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## Wikimedia Worlds Part I: Wikipedia

Imagine a world in which every single person is given free access to the sum of all human knowledge. That's what we're doing (Wikimedia Foundation meta.wikimedia.org/wiki/Leaflet/en)

### Wiki

As viewed by Ward Cunningham, the father of the Wiki (c2.com/cgi/wiki?WikiHistory):

... 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, p. 14).

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 ...” (Leuf and Cunningham, 2001, p. 16).

The original wiki, The Portland Pattern Repository (c2.com/ppr/) was created by Cunningham in 1995 (c2.com/cgi/wiki?WikiHistory).

“Wiki wiki” (pronounced “wicky”, “weekee” or “veekee”) (encyclopedia.laborlawtalk.com/Wiki#Pronunciation) is a Hawaiian term for “quick” or “super-fast” (en.wikipedia.org/wiki/Wiki). “Cunningham coined the term wiki after the ‘wiki wiki’ or ‘quick’ shuttle buses at Honolulu Airport” (en.wikipedia.org/wiki/Wiki#History). The wiki concept reflects his view that a web-based database should be simple to create and easy to use (en.wikipedia.org/wiki/Ward\_Cunningham). As concisely described by Berkman (2004, p. 1), a wiki is:

a collection of related HTML pages, typically residing on a server, created by wiki software. Wiki software permits and is designed to enable any visitor to edit the existing wiki documents without any special access authorization. No programming knowledge or technical capabilities to make edits or add new wiki pages are required; edits can be input right on the document, and they take effect immediately. As such, a wiki embodies what is called an “open editing” philosophy.

Indeed, as noted by Lamb (2004):

... the wide-open ethic of wikis contrasts vividly with the traditional approaches of standard groupware and collaborative systems. Access restrictions, rigidly defined workflows, and structures are anathema to most wiki developers. What's unique about wikis is that users define for themselves how their processes and groups will develop ...

A Wiki is an example of “social software”, “a type of software that makes it easy for groups of people to work in a virtual environment” (Chawner and Lewis, 2004). Blogs, instant messaging, and internet relay chats are among other prominent types of social software or systems (en.wikipedia.org/wiki/Social\_software#Examples).

### General features and functions

“A defining characteristic of wiki technology is the ease with which pages can be created and updated” (en.wikipedia.org/wiki/Wiki). “Most wikis provide the user with a set of navigation or utility tools such as the ability to edit a page; view recently changed pages; use a ‘history’ feature to view or roll back to a previous version of a page; ‘discuss’ offline changes or proposed changes to a page; use a ‘backlinks’ function (view all the

pages that link to the page currently displayed); search the wiki; and others” (Peterson, 2004, p. 14). In addition, most wikis provide a “sandbox” in which users can test and experiment with the wiki syntax, editing conventions, and other features and functionalities (en.wikipedia.org/wiki/Wikipedia:About\_the\_Sandbox). While, “some wiki implementations provide the ability to register users and restrict editing capabilities to a particular set of users ...” (Peterson, 2004, p. 14), most public wikis do not generally require that readers register, and additions or modifications made by readers are not typically reviewed prior to publication within a wiki (en.wikipedia.org/wiki/Wiki).

### Advantages

In a recent review, Bean and Hott (2005) clearly summarize the advantages of Wikis within organizations, noting their “potential to provide individuals with a forum for improving knowledge and advancing thought processes; form collaborative social research communities with respect to project management, provide innovative reference repositories for all aspects of planning, operation, and implementation” (Bean and Hott 2005, p. 8).

### Uses

Since their initial introduction, the use of wikis has grown to include a range of current or potential collaborative activities in a wide variety of organizational environments (McKiernan, 2005), notably in corporations (Berkman, 2004), institutions of higher education (Lamb, 2004; Schwartz *et al.*, 2004), and libraries (Berkman, 2004; Minor, 2004)

Businesses are using wikis “to organize and manage projects, record meeting notes, track deadlines, gather requirements, solve problems remotely, co-author proposals, [and] communicate initiatives ... (Peterson, 2004, p. 14). In addition, wikis could be used as a partial Intranet replacement or supplement, as a collaborative space for strategic planning, and as an environment for a “Best Practices Knowledge Repository” or forum for a “Live Issue Knowledge Exchange” (Berkman, 2004, p. 2).

Based on a survey of 24 university wikis, Schwartz *et al.* (2004), identified a number of wiki uses, including the creation of interactive activities for their students and the presentation of “course information such as resources, external links, project information, and frequently asked questions (FAQs).” In addition, they observed that wikis “provide a forum for learners to discuss topics and obtain information relating to courses, extra curricular activities and associations in their fields of interest.” Lamb (2004, pp. 2-3) describes several wiki applications at the University of British Columbia, his home institution, notably the integration of wikis into the course management system authoring environment by the Faculty of Applied Science, Centre for Instructional Support; the use of a wiki “to store and organize content for a major new job posting and career development web site” by the Career Services unit; and the creation of a wiki to plan a conference, to collect supporting resources, gather contributions from invited participants, and to record group work. After the conference, “participants subsequently edited their collaborative authorings from a wide variety of locations, resulting in a ‘conference proceedings’ of an altogether different sort.”

Berkman (2003, p. 3) has speculated on a variety of library wiki applications, notably the creation of a competitive intelligence knowledgebase and the compilation of frequently asked reference questions with associated answers and sources. In addition, a wiki could provide a collaborative space in which colleagues could share discoveries, experiences, and knowledge about various databases or web search engines. The University of

Winnipeg Library is using a wiki to discuss issues relating to electronic reserves and to experiment with possible prototypes. In addition, a wiki is used to solicit comments and suggestions about its services and for students to request reference and research assistance (Minor, 2004). The same wiki is also used as the framework for an eManual, an information literacy resource guide ([whatwouldbatgirl.do.xwiki.com/xwiki/bin/view/eManual/](http://whatwouldbatgirl.do.xwiki.com/xwiki/bin/view/eManual/)).

### Wikimedia Foundation

Among the most popular and best known wikis are the public wikis hosted and coordinated by the Wikimedia Foundation Inc. (Wikimedia) ([wikimediafoundation.org/wiki/Home](http://wikimediafoundation.org/wiki/Home)). The Wikimedia Foundation is “a non-profit corporation organized under the laws of Florida, USA” that was officially announced on June 20, 2003 by Jimmy Wales, the founder of Wikipedia, “the free-content encyclopedia that anyone can edit” ([en.wikipedia.org/wiki/Main\\_Page](http://en.wikipedia.org/wiki/Main_Page)). “The goals of the foundation are to maintain and develop free-content, wiki-based projects and to provide the full contents of those projects to the public free of charge” ([wikimediafoundation.org/wiki/About\\_Wikimedia#The\\_goals\\_of\\_the\\_foundation](http://wikimediafoundation.org/wiki/About_Wikimedia#The_goals_of_the_foundation)). “The Wikimedia Foundation is the parent organization of some of the largest collaboratively-edited reference projects in the world” ([wikimediafoundation.org/wiki/Home](http://wikimediafoundation.org/wiki/Home)), notably Wikipedia ([www.wikipedia.org](http://www.wikipedia.org)), Wikibooks ([en.wikibooks.org](http://en.wikibooks.org)), Wikinews ([en.wikinews.org](http://en.wikinews.org)), Wikiquote ([en.wikiquote.org](http://en.wikiquote.org)), Wikisource ([wikisource.org](http://wikisource.org)), Wikispecies ([species.wikipedia.org](http://species.wikipedia.org)), Wiktionary ([en.wiktionary.org](http://en.wiktionary.org)), and Wikimedia Commons ([commons.wikimedia.org](http://commons.wikimedia.org)). “The name Wikimedia is a portmanteau of [the words] ‘wiki’ and ‘multimedia’ ([wikimediafoundation.org/wiki/About\\_Wikimedia#The\\_goals\\_of\\_the\\_foundation](http://wikimediafoundation.org/wiki/About_Wikimedia#The_goals_of_the_foundation)).

Wikimedia relies in part on public donations to provide its various wiki-based projects. In addition to support for regular hardware upgrades, funding is necessary to cover bandwidth, rackspace, and software development costs and expenses. ([wikimediafoundation.org/wiki/Fundraising](http://wikimediafoundation.org/wiki/Fundraising)).

### MediaWiki

Wikipedia, as well as its various sister projects, makes use of MediaWiki ([wikipedia.sourceforge.net](http://wikipedia.sourceforge.net)), an open source wiki software program (engine) licensed under the GNU General Public License ([www.gnu.org/copyleft/gpl.html](http://www.gnu.org/copyleft/gpl.html)) ([meta.wikimedia.org/wiki/Help:Index](http://meta.wikimedia.org/wiki/Help:Index)). MediaWiki was developed at SourceForge ([sourceforge.net/](http://sourceforge.net/)) and can be downloaded from its site ([wikipedia.sourceforge.net](http://wikipedia.sourceforge.net)).

A “feature list” for the MediaWiki software is available ([meta.wikimedia.org/wiki/MediaWiki\\_feature\\_list](http://meta.wikimedia.org/wiki/MediaWiki_feature_list)) as is a FAQ ([meta.wikimedia.org/wiki/MediaWiki\\_FAQ](http://meta.wikimedia.org/wiki/MediaWiki_FAQ)). A comprehensive “MediaWiki Handbook” is also available ([meta.wikimedia.org/wiki/Help:Contents](http://meta.wikimedia.org/wiki/Help:Contents)).

#### *Features and functionalities*

Mediawiki software offers basic and advanced features and functionalities, notably those relating to the “look and feel” of the particular Wikipedia; multimedia and extensions; edit tracking; structure and syntax; editing; discussions; multilanguage support; backend characteristics; permissions; and searching ([meta.wikimedia.org/wiki/MediaWiki\\_feature\\_list](http://meta.wikimedia.org/wiki/MediaWiki_feature_list)) as follows:

- (1) *Look and feel*:
  - printable versions;
  - “skins”;
  - table of contents generation; and
  - user styles.
- (2) *Multimedia and extensions*:
  - file uploading;
  - mathematical formulas representation;
  - automatic resizing; and
  - timeline.
- (3) *Edit tracking*:
  - “recent changes”;
  - extended “related changes”;
  - side-by-side differences;
  - on-page authorship;
  - user contribution; and
  - watchlists.
- (4) *Structure and syntax*:
  - links to individual article sections;
  - namespaces;
  - support for multiple categories;
  - support for subpages; and
  - word-extension linking.

- (5) *Editing*:
  - edit conflicts;
  - edit preview;
  - edit summary;
  - edit toolbar;
  - minor edit; and
  - section editing.
- (6) *Discussions*:
  - automatic signature;
  - message notification; and
  - “Talk” pages.
- (7) *Multilanguage support*:
  - “interlanguage” links; and
  - translation.
- (8) *Backend*:
  - all revisions of an article are stored;
  - cookie-based account and login system;
  - database-driven (MySQL); and
  - RSS syndication available for many special pages.
- (9) *Permissions*:
  - different rights for anonymous users, signed in users, sysops, bureaucrats and developers.
- (10) *Search and queries*:
  - full-text searching;
  - ‘Go’ button allows direct viewing of a specified article’s contents; and
  - view pages that link to the current page.

## Wikipedia

Wikipedia ([www.wikipedia.org](http://www.wikipedia.org)) ([en.wikipedia.org](http://en.wikipedia.org)) is a web-based, free-content, collaboratively-written encyclopedia, with editions in nearly 200 different languages (see Figure 1). Its content includes traditional encyclopedia topics and content typically found in almanacs, gazetteers, and other reference works, as well as coverage of current events ([en.wikipedia.org/wiki/Wikipedia](http://en.wikipedia.org/wiki/Wikipedia)). As of early August 2005, there were more than 200 Wikipedia language editions, with the five largest editions in English (662,000 articles), German (266,200), French (141,800), Japanese (131,900), and Swedish (92,500) ([meta.wikimedia.org/wiki/List\\_of\\_Wikipedias](http://meta.wikimedia.org/wiki/List_of_Wikipedias)), with the combined Wikipedia editions containing approximately two million articles. “On May 16, 2005, the English Wikipedia had 526,000 articles and 194 million words, giving a mean article length of 368 words and about one billion total characters.” In comparison,

**Figure 1**  
Screen print of the homepage of the English-language Wikipedia



the online version of the *Encyclopædia Britannica* (2002) contained 120,000 articles, 44 million words, with average article length of 370 words ([en.wikipedia.org/wiki/Wikipedia:Size\\_comparisons#Comparison\\_of\\_encyclopedias](http://en.wikipedia.org/wiki/Wikipedia:Size_comparisons#Comparison_of_encyclopedias)). Wikipedia was recently recognized as the most visited online encyclopedia) and the second most visited “Education-Reference” web site overall, surpassed only by Dictionary.com ([www.hitwise.com/news/us200505.html](http://www.hitwise.com/news/us200505.html)) (see also ([www.alexa.com/browse?&CategoryID=10](http://www.alexa.com/browse?&CategoryID=10))).

## History

Wikipedia was originally established as an adjunct to Nupedia, a web-based encyclopedia with contributions “written by experts and licensed as free content” launched in March 2000. A key component of Nupedia was its “extensive peer review process designed to make its articles of a quality comparable to professional encyclopedias” ([en.wikipedia.org/wiki/Nupedia](http://en.wikipedia.org/wiki/Nupedia)). Due in part to its highly rigorous editorial process, ([en.wikipedia.org/wiki/Nupedia#The\\_editorial\\_process](http://en.wikipedia.org/wiki/Nupedia#The_editorial_process)), however, only two dozen contributions were formally

published in the Nupedia, while another 74 were in progress before the project ended in September 2003 ([en.wikipedia.org/wiki/Nupedia](http://en.wikipedia.org/wiki/Nupedia)) (see also Sanger, 2001, 2005a, b).

Prior to its termination, Larry Singer, the Nupedia editor in chief, and founder Wales recognized that the:

... slow productivity was probably going to be an ongoing problem and that there needed to be a way in which ordinary uncredentialed people could participate more easily [in the development of Nupedia] (Sanger, 2005a).

By coincidence, Sanger subsequently learned about the WikiWikiWeb ([c2.com/cgi/wiki?WikiWikiWeb](http://c2.com/cgi/wiki?WikiWikiWeb)) established by Ward Cunningham. As noted by Sanger (2005a):

Instantly I was considering whether wiki would work as a more open and simple editorial system for a free, collaborative encyclopedia, and it seemed exactly right. And the more I thought about it, without even having seen a wiki, the more it seemed obviously right.

Subsequently, Wikipedia was created as a side project to allow collaboration on articles prior to entering the peer

review process ([en.wikipedia.org/wiki/Nupedia](http://en.wikipedia.org/wiki/Nupedia)). Within weeks of its formal launch in January 2001, Wikipedia had significantly more content than Nupedia (Sanger, 2005a). The UseModWiki software ([www.usemod.com/cgi-bin/wiki.pl](http://www.usemod.com/cgi-bin/wiki.pl)) was used for all versions of Wikipedia until early 2002, when all language versions were converted to MediaWiki ([en.wikipedia.org/wiki/UseMod](http://en.wikipedia.org/wiki/UseMod)).

## Wikipedians

Unlike the preparation of most print and electronic reference works, almost anyone can contribute to Wikipedia. Perhaps most significantly, readers can also edit nearly any article by any other contributor, updating a current version with corrections or revisions ([en.wikipedia.org/wiki/Wikipedia](http://en.wikipedia.org/wiki/Wikipedia)). Those who do contribute have been referred to as “Wikipedians”, who collectively comprise “The Wikipedia Community” ([en.wikipedia.org/wiki/Wikipedians](http://en.wikipedia.org/wiki/Wikipedians)) ([meta.wikimedia.org/wiki/Wikipedians](http://meta.wikimedia.org/wiki/Wikipedians)). While many will find it surprising, Wikipedia contributors “need not have any expertise or formal qualifications in the subjects which they [can create] or edit ...” While one need not be a certified expert to contribute to Wikipedia, many contributors have in-depth knowledge of a wide variety of topics (Pink, 2005) and have made a significant number of contributions ([en.wikipedia.org/wiki/Wikipedia:List\\_of\\_Wikipedians\\_by\\_number\\_of\\_edits](http://en.wikipedia.org/wiki/Wikipedia:List_of_Wikipedians_by_number_of_edits)). As of late-July 2005, there were more than 350,000 registered users of the English Wikipedia ([en.wikipedia.org/wiki/Wikipedians](http://en.wikipedia.org/wiki/Wikipedians)) “plus an unknown (but quite large) number of unregistered contributors” ([en.wikipedia.org/wiki/Wikipedians](http://en.wikipedia.org/wiki/Wikipedians)).

## Power structure

As noted, Wikipedia pages can be edited by anyone, including anonymous users. In general:

... [t]here are no formal distinctions between different editors [contributors] on Wikipedia, and decisions are ideally made by reaching consensus among those involved ([en.wikipedia.org/wiki/Wikipedia#Authors](http://en.wikipedia.org/wiki/Wikipedia#Authors)).

Although most readers can readily submit or modify pages, a “Wikipedia power pyramid” (Pink, 2005, p. 129) does exist, with those of a particular status having lesser or greater associated access rights, benefits, and control ([meta.wikimedia.org/wiki/Status](http://meta.wikimedia.org/wiki/Status)). Near the bottom of the hierarchy are anonymous users, contributors who have not established an account. While anonymous users have similar editing privileges as those who login under their respective accounts, anonymous users “do not have access to a watchlist, and are not allowed to upload images or move pages” ([meta.wikimedia.org/wiki/Anonymous\\_user](http://meta.wikimedia.org/wiki/Anonymous_user)). In addition to the ability to establish a watchlist to monitor selected page changes and to incorporate images in their contributions and move pages within Wikipedia, registered users can also set a variety of preferences ([meta.wikimedia.org/wiki/Registered\\_user](http://meta.wikimedia.org/wiki/Registered_user)) and have other benefits ([en.wikipedia.org/wiki/Why\\_create\\_an\\_account?](http://en.wikipedia.org/wiki/Why_create_an_account?)).

A registered user can also become an “administrator”, a user who “can protect/unprotect pages, delete/undelete pages, [and] block/unblock users”, among other privileges ([meta.wikimedia.org/wiki/Administrator](http://meta.wikimedia.org/wiki/Administrator)) ([en.wikipedia.org/wiki/Wikipedia:Admin](http://en.wikipedia.org/wiki/Wikipedia:Admin)). Other Wikipedians with special privileges and responsibilities include “arbitrator”, “developer” ([meta.wikimedia.org/wiki/Developer](http://meta.wikimedia.org/wiki/Developer)), “steward” ([meta.wikimedia.org/wiki/Steward](http://meta.wikimedia.org/wiki/Steward)), and “bureaucrat” ([meta.wikimedia.org/wiki/Bureaucrat](http://meta.wikimedia.org/wiki/Bureaucrat)) (Pink, 2005, p. 129) ([meta.wikimedia.org/wiki/Power\\_structure](http://meta.wikimedia.org/wiki/Power_structure)). Jimmy (“Jimbo”) Wales ([en.wikipedia.org/wiki/Jimbo\\_Wales](http://en.wikipedia.org/wiki/Jimbo_Wales)), the Wikipedia founder and benefactor, serves as “benevolent dictator” ([meta.wikimedia.org/wiki/Benevolent\\_dictator](http://meta.wikimedia.org/wiki/Benevolent_dictator)), with ultimate decision making authority (Pink, 2005, p. 129).

## “Neutral point of view”

One of the fundamental requirements for Wikipedia contributions is they “should be written from a neutral point of view: without bias, representing all views fairly” ([en.wikipedia.org/wiki/Neutral\\_point\\_of\\_view](http://en.wikipedia.org/wiki/Neutral_point_of_view)). As explicitly stated, the policy “doesn’t assume that writing an

article from a single, unbiased, objective point of view is possible. Instead it says to fairly represent all sides of a dispute by not making articles state, imply, or insinuate that only one side is correct” ([en.wikipedia.org/wiki/Neutral\\_point\\_of\\_view#Introduction](http://en.wikipedia.org/wiki/Neutral_point_of_view#Introduction)). “At Wikipedia, the terms ‘unbiased’ and ‘neutral point of view’ are used in a precise way that is different from the common understanding: articles without bias describe debates fairly rather than advocating any side of the debate. Since all articles are edited by people, this is difficult, as people are inherently biased” ([en.wikipedia.org/wiki/Neutral\\_point\\_of\\_view#The\\_basic\\_concept\\_of\\_neutrality](http://en.wikipedia.org/wiki/Neutral_point_of_view#The_basic_concept_of_neutrality)).

A primary reason for the neutral point of view policy is recognition that as an “encyclopedia, a compilation of human knowledge”, Wikipedia is a “community-built, international resource,” and that as such, it is unrealistic to “expect collaborators to agree in all cases, or even in many cases, on what constitutes knowledge in a strict sense.” As a result, Wikipedia has adopted “the looser sense of ‘human knowledge’ according to which a wide variety of conflicting theories constitute what [it calls] ... ‘knowledge.’” In offering content from a neutral point of view Wikipedia seeks to encourage readers to “make up their minds for themselves, thus encouraging intellectual independence” ([en.wikipedia.org/wiki/Neutral\\_point\\_of\\_view](http://en.wikipedia.org/wiki/Neutral_point_of_view)). Wikipedia strongly encourages authors to use reputable information sources and cite these in their contributions ([en.wikipedia.org/wiki/Neutral\\_point\\_of\\_view#The\\_vital\\_component:\\_good\\_research](http://en.wikipedia.org/wiki/Neutral_point_of_view#The_vital_component:_good_research)). A tutorial providing detailed explicit guidance on the preparation of contributions from a neutral point of view is available ([en.wikipedia.org/wiki/Wikipedia:NPOV\\_tutorial](http://en.wikipedia.org/wiki/Wikipedia:NPOV_tutorial)).

## Policies and guidelines

While Wikipedia does offer contributors significant opportunity and latitude, it does have several policies that have been established to facilitate its goal of building “the largest encyclopedia in history” collaborately. Among its “key policies” contributors are encouraged to avoid bias in their submissions, to recognize relevant copyright policies, and to respect other

contributors (en.wikipedia.org/wiki/Wikipedia:Policies\_and\_guidelines) (see also en.wikipedia.org/wiki/Category:Wikipedia\_official\_policy). In addition, it has established various conventions (en.wikipedia.org/wiki/Wikipedia:Policies\_and\_guidelines#Conventions), as well as general, behavioral, content, and style guidelines (en.wikipedia.org/wiki/Wikipedia:Policies\_and\_guidelines#Types\_of\_guidelines) (see also en.wikipedia.org/wiki/Category:Wikipedia\_guidelines).

### Primary browse options

Readers can browse Wikipedia by broad themes (i.e. “culture”, “geography”, “history”, “life”, “mathematics”, “science”, “society”, and “technology”), as well as a general “browse Wikipedia”, “article overview”, “alphabetical index” and “other schemas” (en.wikipedia.org/wiki/Main\_Page) (see Figure 2). In general, each broad theme (or “category”) provides a brief definition of the scope of the category, alphabetically categorized sections of associated hotlinked “subcategories”, and a similar listing of key articles for the category (see Figure 2). In addition, some category pages will include a link

to a Wikipedia article about the category theme (e.g. “culture”), a list of main subcategories (e.g. “art, arts, entertainment, religion, philosophy”), an entry and associated link for one or more of the Wikimedia sister projects (www.wikimedia.org), a link to an associated “portal” (e.g. culture portal) and entries for other associated Wikipedia categories (e.g. “Anthropology | Human sciences | Fundamental”). In most cases, an associated image or graphic is included in the upper right-hand corner of the category page (see Figure 2). For two of the primary categories, “mathematics” and “technology”, a menu of hotlinked entries for their respective “major fields” is also provided.

All primary browse categories in Wikipedia can also be browsed currently by selecting the “browse Wikipedia” option (en.wikipedia.org/wiki/Wikipedia:Browse). In this browse option, each primary category (e.g. “culture”) is presented with several of its major subcategories (e.g. “art”, “cinema”, “languages”) (see Figure 3). On the right side margin, the browse Wikipedia option also offers an “alphabetical index”, a “reference” section, a categorized grouping of “selected articles”, and links to “other resources”. The alphabetical index

offers an A-Z browse for the entire Wikipedia. Readers can also use this index as a “Quick index [that] allows [them] to look up an article by its first two letters” (en.wikipedia.org/wiki/Wikipedia:Quick\_index). The reference option facilitates access to 12 major Wikipedia references categories (e.g. “biographies”, “cycles”, “timelines”), while the selected articles set provides access to several specialized resource categories (e.g. “current events”, “featured articles”, “historical anniversaries”).

The other resources group provides individual access to each of the Wikipedia sister projects (i.e. “dictionary” [Wiktionary], “news” [Wikinews], “quotations” [Wikiquote], “source texts” [Wikisource], “species directory” [Wikispecies], and “textbooks” [Wikibooks]. In addition, a link is provided to “images and media” in Wikipedia (“Wikipedia images by topic”), and the Wikimedia “commons” project.

Wikipedia can also be browsed by “article overviews” (“Browse by overview”) (en.wikipedia.org/wiki/Wikipedia:Browse\_by\_overview). This option offers access to most of the major categories available in the Browse Wikipedia along with some of their respective subcategories complemented by similar or related subcategory topics. Readers can also browse Wikipedia by a variety of other schemes (“category schemes”) (en.wikipedia.org/wiki/Wikipedia:Category\_schemes). From this page the reader can access a wide variety of organized Wikipedia resources (e.g. “lists of articles” (“Special:Allpages/!”, “Wikipedia:Concise”, “Wikipedia:Basic topics”), “topical” (“Wikipedia browse by overview”, “Wikipedia:Wikipedia arranged by topic”, “lists of articles by category”), and “time” (“historical timeline”, “list of historical anniversaries”, “current events”).

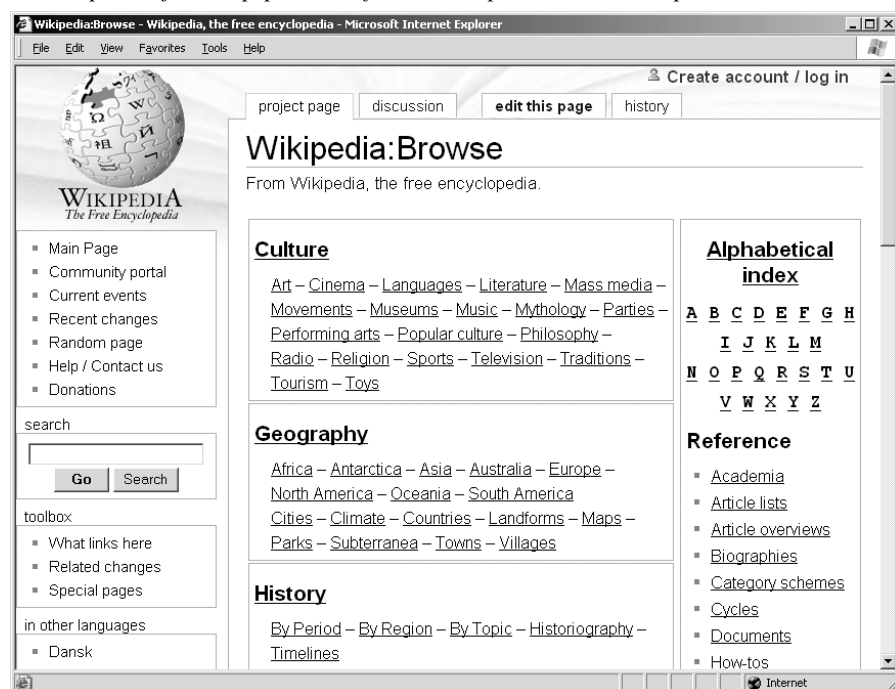
### Supplemental browse options

At the bottom of the Wikipedia main page, the reader is offered a variety of other browse options. The first, “all”, allows the reader to browse the complete Wikipedia by article title. From within this display, the reader can choose to retrieve and display pages

**Figure 2**  
Screen print of the top portion of the Wikipedia “Category:Culture” page



**Figure 3**  
 Screen print of the top portion of the “Wikipedia:Browse” option



beginning with a letter or word of interest (“display pages starting at”). Readers can also browse “new encyclopedia articles” by selecting this option found on the same line to the right of the “all” browse option. By default, this option provides a listing of the most recent 500 “new pages” in reverse chronological order, each of which includes the time, date, page name, file size, and author (or associated IP Address for anonymous contributors). By selecting the option of interest, readers can display the list groups of fewer entries (i.e. 20, 50, 100, 250). A third supplemental browse option, provides links to several hundred of the most recent orphaned pages (“orphans”), while a fourth provides access to an alphabetical listing of Wikipedia “categories” (en.wikibooks.org/w/wiki.phtml?title=Special:Categories). Orphaned pages may lack sufficient content or need significant review and revision to improve their quality. The category option provides access to an alphabetical list of all Wikipedia categories. Owing to its length, and associated navigation difficulties, however, readers are encouraged to use the various Wikipedia browse options

(e.g. en.wikipedia.org/wiki/Wikipedia:Browse).

### Search options and results

Within Wikipedia, users are provided with one search box with two “search” options: “go” and “search” (see Figure 1, left margin). Execution of a search query (e.g. “Bronx”) using the former option will retrieve an associated Wikipedia page, if available (see Figure 4). In addition to descriptive text for a topic, the retrieved entry will include embedded hyperlinks to other Wikipedia pages for a variety of relevant data and other information (e.g., dates, people, places). At the top of any given page, readers are provided the opportunity to “edit this page”, discuss the page with other contributors in an online forum (“discussion”) (e.g. en.wikipedia.org/wiki/Talk:The\_Bronx), or review the “history” of a page (see below) (see Figure 4, tabs). In addition, the reader can also readily access the equivalent entry for the current page in another Wikipedia by selecting from a menu of available languages (“in other languages”) located on the left side of the page (en.wikipedia.org/wiki/Wikipedia:Interlanguage\_links).

Executing a query using the “search” will display results in relevancy order. In these search results, each entry will include the page title (e.g. “Bronx River”) and the search term(s) in red bold font in select contexts (e.g. “The Bronx River is a river, approximately 20 mi (32km) lon...”). In addition, the relevancy percentage, file size, number of words, and time and date of the last update are provided in green font (e.g. “relevancy: 99.2 percent-1.2KB (190 words) – 31 May 2005 00:08”).

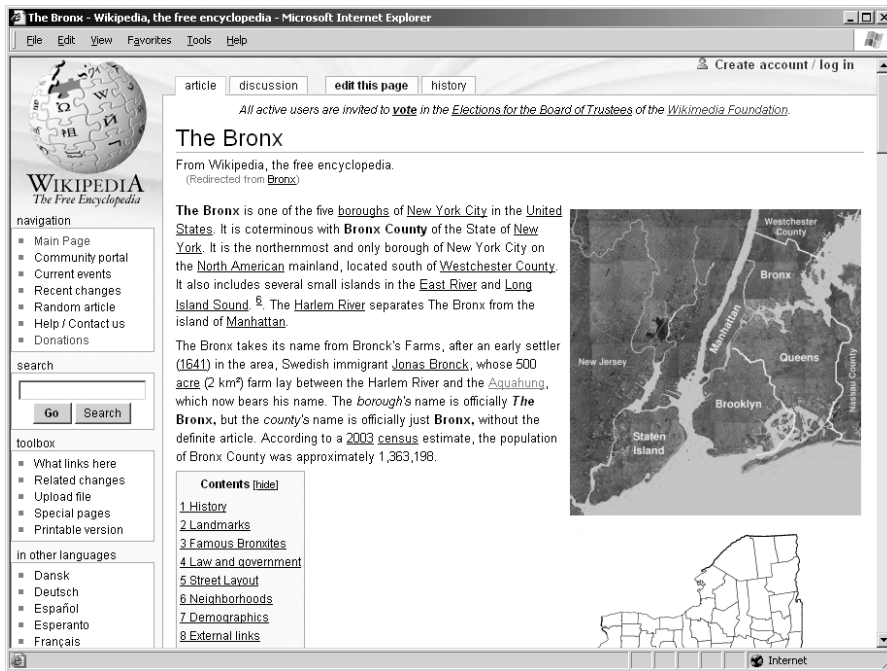
On occasions, the search feature in Wikipedia is disabled due to server overload. In such cases, readers are advised to use Google as a substitute, although results will not reflect the most recent additions to the Wikibooks collection (en.wikibooks.org/wiki/Wikibooks:Searching).

### Page history

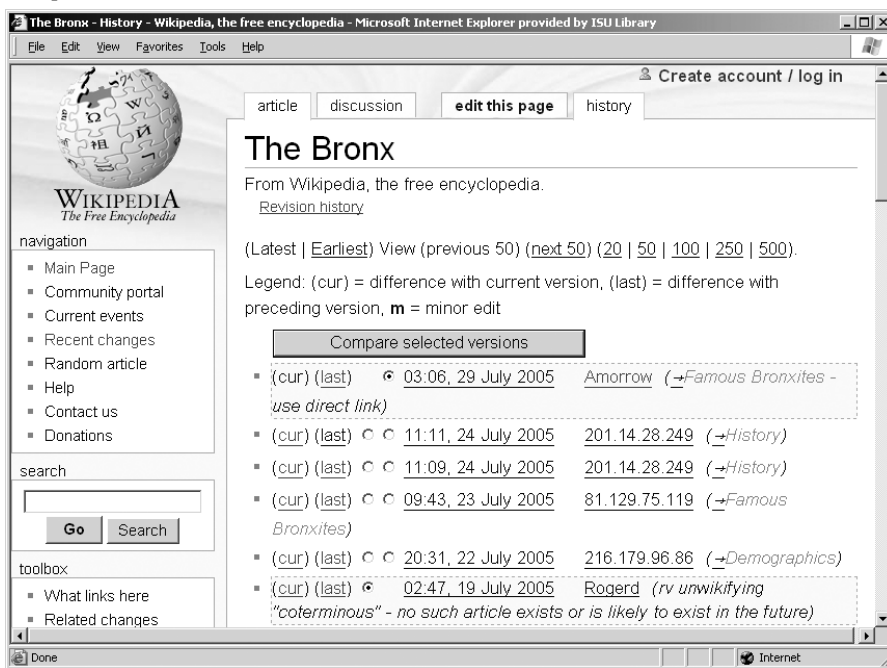
“The page history of almost all versions of pages is available. It consists of the text, the date and time of every edit, the user who made it, the edit summary, and a possible marking as “minor edit”. It is linked to from recent changes, related changes and from every article. The page history of deleted pages is not available to non-administrators” (en.wikipedia.org/wiki/Wikipedia:Page\_history). Within a page history (also referred to as “revision history” or “edit history”), “every line represents one edit to the given page and the version resulting from it” (meta.wikimedia.org/wiki/Help:Page\_history) (see Figure 5).

From within any page history, any reader can easily access the changes made to a page or compare any given page version with any other. For a given version, linked options labeled “cur” and “last” respectively allow the reader to view the “difference with [the] current version” or the “difference with [the] preceding version” (see Figure 5, center left). In addition to retrieving differences between a current and previous version for a given edit, readers can also readily review changes between any two versions by clicking the respective radio buttons associated with a given edit and clicking the “compare selected versions” (e.g. en.wikipedia.org/w/index.php?title=The\_

**Figure 4**  
A sample Wikipedia article about the Bronx, a borough of New York City



**Figure 5**  
The upper portion of the “history” page for a sample Wikipedia page showing the dates and times of select versions, and the author (or IP addresses) of its associated Wikipedia contributors



Bronx&action=history) (see Figure 6). In comparing two versions of a page:

... [t]he two versions are shown side-by-side. In the old version paragraphs which differ are yellow and the new version is they are green. In left-to-right languages,

the old version on the left. This is reversed in right-to-left scripts. Text removed within a paragraph is shown in red on the old version. New text within a paragraph is shown in red on the new version. If a whole paragraph was removed or added, the text is not red

but just black, while the other side is blank (white). Unchanged text is black on grey, only parts before and after changed text is shown (meta.wikimedia.org/wiki/Help:Diff).

In addition to displaying and indicating the differences between versions, the comparison page includes a link to the associated “revision” of each contributor; the Wikipedia personal page of the contributor, if available; an associated “talk” page for each, if available; and to the specific contributions a reader has made within the Wikipedia (“contribs”) (meta.wikimedia.org/wiki/Help:Diff) (see Figure 6). “A talk page is a special Wikipedia page containing discussion about the contents of its associated ‘subject’ page” (en.wikipedia.org/wiki/Talk\_page).

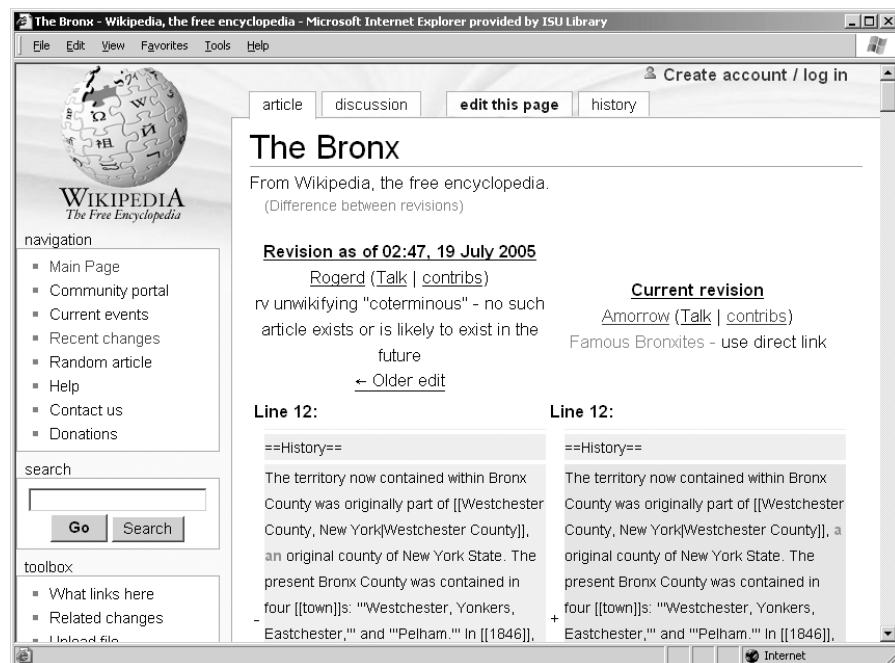
### “Recent changes”, “watchlists”, and reversions

Any user can access the “recent changes” made to any Wikipedia page by selecting that option found in the sidebar menu (see Figure 1). “Using this page, users can monitor and review the work of other users, allowing mistakes to be corrected and vandalism to be eliminated” (en.wikipedia.org/wiki/Recent\_changes). From within the recent changes page, readers can display the recent changes of a particular “namespace” (e.g. “talk”, “image”, “help”) by selecting the option of interest from a drop-down menu. In addition to monitoring recent changes anywhere within Wikipedia, users can also display “related changes” to pages that are linked from a given displayed page (en.wikipedia.org/wiki/Related\_changes). Individuals can also receive all recent changes as a web feed (en.wikipedia.org/w/wiki.phtml?title=Special:Recentchanges&feed=rss).

One of several benefits provided to a registered Wikipedia user is the opportunity to create a personal “watchlist”. “When logged in, every page has a link to the user’s watchlist ... It approximately functions as a custom recent changes just for [watched] pages ... [The watchlist itself] gives a list of all watched pages, ordered backward according to the time of the last edit of the page ...” (meta.

**Figure 6**

Readers can readily compare edits between versions of a Wikipedia page by selecting those of interest within the associated “history” page and clicking the “compare selected versions” button



wikimedia.org/wiki/Help:Watching\_pages#Watchlist). Contributors can choose to receive e-mail notification after a watched page has been edited by another individual (meta.wikimedia.org/wiki/Watchlist#Email\_notification). As observed by Viégas *et al.* (2004, p. 581), “... the watchlists provide a mechanism for community surveillance, and may be responsible for the extremely rapid response to vandalism” (see below). Indeed, based on their review and analysis of various types of revisions, the investigators found “that half of mass deletions are modified within three minutes, and half of vulgar mass deletions are modified within two minutes”. In his notable “Isuzu experiment” (alex.halavais.net/news/index.php?p=794), assistant professor of Communication and the Graduate director of Informatics at the University at Buffalo, intentionally made select changes within Wikipedia, with the expectations that they would be corrected within two weeks. To his surprise, they were readily corrected (alex.halavais.net/news/index.php?p=795).

In general, any given current Wikipedia page can also be readily “reverted” to a previous version (en.wikipedia.org/wiki/Wikipedia:How\_

to\_revert\_a\_page\_to\_an\_earlier\_version) (en.wikipedia.org/wiki/Revert). Reversions are typically made in instances when a page has been vandalized. As defined, “[v]andalism is any indisputably bad-faith addition, deletion, or change to content made in a deliberate attempt to compromise the integrity of the encyclopedia. The largest quantity of vandalism consists of replacement of prominent articles with obscenities, namecalling, or other wholly irrelevant content” (en.wikipedia.org/wiki/Wikipedia:Vandalism) (see also Viégas *et al.*, 2004, pp. 578-9). To revert a page, the reader need only click on the time and date section associated with a given page version from within a given Wikipedia page history (see Figure 5, center column). While specific procedures for reverting a page are not provided within a page history, explicit instructions are available from a Wikipedia information page (en.wikipedia.org/wiki/Wikipedia:How\_to\_revert\_a\_page\_to\_an\_earlier\_version).

### Featured content

In addition to its search and browse options, the Wikipedia homepage includes various featured content,

notably “Today’s featured article”, “In the news”, “Selected anniversaries”, and a “Did you know...” The featured article provides a succinct overview for a select topic and is “comprehensive, factually accurate, stable, and well-written” and “[e]xemplify Wikipedia’s very best work” (en.wikipedia.org/wiki/Wikipedia:What\_is\_a\_featured\_article), while the news section provides one sentence statements about recent news events (see Figure 1). The Selected anniversaries feature notes significant events that occurred on the current day, while noteworthy facts and trivia from new Wikipedia articles are offered in the did you know section. For each, links are also provided to recent and previous content. In select cases, access to forthcoming content is also provided (i.e. featured articles and anniversaries). The main Wikipedia page also on occasion has a “Today’s featured picture” that ... highlights images and charts that ... [are found to be] beautiful, striking, shocking, impressive, titillating, fascinating, incredible, or in short just brilliant” (en.wikipedia.org/wiki/Wikipedia:Featured\_pictures).

### Criticisms

Although Wikipedia is one of the most popular reference sites on the Internet, receiving approximately 60 million hits per day (en.wikipedia.org/wiki/Wikipedia), it has been criticized by a number of individuals and communities as “unauthoritative and unreliable” and that it “exhibits systematic bias...” (en.wikipedia.org/wiki/Criticism\_of\_Wikipedia). While praised by some for its “free distribution, free editing and wide range of topics” (en.wikipedia.org/wiki/Wikipedia), the “lack of authority, accountability, and peer review are considered disqualifying factors” by some (en.wikipedia.org/wiki/Criticism\_of\_Wikipedia). While acknowledging its inadequacies, supporters “counter these arguments by saying that Wikipedia is a more independent source than most traditional encyclopedias. They argue that the reliability is potentially greater than that of a traditional source, since errors can be corrected immediately, and point out that the formal processes used by academic sources (peer review, etc.) are

also prone to human error” (en.wikipedia.org/wiki/Criticism\_of\_Wikipedia).

## Disclaimers

As a general disclaimer, Wikipedia explicitly advises its readers that its content has not been uniformly “reviewed by professionals with the expertise necessary to provide ... complete, accurate or reliable information” and that it can not guarantee its validity. Although it is “working on ways to select and highlight reliable versions of articles ...”, “Wikipedia is not uniformly peer reviewed.” Its disclaimer further notes that “[w]hile readers may correct errors or engage in casual peer review, they have no legal duty to do so and thus all [Wikipedia] information ... is without any implied warranty of fitness for any purpose or use whatsoever” and that “... the authors, contributors, sponsors, administrators, sysops, or anyone else connected with Wikipedia in any way whatsoever can be responsible for the appearance of any inaccurate or libelous information or the ... use of the information contained in or linked from these web pages” (en.wikipedia.org/wiki/Wikipedia:General\_disclaimer). In a supplemental disclaimer, it cautions readers to be aware that information in Wikipedia “may be inaccurate, misleading, dangerous, misspelled, or illegal.” It strongly encourages readers “take all steps necessary to ascertain that any information [found in] Wikipedia is correct and has been verified,” recommending that readers “[d]oublecheck information with independent sources (en.wikipedia.org/wiki/Wikipedia:Risk\_disclaimer).

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This is the first part of a two-part series that profiles select projects of the Wikimedia Foundation. The second part will profile the content, and the features and functionalities of Wikibooks, Wikinews, Wikiquote, Wikisource, Wikispecies, and Wiktionary.

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