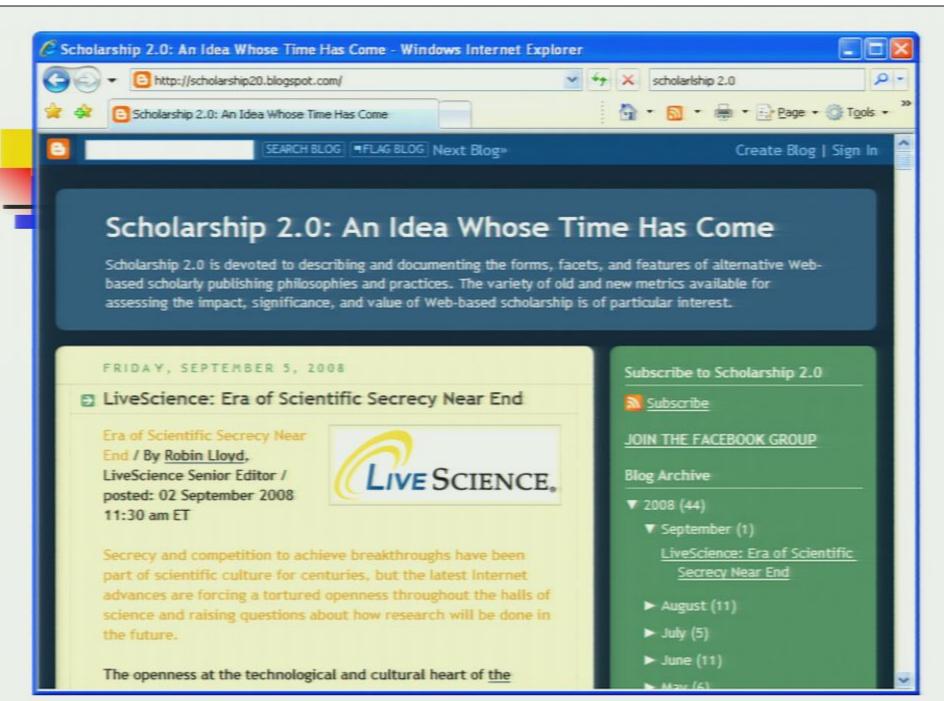


#### Robert Hoffman

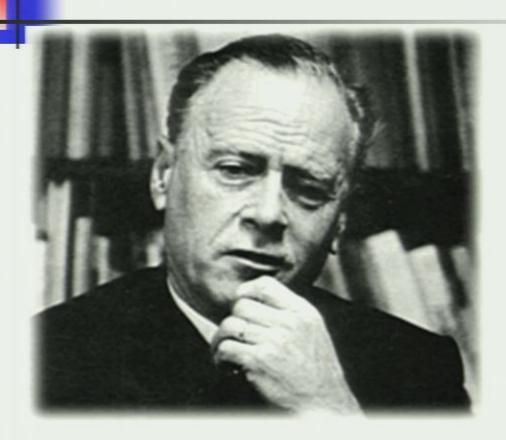
A Wiki for the Life Sciences Where Authorship Matters

Nature Genetics / volume 40 / number 9 / 1047 - 1051 / September 2008 / Published online 27 August 2008 / doi:10.1038/ng.f.217

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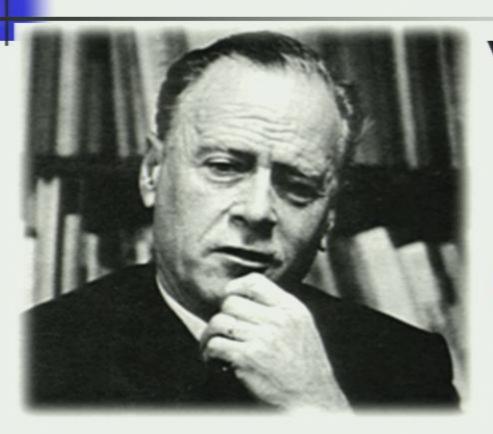
#### </EndQuote> (1)



**Marshall McLuhan** 

[SOURCE]

#### </EndQuote> (1)



"The Medium is the Message,

the Audience is the Content."

Marshall McLuhan
[SOURCE]



#### </EndQuote> (2)

## "Hot media are ... low in participation,

Cool media are high in participation or completion by the audience."

Marshall McLuhan

Understanding Media: The Extensions of Man.

(New York: McGraw-Hill, 1964), 23.

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#### </EndQuote>(3)

We become what we behold.

We shape our tools

and thereafter

our tools shape us."

Marshall McLuhan

Understanding Media (1964)

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#### ! THANK YOU!

## FOR YOUR ATTENTION

#### FINAL



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