



phase iv

The Future of MediaWiki and the Wikimedia projects

Erik Möller – August 6, 2005

The Purpose of Technology Research

- Many (thousands) very active content producers
- Very few (less than 10) very active developers
- New projects with specific needs
- Research can
 - Identify useful software enhancements
 - Write specifications and make recommendations
 - Supervise and review implementation process
 - Get the community involved in technical processes

Wikimania - August 6, 2005



WIKIMEDIA

Wikimedia Research Network

- Attempt to bring individuals together to
 - work on specs
 - study Wikimedia content and communities
 - coordinate external contacts
 - organize community meetings
- Current activities
 - Single login specs
 - Development tasks
 - User survey

Wikimania - August 6, 2005



Why peer review?

- Beyond existing mechanisms
- Main criticism against Wikipedia
 - From academia
 - From search engines
 - From pundits
- Fact-checking is a collaborative process
- As much work as the encyclopedia itself
- First step: Article survey

Wikimania - August 6, 2005



WIKIMEDIA

Article survey

Revisions for Infinite monkey theorem

Revision #1044 ([View this revision](#)) 2005-08-02 08:18:31 by [Admin](#) : ""

Overall	No opinion <input type="radio"/> <input type="radio"/> 1 <input type="radio"/> 2 <input checked="" type="radio"/> 3 <input type="radio"/> 4	
Neutral point of view	No opinion <input type="radio"/> <input type="radio"/> 1 <input checked="" type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4	
Factual accuracy	No opinion <input type="radio"/> <input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4	all wrong
Quality of references	No opinion <input checked="" type="radio"/> <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4	
Completeness	No opinion <input checked="" type="radio"/> <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4	
Quality of lead section	No opinion <input checked="" type="radio"/> <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4	
Images and illustrations	No opinion <input checked="" type="radio"/> <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4	
Relevance	No opinion <input checked="" type="radio"/> <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4	

Use my previous assessment where selected 'No opinion' Clear my older validation data

Hint: Merging your data means that for the article revision you select, all options where you have specified *no opinion* will be set to the value and comment of the most recent revision for which you have expressed an opinion. For example, if you want to change a single

Wikimania - August 6, 2005

Page protection

- Pages only editable by sysops
- Edit warring or distributed vandalism, decided by sysop
- English Wikipedia: avg. 12 protections per day
- However, some pages stay protected very long
 - Lack of processes or responsibility
 - e.g. Sexual abuse of children

Alternatives

- Code which exists (recent, not in use):
 - User edits invisible copy of page
 - Sysops can “verify” a revision
 - Displayed copy is last verified one during period of protection
- Ideal solution:
 - If no sysop “verifies”, page is automatically published if no activity for n minutes

My thoughts on peer review

- Must be “wiki-like”
 - Fast and easy
 - Consensus-based
- One basic concept for Wikipedia, Wikinews, etc.
- Distinction between “stable” and “unstable” revisions
- Offer to view only stable revisions

Wikimania - August 6, 2005



WIKIMEDIA

How are articles reviewed?

- Categorized review queues
- Initial review
 - Sectioned discussion page
 - Neutrality, Accuracy, Comprehensiveness etc.
 - A set number (e.g. 3) has to agree in each of these areas
 - There must be no unresolved disagreements (or high threshold)
 - After time X elapses, revision is tagged as stable in areas where stable

Wikimania - August 6, 2005



WIKIMEDIA

Subsequent changes

- Problem: Articles change often
- Subsequent review can be simplified:
 - Special queues which show diffs
 - Only continuing consensus required within timeframe
- Possibility: make use of minor edit flags
 - Not always correctly set
 - Automatic evaluation flawed
- Possibility: sysop speed-up

Wikimania - August 6, 2005



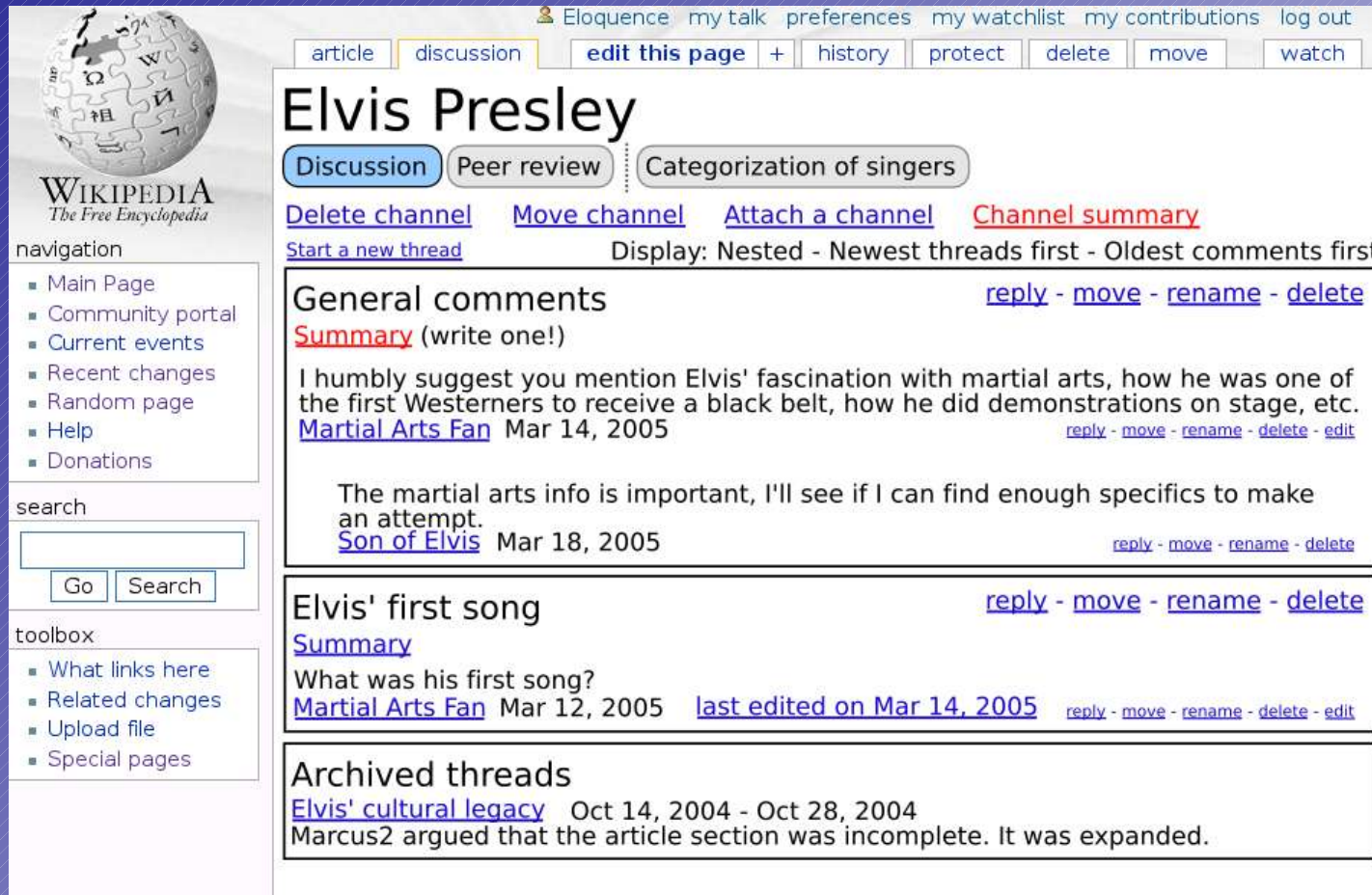
Synthesis

- Page protection and peer review very similar
 - Protection is another category of review: vandalism watch
 - Users can choose whether they want to see, link to or crawl
 - Revisions that may be inaccurate
 - Revisions that may not be neutral
 - Revisions that may not be comprehensive
 - Revisions that may be vandalism / nonsense
 - Of all articles / those subject to frequent editing

Wikimania - August 6, 2005



Discussion is essential



The screenshot shows a Wikipedia discussion page for the article "Elvis Presley". At the top, there is a navigation bar with links for "article", "discussion", "edit this page", "history", "protect", "delete", "move", and "watch". The user "Eloquence" is logged in, with links for "my talk", "preferences", "my watchlist", "my contributions", and "log out".

The article title "Elvis Presley" is prominently displayed, with tabs for "Discussion", "Peer review", and "Categorization of singers". Below the title are links for "Delete channel", "Move channel", "Attach a channel", and "Channel summary". A "Start a new thread" link is also present. The display format is set to "Nested - Newest threads first - Oldest comments first".

The "General comments" section contains two threads:

- Thread 1:** A user named "Martial Arts Fan" posted on Mar 14, 2005: "I humbly suggest you mention Elvis' fascination with martial arts, how he was one of the first Westerners to receive a black belt, how he did demonstrations on stage, etc." The comment includes a link to "Martial Arts Fan" and a "reply - move - rename - delete - edit" menu.
- Thread 2:** A user named "Son of Elvis" posted on Mar 18, 2005: "The martial arts info is important, I'll see if I can find enough specifics to make an attempt." The comment includes a link to "Son of Elvis" and a "reply - move - rename - delete" menu.

The "Elvis' first song" section contains one thread:

- Thread 1:** A user named "Martial Arts Fan" posted on Mar 12, 2005: "What was his first song?" The comment includes a link to "Martial Arts Fan", a "last edited on Mar 14, 2005" timestamp, and a "reply - move - rename - delete - edit" menu.

The "Archived threads" section contains one thread:

- Thread 1:** A thread titled "Elvis' cultural legacy" from Oct 14, 2004 - Oct 28, 2004. The summary states: "Marcus2 argued that the article section was incomplete. It was expanded."

On the left side of the page, there is a navigation menu with links for "Main Page", "Community portal", "Current events", "Recent changes", "Random page", "Help", and "Donations". Below this is a search box with "Go" and "Search" buttons. At the bottom of the left sidebar is a "toolbox" with links for "What links here", "Related changes", "Upload file", and "Special pages".

Wikimania - August 6, 2005

Wikidata

- Instead of simple text fields, arbitrary data types
- Schemas associated with namespaces
- Each namespace is a table in a rel. DB
 - Some data displayed, other data relational
- Individual fields have histories, diffs, etc.
- Thousands of applications
 - Ultimate Wiktionary (sets language needs)
 - Infoboxes

Wikimania - August 6, 2005



Namespace manager

Properties		Internal slot	-2
System namespace		NS_MEDIA	
Support subpages	<input type="checkbox"/>		
Search by default	<input type="checkbox"/>		
Default link prefix	<input type="text"/>		
Parent namespace slot	<input type="text"/>		
blank for none			

Delete Names		Default
N/A	Media	<input checked="" type="radio"/>
canonical name		
<input type="checkbox"/>	Direct	<input type="radio"/>
	<input type="text"/>	<input type="radio"/>
	<input type="text"/>	<input type="radio"/>
	<input type="text"/>	<input type="radio"/>

Properties		Internal slot	-1
System namespace		NS_SPECIAL	
Support subpages	<input type="checkbox"/>		
Search by default	<input type="checkbox"/>		
Default link prefix	<input type="text"/>		
Parent namespace slot	<input type="text"/>		
blank for none			

Delete Names		Default
N/A	Special	<input checked="" type="radio"/>
canonical name		
	<input type="text"/>	<input type="radio"/>
	<input type="text"/>	<input type="radio"/>
	<input type="text"/>	<input type="radio"/>

Wikimania - August 6, 2005

Company namespace

Editing Company:Google

You've followed a link to a page that doesn't exist yet. To create the page, start typing in the box below (see the [help page](#) for more info). If you are here by mistake, just click your browser's **back** button.

Type	Public <input type="button" value="v"/>
Founded (year)	<input type="text"/> <input type="text"/>
Current main location	<input type="text"/>
Key people	<input type="text"/> <input type="button" value="Add more"/>
Industry	Select one <input type="button" value="v"/>
Products	<input type="text"/> <input type="button" value="Add more"/>
Revenue	<input type="text"/> USD (2004)
Website	<input type="text"/> <input type="button" value="Add more"/>

Edit summary:

Wikimania - August 6, 2005



WIKIMEDIA

Country namespace

Editing Country:Germany

You've followed a link to a page that doesn't exist yet. To create the page, start typing in the box below (see the [help page](#) for more info). If you are here by mistake, just click your browser's **back** button.

Flag	<input type="text"/>
Independence	<input type="text"/>
- From	<input type="text"/>
Population (2005)	<input type="text"/>
GDP (PPP, 2005)	<input type="text"/>
Head of State	<input type="text"/>

Edit summary:

Save data

Show preview

Wikimania - August 6, 2005

Tagging

- Current category system very stupid
 - Tagging = editing
 - Edit many pages to make simple changes
 - Renaming, reordering
 - No proper hierarchical view
 - No synonyms or 110n
- Needed: Tag manager with autocompletion
 - Manage hierarchy, add tags to pages

Wikimania - August 6, 2005



WIKIMEDIA

Project-specific needs

- Wikinews
 - Easy submission interface (Wikidata)
 - Real-time editing
- Wikisource
 - Translation interface
- Wikimedia Commons
 - Media manager, upload form
 - Combined tag queries

Wikimania - August 6, 2005



WIKIMEDIA

Tag manager



- **Most frequently used tags visible**
- **New ones can be added easily**
- **“Google Suggest” style completion**

Wikimania - August 6, 2005

Project needs (cont.)

- Wikibooks
 - Modularization
 - Book TOCs
- Wikiquote
 - Quotes as elements (Wikidata)
- Wikipedia
 - Smart references
 - “Unreferenced” markers

Wikimania - August 6, 2005



WIKIMEDIA

On the horizon

- Wikiversity/Wikisophia
 - E-learning
 - Research
 - Publishing
- Geodata for articles (already happening)
 - Integration with Google Earth
- Map generation (automatic and human)
- More cool extensions

Wikimania - August 6, 2005



The Road Ahead™

- Single login
- Well-structured list of development tasks
 - Familiarity with MediaWiki
 - General coding skill requirements
 - Size of task
 - Importance of task
- Test case for targeted development
- Work with universities, companies

Wikimania - August 6, 2005



WIKIMEDIA

Wiki power

- Parallels between wiki and code
- Natural synthesis of wikis and blogs
- What is a wiki?
 - Philosophy of maximizing participation
 - Toolset rather than single tool
- Wikimedia has chosen to launch projects in key areas
 - Responsibility to innovate technology

Wikimania - August 6, 2005

