Wikipedia – Free and Reliable?

*Aspects of a Collaboratively Shaped Encyclopaedia**

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Abstract

Wikipedia is a multilingual, Internet-based, free, wiki-encyclopaedia that is created by its own users.

The aim of the present article is to let users' descriptions of their impressions and experiences of Wikipedia increase our understanding of the function and dynamics of this collaboratively shaped wiki-encyclopaedia.

Qualitative, structured interviews concerning users, and the creation and use of Wikipedia were carried out via e-mail with six male respondents – administrators at the Swedish Wikipedia – during September and October, 2006.

The results focus on the following themes: I. Passive and active users; II. Formal and informal tasks; III. Common and personal visions; IV. Working together; V. The origins and creation of articles; VI. Contents and quality; VII. Decisions and interventions; VIII. Encyclopaedic ambitions.

The discussion deals with the approach of this encyclopaedic phenomenon, focusing on its "unfinishedness", its development in different directions, and the social regulation that is implied and involved. Wikipedia is a product of our time, having a powerful vision and engagement, and it should therefore be interpreted and considered on its own terms.

Keywords: Wikipedia, encyclopaedia, wiki, cooperation, collaboration, social regulation

Introduction

Wikipedia is an international, multilingual[1], Internet-based, free-content encyclopaedia. Consisting of about 8 million[2] articles (27 million pages), it has become the world's largest encyclopaedic wiki. Wikipedia uses the wiki technique and hypertext environment, and besides its encyclopaedic content, it contains meta-level information and communication channels to enable further interaction.

The encyclopaedia is created collaboratively by all kinds of people. Everyone is free to write and edit articles – without having any formal expertise or qualifications. Today, more than 8 million individuals[3] contribute in some way. Unlike most encyclopaedias, Wikipedia does not have any standardized procedures for fact checking, editing or review processes to ensure reliability; it is instead built on the expectation "that collaboration among users will improve articles over time"[4]. Everett (2005:605) says sceptically that "the assumption that revision after revision will result in ever-increasing accuracy seems naïve". Will collaboration compensate for the lack of authority and source credibility?

The more Wikipedia displays its collaborative practices, the more it becomes evident that it differs from traditional encyclopaedias. Wikipedia needs another approach.

The aim of the present article is to let users' descriptions of their impressions and experiences of Wikipedia increase our understanding of the function and dynamics of this collaboratively shaped wiki-encyclopaedia. Here, Wikipedia's users serve as guides to this relatively new and quite unexplored arena and phenomenon.

Background

Wikis and Wikipedia

Wikipedia is a portmanteau of the words *wiki* and *encyclopedia (encyclopaedia)*. The word *wiki* means "quick" or "superfast" in Hawaiian[5]. In web contexts, it represents a virtual place, a website, accessible to everyone, where all visitors are allowed to edit the content. Wikis can be considered as a true hypertext medium with a non-linear structure – links that elucidate and explain the information given or supply references to other sources. The source format, with the modifiable web pages, is usually referred to as *wiki text*[6]. Previous versions are saved so that damaged or vandalized texts can be restored. The first wiki system available on the Internet was called WikiWikiWeb[7].

Wikis can be used to facilitate communication, collaboration, and website administration in a variety of arenas (Frumkin, 2005). A wiki is a "group communication mechanism" usually serving a specific interest community purpose, as found by Emigh and Herring (2005:2). Some wiki systems exist as free and open sources, while others are only commercially available. To libraries, wikis offer knowledge-based systems for references in which librarians can add or edit pages as well as comment upon existing pages; to research societies, wikis "open the door to sharing research experiences, allowing for collaborative research, and making it easier for future researchers to find the materials they need in a particular collection" (Frumkin, 2005:21).

Wikipedia presents itself as "[t]he free encyclopaedia that anyone can edit"[8]. Rosenzweig (2006) emphasizes that Wikipedia is entirely free, and that this freedom also includes use of the articles.

Wikipedia began as a complementary project for Nupedia, which started in 2000 as a free online encyclopaedia, written by experts and reviewed through a formal seven-step process. Because it was considered to be quite slow, the solution was to create a wiki alongside Nupedia, and thus Wikipedia was launched in January 2001 in a single English-language edition. Both encyclopaedias coexisted until 2003, when Nupedia's text was finally incorporated into Wikipedia. For Wikipedia's history and origins, see Rosenzweig (2006) who traces its roots back to the old idea of gathering all the knowledge in the world into one single source.

The umbrella organization Wikimedia Foundation Inc[9], based in Florida, is a non-profit corporation[10] as well as an educational foundation. With only a handful of paid employees, all its projects are funded by donations and other means. Wikipedia is just one of many projects[11], and its grand vision is to bring a free and accurate encyclopaedia to every person on the planet.[12]

The Wikipedia Policies and Guidelines

To create a shared understanding among users, Wikipedia has determined *policies* of a more official character, and *guidelines* that consist of less rigid rules, and are usually

debated and decided by consensus. Some *key policies* constitute the foundation for all language versions: Wikipedia is an encyclopaedia; decision-making is based on consensus; contributors must respect each other; copyrights may not be infringed; any biases should be avoided (articles should be written from a neutral point of view); and the information given should be supported by reliable sources.[13] Anything more than this is the responsibility of each language version, even though the English Wikipedia, being the most elaborated version, often serves as a model.

Guidelines should be treated with common sense; they deal with aspects such as *content, classification, editing, discussion,* and *behaviour.*[14] "The *ideal* Wikipedia article is balanced, neutral and encyclopaedic, containing notable verifiable knowledge".[15] The Swedish Wikipedia recommends that its contributors use a written style appropriate for an encyclopaedia.[16]

Cooperation and Collaboration

Wikipedia is built upon cooperation and collaboration. The concept *cooperation* refers to the division of labour among the participants such that each person is responsible for a portion of the problems to be identified and solved, while *collaboration* involves a mutual engagement in a coordinated, synchronous effort to solve the problem together. Collaborating individuals can be responsible for different parts of a task, but collaboration also involves an attempt to construct and maintain a shared conception of the problem (Dillenbourg, 1999).

Viégas, Wattenberg and Kushal (2004) suggested an exploratory data analysis tool, called *history flow visualization,* to reveal patterns of collaboration and negotiation within the wiki context. This method covers concepts such as vandalism and repair, anonymity versus named authorship, negotiation, and content stability. The difference in changes in size can measure stability over time. Concerning Wikipedia, the expectation was that pages/articles would stabilize over time, instead they discovered continual changes in size and turnover of texts.

The scientific journal Nature[17] used experts to compare the English-language version of Wikipedia with the online version of the Encyclopædia Britannica (EB). Forty-two entries regarding scientific subjects were chosen from each encyclopaedia; and then, without knowing their source, relevant experts reviewed the articles. Numerous errors were found in both encyclopaedias: On average, EB contained three errors per article, and Wikipedia four errors per article. EB performed much better concerning its readability, while Wikipedia was experienced as being confusing and poorly structured (Giles, 2005). EB criticized the study later for being wrong and misleading "from the criteria for identifying inaccuracies to the discrepancy between the article text and its headline"[18].

Method

The method chosen for this exploratory study is qualitative, based upon structured interviews held with individuals committed to Wikipedia. Their experience and knowledge, especially of the Swedish version of Wikipedia, allow us to get an insight into and understanding of the arena as well as the ongoing processes.

Selection and Respondents

To identify and locate participants for the interviews, the press contact[19] for the Swedish Wikipedia was contacted by mail. The criteria were that any participants must be familiar with Wikipedia, and be prepared to answer questions via e-mail concerning their engagement, use and visions in relation to Wikipedia. The press contact made an online request directed to the *administrators* – about 12 (both males and females) were available at that time. As administrators of the Swedish Wikipedia, they have access to technical features that are needed for maintenance[20]. At the time of the interviews, the Swedish Wikipedia had a total of 66 administrators[21]. Six men, aged between 22 and 39 years, with an average age of 30.5 years, agreed to participate. These were confirmed as active and regular users of the Swedish Wikipedia, as well as being trusted members of the Wikipedia community[22]. All the respondents had studied at university. At the time of the survey, some were unemployed, some in further education, and some had full-time employment.

According to the ethical rules of confidentiality, the respondents' real names cannot be disclosed; they are instead called: *Anders*, *Benny*, *Carl*, *Daniel*, *Erik* and *Fredrik*.

Interviews Conducted via E-mails

The interviews could have been conducted on the telephone or in face-to-face situations. But, both for practical reasons and as an interesting test procedure, the respondents were interviewed via e-mail on three occasions during September and October, 2006. The questions were grouped into seven categories: *Demographic questions* (A), *Wikipedia as a source* (B), *Creation of articles* (C), *The users and the use of Wikipedia* (D), *Promotions of featured articles* (E), *Requests for interventions* (F), and *Wikipedia's future* (G). To create a shared frame of reference, each category was given a short introduction. On the first occasion, categories A, B and C were dealt with, on the second, category D, and on the third, categories E, F and G, together with a concluding open question that allowed further comments or clarifications. The questions were always asked in the same order, and formulated so that they would encourage answers that are thoughtful, reflective, and explanatory. More specific questions often followed the main questions. The intention was to give the interviews, carried out in Swedish, an open character.

Data and Analysis

The empirical data in this study, including the respondents' answers, consist of some 20,000 words. Unlike traditional research interviews, these did not have to be transcribed; as the answers were transmitted from e-mails directly into Word documents for further processing and analysis.

The content analysis is organized as cross-interview analysis, meaning that the answers from different individuals have been grouped together (Patton 1990). During the process of analysis, the data have been classified step by step, condensed, and then organized into some manageable categories; a selection of some illustrative quotations to include here has been made. The interview guide has gradually been abandoned as an analytical framework; instead the approach has become increasingly inductive in order to reveal some of the underlying themes and categories.

Results

In the results, the focus will be on the following themes: I. Passive and active users; II. Formal and informal tasks; III. Common and personal visions; IV. Working together; V. The origins and creation of articles; VI. Contents and quality; VII. Decisions and interventions; VIII. Encyclopaedic ambitions.

Starting from the respondents' statements, the intention is to reveal visible patterns, as well as any variations and contrasts, within the emerging themes related to Wikipedia's functions and dynamics. In the results, detailed descriptions as well as direct quotations illustrate how the respondents perceive their engagement and the arena. The respondents appear as a group, and as representatives of Wikipedia, but to show the differences between them they also appear in the text as individuals with fictitious names.

I: Passive and Active Users

Individuals can approach Wikipedia in two ways: as information seekers or as contributors. Anders' statement explains this division:

> Everybody should use Wikipedia, either as a source, or, if you find deficiencies, as a medium you can make contributions to.

Individuals who relate to Wikipedia in some way can be divided into *passive users*, who use it exclusively for information retrieval, or *active users*, or *contributors*[23] who add input and take part in the activities on the arena. The respondents in this study describe passive users as "ordinary people" – mostly laymen who want to learn about a variety of subjects. Many pupils/students[24], and also journalists, probably regard Wikipedia as a useful source of information or references.

The active users, or contributors, help to create and develop Wikipedia; from now on, these users will be in focus. The respondents do not know exactly who the contributors are, but in general they are assumed to be between 20 and 40 years of age, and come from all demographic segments. Well-educated younger men seem to dominate. Fredrik has a theory to explain the presumed low average age:

> Sometimes older writers might hesitate before they enter into Wikipedia since they don't feel comfortable enough with the technology in use, or with computers in general.

Fredrik has observed that contributors can be divided into two groups: The first group includes university students aged 20+, the second, older (35+) individuals with both professional experience and higher education. Contributors often have a bond to computers, not necessarily in their professions, but rather based on their profound interest. Initially, according to Erik, the abbreviation *NPOV* (*neutral point of view*) was humorously understood as the *nerd point of view*.

Wikipedia's contributors appear as *unregistered* (their computers' IP addresses can be identified), or *registered* with *user accounts*, *user names*, and personal *user pages*[25]. Registered users are able to choose how much they want to reveal about themselves, consequently different levels of identification can be seen on the arena. Benny believes that users often present themselves, while Anders claims that most of them act anonymously. Everyone is allowed to edit articles, but registered users tend to be taken more seriously. Having one's real name as *user name* is quite unusual, instead users select names with fitting connotations, and Erik remarks:

…you might wonder how neutral a user who calls himself/herself 'Really Evil Pole' can be, when writing about the German order [Tyska orden].

Erik believes that no one can know more about a person than he/she chooses to reveal, while Fredrik and Benny think that in time, some kind of personal profile will emerge and contributors will be recognized by their style, edits, interests and/or attitudes to disputes; active users tend to keep an eye on each other and would soon discover if someone assumed a new guise.

II: Formal and Informal Tasks

Some registered contributors are trusted with *formal* tasks that allow them extra administrative access. The respondents mention *administrators, bureaucrats, checkusers, stewards,* and *developers*. *Administrators*, or *"sysops"*, have access to technical issues to help with maintenances as well as cleaning up any vandalism. *Bureaucrats* turn users into administrators or bureaucrats. *Checkusers* or *IP controllers* investigate IP addresses to see whether more than one user uses the same IP address, and examine suspected *puppet accounts*[26]. *Stewards* have administrators' authorities concerning all Wikimedia projects, including Wikipedia; they assist smaller projects, and distribute as well as withdraw technical authorization. *Developers* cooperate on an international basis, have access to the servers and thus are able to make changes to the wiki software.[27]

Besides formal roles such as these, users may have *informal*, self-imposed assignments, for instance, as experts, translators, or proofreaders. They could specialize in finding pictures, categorizing articles, cleaning up vandalism, or welcoming new users. Daniel explains that there are those who concentrate on certain or specific topics, while others deal with numerous topics.

Some users edit articles without being engaged in the meta-activities, such as discussions and elections, at all; Erik calls them *exopedians* [exopedianer]. Others are only engaged in meta-activities. The respondents feel that most users balance somewhere between these two extremes, but if they respect Wikipedia's policies and guidelines, individuals are free to engage in almost everything.

III: Common and Personal Visions

Wikipedia's vision, or *raison d´être*, is to collaboratively create an encyclopaedia that everyone can edit and access. Erik explains that providing neutral information is enough for an encyclopaedia, while Carl points out Wikipedia's own definition of an *encyclopaedia*:

An encyclopaedia, or a book of reference, is a written résumé of human knowledge.

Policies and guidelines reflect Wikipedia's focal points. Benny points out the need for flexibility, as Wikipedia and the inclusion conditions are constantly evolving. Other respondents would welcome more precise guidelines to strictly direct the contributors when editing articles. Fredrik feels that clearer criteria also would make it easier to prevent irrelevant articles from being published:

…that articles, for instance, about the 'promotion of craziness' [flugighetens främjande] are not relevant and do not qualify for the encyclopaedia, in other words, sometimes we would rather say 'no' than 'maybe'.

Some respondents believe that too many rules and directives would be confusing; users should respond to and respect a few fundamental rules. People must think for themselves, says Erik; Wikipedia is not institutionalized or bureaucratized, and individuals should therefore ask themselves whether or not a given contribution makes sense in the context. Benny assumes that in practice most new contributors learn from the interaction with other more experienced users, rather than from stated policies and guidelines.

The respondents indicate that contributors' commitments, their level of personal engagement, vary. Benny expresses how some contributions can lead to great visions:

> I think it's more meaningful to me to write about plants, animals and geography, than to over and over again present my arguments about why an immanent god does not exist. To me it seems like I am building something bigger, and making progress, when I expand the coverage of different plant families.

A classical example shows how different people can regard the same task: When two stonecutters describe the work they do, one is cutting stones but the other is building a cathedral. Likewise Wikipedia's contributors are striving for different goals; their visions could include just one person or the whole community.

IV: Working Together

Communication facilitating cooperation and collaboration take place within different discussion forums – on *talk pages*, *user pages*, *community portals*, and *IRC-channels* – in which users can coordinate their mutual attempts to create and expand specific articles or projects. Users also interact and communicate face-to-face in *meetups*. The respondents describe some informal meetings in Sweden at which they socialize and discuss all kinds of Wikipedia matters.

Depending on the level of engagement in relation to the performed task, different forms of cooperation and collaboration can be noted. Respondents report that contributors often spontaneously work together, for instance, as Carl has observed:

> When everything works, the cooperation might not be visible at all. Each one expands and improves [the article]. But, if you have different opinions about what the article should look like, you have to discuss them.

Rather inexperienced contributors can instigate many of the articles. Fredrik explains how newcomers can be helped by the more experienced.

> [T]here is no reason to feel like a fish out of water – others who master the situation will take care of the things that seem problematic […]. That's the beauty of the Wiki technique!

An individual often creates the initial groundwork, and then others make contributions in the improvement, standardization and wikification (adjusting to the wiki format) of the articles. Erik describes how individuals work together "when the wiki-technique works at its best": *The first person* involved, perhaps a new, unregistered user, creates an article consisting of plain text; *the next person*, usually a registered user, notes the article and marks it with "non-wiki" or "quality check" for others to see if they can make any contributions; *a third person* finds that he/she is able to give the article encyclopaedic stringency, categorize it, or create links to other language versions; *the fourth user* compares it with a longer English version and translates the English article into Swedish

to expand the text; finally, *the fifth person* revises the article for linguistic correctness. The product is now acceptable.

On a more collaborative level, the respondents describe how contributors with a specific interest coordinate their writing in *projects* concerning specific subject fields or issues and share their knowledge and experience. The contributors become united by their mutual desire to create good encyclopaedic articles about *plants*, *birds*, *fishes*, *churches*, *chemistry*, and *languages*. According to Daniel:

> Some very specialized fields like hymns and motorways have quite a lot of engaged writers.

Anders considers that Wikipedia needs a "community" for each subject field to become a good encyclopaedia, and to implement this vision, Wikipedia must be perceived as an attractive place on the Internet.

V: The Origins and Creation of Articles

Encyclopaedic articles have a variety of origins; different kinds of original texts, from external and internal sources, could be sources of inspiration. To be acceptable within Wikipedia's concept, these texts are *transformed*, *transferred* or *translated*. Some sources considered as useful are given as examples by the respondents: Anders bought a textbook in medicine for a project about *human anatomy*; Benny's inspiration came from the reference list from a university course in *plants/herbs*, but also from reference books about *churches*.

Old encyclopaedias seem to be of great value. Several respondents mention the Swedish encyclopaedia *Nordisk Familjebok*[28], and the copying of articles directly from the digital facsimile edition, which is available on the Internet though *Project Runeberg*[29]. According to Fredrik, material regarding Swedish kings often comes from this source, but even though most of the facts are correct, the passage of time affects the way we now regard the past, changing our concept of history. Daniel reports about some copied articles concerning Swedish history. Because they lack proper revision, their quality is now considered inadequate; however, texts like these are now replaced.

The importance of using established or accepted sources to verify the content is emphasized by the respondents; Fredrik says that these sources should represent both different opinions and reflect several independent sources. Facts should be based upon contemporary research and be confirmed according to academic standards. Erik states the need for popular support. Respondents question the objectivity of some sources, for instance, that Wikipedia contains information from *The World Factbook*, published by the CIA. This book, accessible on the Internet, gives information about different countries, but Anders wonders whether the descriptions of Iran and North Korea can be regarded as impartial, or may possibly be biased.

Many articles on the Swedish Wikipedia are translations from other language versions, principally from the English Wikipedia, as Anders admits:

> I think most articles in Swedish Wikipedia are translations of corresponding articles in English.

Translations also come from Wikipedia's German and Scandinavian language versions. One reason, explained by a respondent, might be that Swedish references on the Internet often have copyright protection. Carl relates his experiences:

I have translated both from German to English, and from Japanese to English by means of a translation web service. It did not turn out very well.

When the Japanese princess Kawashima Kiko had a son, Erik says someone simply translated the English article into Swedish. Users tend to rely too much on the English Wikipedia, and copy the articles quite uncritically, says Daniel. Carl emphasizes the difficulties involved in tracing the original source of the information. When translating from other language versions, the assessment of an article's quality could cause some problems, according to Erik:

The other article is written by people like us, but we cannot know how correct it is.

The advice given by Erik is that the translator should first take a look at the article's talk pages and search for relevant information that might help him/her avoid the parts of the article that have been questioned.

New articles can also originate from *non-existent articles*, in other words, links (marked with red characters, called *red links*, *dead links, edit links* or *broken links*) to articles that have not yet been written. These links function as open invitations, hopefully encouraging someone to start writing about them.

VI: Contents and Quality

The content of Wikipedia can, according to Anders, be roughly divided into three categories. *Uncontroversial factual articles* usually have a good level of reliability, while *controversial articles* consist of varying quality. Both can include good-quality articles if their content is supported by established sources. The third category, *trash*, comprises extremely short and poorly written "articles" that are often submitted out of context, but some of them can later be developed into acceptable articles.

Most respondents agree that *sex*, *politics* and *religion/faith* are to be considered and regarded as controversial issues. Carl includes *science*, and Daniel proposes *local history* as somewhat problematic, because sources quoted and purporting to be good and reliable may not be verifiable. Several respondents mention the pro-paedophilia biased article that caused trouble. Some established references could probably have made it less biased. The editor actually referred to some scientific studies, claims Erik, but without mentioning that they had been criticized. Benny expresses his despair as follows:

Since this issue is extremely politically incorrect, most users would not even touch it with a pair of tongs. […] In situations like these, it's easy to panic and search for a guideline/policy that helps you get rid of the rubbish in the original article.

Many annoyed and disgusted users wanted to see the article erased, but the text was instead cleaned up and moved to another entry. Strong feelings fuelled the debate, and resulted in the article writer being extremely well monitored.

Popular culture articles about music groups, rock stars and sportsmen/sportswomen are often given some subjective admiration. Fredrik calls it *fluff facts*, since the contents cannot be verified. Erik describes *fluff* as vague expressions and unmotivated additional words. Younger users write about Bionicle and Harry Potter characters – articles that are often lacking in correct language usage and critical perceptions, and could contain both rubbish and nonsense.

Articles selected for rewards help to stimulate and communicate the quality Wikipedia seeks to attain, explain Daniel and Benny. The Swedish Wikipedia contains *featured* and *readable articles* as their marks of distinction[30]; rewarded articles are displayed on the home page – in the "shop window". *Featured articles*, sometimes given as simplified versions, can be seen in most language versions. Anders and Carl explain the nomination and selection process and how interested users review the articles and discuss their standards before casting their votes. Depending on the outcome, articles are awarded their new status – if not, they can be improved and nominated again. The respondents believe that the criteria change over time; it seems harder today to live up to the required standards, because subject specializations are becoming more defined and increasingly competent contributors are appearing on the arena. Anders mentions an article about the Swedish king Charles XII [Karl XII], taken from the Nordisk Familjebok, that was not as comprehensive as a newly written, updated article. Without being explicitly expressed, the requirements vary depending on their subject and topic, and issues that can be considered controversial require irrefutable confirmation. Benny claims that an article concerning *Nazism* requires more work than does an article about *Truthiness*[31] to become eligible for a reward. Other reward criteria could include other ideals and, according to Daniel, better reflect Wikipedia.

VII: Decisions and Interventions

Decision-making within Wikipedia usually follows the principle of consensus. Profound and exhaustive discussions – often on talk pages – make it possible to debate arguments and aspects before interested users vote on the best solution. Absolute consensus is an abstract idea, and Anders remarks: "neither here nor elsewhere, can any consensus be fully realized". In serious disputes or conflicts, *arbitration committees (ArbCom)* are able to intervene even though administrators execute their decisions[32].

Wikipedia has to deal with problems such as *edit-wars* – explained by Fredrik as "quarrels about nothing" – and *vandalism*. Edit-wars break out when contributors continuously incorporate changes into a published article – and remove other changes they do not agree with. Three respondents mention articles concerning the *Gothenburg riots*[33] *[Göteborgskravallerna]* in which the contributors were biased, so the articles turned out to be defective.

According to the respondents, *vandalism*[34] poses serious problems to Wikipedia. Benny shows what vandalism could look like:

> A person has written a long article about a country, and the next day a senior-level pupil destroys it by writing "JAMES IS THE BEST!!!"

The administrators are constantly monitoring Wikipedia to detect and clean up vandalism. They seem to keep up with non-constructive edits by restoring the damaged texts immediately. Users are encouraged to be observant. Improper behaviour on Wikipedia might lead to interventions, such as *warnings*, *monitoring,* or *blocking* – appropriate interventions are determined by the administrators. More experienced users can easily detect "serious" vandalism, while the inexperienced have to look more closely to find the edits that are actually sabotage. Articles often subjected to vandalism can be *monitored*, and Fredrik mentions that certain issues, like the article about Adolf Hitler, might pose some problems. Sometimes a *warning* could be enough to stop the vandalism, as it is

experienced as upsetting. Carl quotes what a warning on the vandal's own user page could look like:

> What you wrote might be interpreted as a personal attack. Repeated personal attacks can lead to you being blocked from writing on Wikipedia.

But, vandals often use public computers with IP addresses registered at schools or libraries. Benny believes that most warnings directed at unregistered users lack effect, while warnings given to registered users could lead to a dialogue that changes their behaviour. The respondents assume that many vandals are pupils/students. Daniel has noticed that vandalism is more common during school terms than on school holidays. Fredrik believes that vandalism occurs during computer lessons or gaps between lessons. To improve the situation and deal with this kind of vandalism, some schools[35] and libraries are more or less permanently blocked (for a year or longer). When the source of vandalism has been located, Daniel stresses the importance of contacting these schools or libraries and drawing their attention to the problem.

VIII: Encyclopaedic Ambitions

Wikipedia's encyclopaedic ambition leads to comparisons being drawn between Wikipedia and other encyclopaedias[36] – both online and printed versions. Similarities as well as differences can be seen.

The respondents note some of Wikipedia's characteristics: its larger proportions, more details and broader content; furthermore, it is free to use, easily accessible, and constantly updated. Benny exemplifies its profundities with a link to an extensive article about the toy robot "Optimus prime"[37].

Wikipedia seems to provide better coverage of popular culture, but Fredrik believes that traditional encyclopaedias are far ahead when it comes to fields such as systematic biographical and historical articles. Erik stresses some similarities between Wikipedia and traditional encyclopaedias: they share the same demands concerning language and stringency, but Wikipedia is not forced to use a condensed "encyclopaedian" language in order to save space.

Wikipedia is the product of amateurs who write in their leisure hours on a voluntary basis, while traditional encyclopaedias have paid experts, explains Erik. Fredrik states this discrepancy further:

> NE (The Swedish National Encyclopeadia) and EB are written by a large group of highly educated academics, while Wikipedia consists of a glorious mess of people, many with very detailed knowledge within their domain and of all educational levels and fields.

The voluntary participation obviously affects Wikipedia's structure and organization, and Fredrik thinks that the structure does not always keep up with the expansion of the content. Benny says about people's impact:

> Wikipedia's 'approach' is an immediate consequence of the people who participate in the project. There is neither a superior management nor superior policy documents (except for some fundamental principles).

Discussion

Methodological Considerations

Using e-mails for the interviews was very successful, as all respondents were used to communicating via computers. Most answers were quite detailed and well expressed; the style differed from formal written language to something more like spoken language. Links to articles on Wikipedia were attached to some of the e-mails.

The respondents were not interviewed face-to-face, and as the opportunities to rephrase or specify were limited, the questions had to be clearly worded. Subsequent questions were formulated so that the respondents could easily express and develop their further answers. A common research dilemma concerns to what extent the frame of reference is shared. People engaged in Wikipedia develop their own terminology using words that might be strange to the uninitiated. In this work, the intention has been to incorporate some of the terms expressed by the respondents or found in Wikipedia's glossary[38].

Can the respondents be seen as good and competent representatives of Wikipedia, and are we able to assess how representative they are? Wikipedia's press contact located the participants for the study – six administrators from a rather homogeneous group of highly educated males in their twenties or thirties. They correspond to the descriptions, given by the respondents, of Wikipedia's typical active users. In the interviews, the respondents were in agreement to a great extent – either because Wikipedia had shaped them or because they, and individuals like them, had shaped Wikipedia.

Revealing details of the respondents' background or gender is seen as irrelevant. The post-modernistic approach diminishes the significance of the individual's actual identity. Many of Wikipedia's users do not reveal their identities – neither titles, nor formal qualifications are of interest – instead they present themselves through the contributions they make. Respondents here present themselves in and through their answers.

Approaching an Unfinished Product

The meaning of the central concept of *encyclopaedia* seems to confuse the respondents: whether it is just a way to organize information, or whether an encyclopaedia must also be reliable. We will probably see Wikipedia become increasingly used as a reference in educational contexts, and we therefore need to know how to approach this phenomenon – this *wiki-encyclopaedia*.

Like earlier encyclopaedias, Wikipedia has its roots in the modern project, with its belief in science, technology, and rationality, as well as in the tradition of enlightenment, with its intention to collect human knowledge and make it accessible. However, on Wikipedia, contributors are not certified by any editorial body. Instead, contributions are accepted or rejected on their own merits and relevance.

Wikipedia is often compared to traditional encyclopaedias. The respondents refer to the study by Nature, considering that the contributions are already of a fairly high quality. Erik mentions a Swedish newspaper[39] that compared nine entries from the Swedish Wikipedia, NE, and Susning.nu[40]; concerning popular science, Wikipedia exceeded both, with NE coming second. But, what do these studies, the counting of errors and faults, really say about Wikipedia's "usefulness"?

Traditional encyclopaedias (printed or online) still represent the accepted standard, but by only regarding Wikipedia – this post-modernistic phenomenon – with traditional modernistic eyes, we risk overlooking those aspects that differentiate Wikipedia from other encyclopaedias. Post-modernism calls into question our grand narratives and ex-

planations, leaving us with conflicting truths and definitions. In contrast to traditional encyclopaedias, Wikipedia is the product of its users, representing an arena in which the contents can be continuously negotiated. Wikipedia should be considered in its own perspective – simply because it is a different type of product.

Wikipedia is an encyclopaedic wiki, based on the idea that an article will never be finished. At least hypothetically, adjustments or improvements can always be incorporated, and no one is ever supposed to have the last word. The fact that Wikipedia is never a finished product demands a particularly open critical or "sensible" approach, as scepticism could cause trouble – supplementary information, or a whole article could be accepted for the wrong reasons. Search engines on the Internet often rate findings from Wikipedia high among the search results. Anders emphasizes that all Internet users already are in contact with Wikipedia from time to time. Therefore, it would seem important to create a sound attitude; particularly pupils and students should be acquainted with the underlying dynamics, i.e. the circumstances and ways in which the articles are produced.

"Never trust a single source", say the respondents. Fundamentally, the whole content of the Internet should be approached in the same way, for instance, information must be verified. Wikipedia could be instrumental in this process as a gateway to more reliable sources.

Wikipedia is developing in various directions: on the one hand, towards refining the distinctive character of an encyclopaedic wiki, and on the other, towards looking more and more like traditional encyclopaedias. The English Wikipedia created a locked version, alongside the "live" version, with 2,000 articles of particular interest to schools or children.[41] Publishing "finished" articles in a solid encyclopaedia is inconsistent with the wiki idea, and not a product that corresponds to Wikipedia's original intention. Even if Wikipedia launches a locked version of the encyclopaedia, it will not be like traditional encyclopaedias because it has still been created by its users.

Realizing an Encyclopaedic Dream

No encyclopaedia is ever better than the people who write it – even traditional encyclopaedias are subject to the risk of imbalance, as they are always influenced by their contributors' cultural, social, national, and linguistic backgrounds. In Wikipedia, we can probably find the most heterogeneous group of contributors having a vast pool of potential knowledge and enthusiasm. Their willingness to create, communicate and cooperate, the use of modern technology and the wiki technique, together with its large size and global distribution – the components involved are not unique. The great challenge for Wikipedia, and its contributors, rather lies in directing all these resources so that they can fulfil the encyclopaedic dream.

To realize this grand vision, every individual must define his/her own personal mission and ambitions – some will act as "stonecutters" while others are able to "build cathedrals".

Different Opinions and Social Regulation

Wikipedia as an overall arena allows a great extent of freedom of speech. From a technical point of view, censorship does not exist. However, all opinions cannot always be accepted, and on a more practical level there is some kind of censorship – rather a form of social regulation or self-imposed moderation, in which observant users can intervene in order to remove inappropriate texts. These removals can be compared to self-censor-

ship. Discussions among users are important to communicate encyclopaedic values by separating the acceptable from the unacceptable. Experiences from Susning.nu have been a lesson in what could happen without any regulatory process; its popularity attracted many vandals and the problems became overwhelming. Wikipedia should always be unfettered in most respects, but not without any limitations at all; serious contributors must be able to make their voices heard, and feel that this is a serious project.

The free Internet implies some kind of democratic platform, as does Wikipedia. But the respondents do not consider Wikipedia to be a democracy, even though they admit that there are some obvious democratic tendencies. This less elitist arena contains and reflects more opinions and voices than do traditional encyclopaedias, and represents a wider range of ideas, intentions, identities, ages, and cultures, et cetera, which "spice" the content. Many express a serious and sincere engagement – even though some young individuals sometimes seem to be rather precocious, entering debates and discussions they are incapable of fully appreciating.

Issues concerning beliefs, convictions or political affiliations must be carefully balanced. Dedicated and passionate contributors might not even realize that their views are biased, therefore any criticism becomes difficult to convey. People sometimes also argue about trivialities, for instance, if there is a *crisis*, *war* or *conflict* between Israel and Lebanon. Their engagement is an asset – as long as it does not become counterproductive – and contributes more creative power to Wikipedia's dynamic.

Wikipedia and the Academic World

Wikipedia needs to establish a better and closer relationship with the academic world (and vice versa), especially as more and more students are discovering and using Wikipedia. The academic world seems to focus on Wikipedia's lack of reliability instead of taking an active part in its improvement. According to the respondents, there are some prejudices and pre-conceptions that could explain this lack of interaction. Wikipedia's contributors are usually intolerant towards academics and researchers, because they fear that Wikipedia may be used for publishing scientific works. Academics have a scant regard for the untutored contributions of some of Wikipedia's entries. Fredrik's statement below is worth considering:

> The academic world still turns its nose up at Wikipedia thinking that it is a playground for more or less socially handicapped individuals, individuals with a detailed knowledge about some nonsense subject, or for teenagers who only know a little about films and a lot about computer games. The academic world seems to forget that everyone can log in and contribute their knowledge, something that really would be appreciated by all involved.

Obviously, both sides must widen their horizons in order to find out more about the other's intentions. If academics could regard Wikipedia as some sort of enlightenment project, the current perception of mostly young immature people being encouraged to write about their interests could be re-vised and re-evaluated. Imagine the result if academics – both as human beings and competent individuals – could reach out to inspire and challenge all Wikipedia's contributors. Pre-knowledge of the wiki-technique is not necessary, as an increasingly collaborative atmosphere will almost certainly provide someone specialized in wikifying texts.

Wikipedia on its Own Terms

When reviewing and considering the results of this study, it would appear that more individuals should see the concept of Wikipedia behind its own façade. Most respondents express the wish for more input from people outside Wikipedia and for people to realize that they are able to contribute.

Perhaps the core question concerns how we can all approach Wikipedia – if we only glance at it superficially, or if we make an effort to attain something more. To outsiders, Wikipedia could be perceived as an updated, traditional online encyclopaedia – or as a playground for young enthusiasts. These views are not necessarily contradictory. People who only see the apparent surface tend to be more critical and focus on the faults and weaknesses. Initiated individuals, on the other hand, are aware of the ongoing processes, and know that all articles must undergo a process of development before they reach a somewhat satisfactory stage – even without ever becoming completely "finished".

Finally, the initial question must be addressed: Will collaboration compensate for the lack of authority and source credibility? In line with Wikipedia's concept, there will always be articles in all stages of development. Therefore, referring to past source credibility from a general point of view would not seem relevant. If Wikipedia can attract interested, curious and competent individuals, they will improve the product, making the encyclopaedia larger and deeper, as well as creating new entries and rudimentary articles, so-called "stubs". In a community such as Wikipedia, people accumulate knowledge and become informally bound by the values that they find in learning together. Learning might be the reason behind people's commitments, or appear as an incidental outcome. Both passive and active users would be helped by an easily comprehensible symbol that shows the article's present reliability, readability, and scientific level. However, a suggestion such as this gives rise to traditional considerations about who would perform the assessments and on what basis – perhaps involvement of a neutral third party would increase the credibility level.

Wikipedia is not ready-made as are traditional encyclopaedias; it is a product collaboratively constructed in present time. Like other encyclopaedic projects, Wikipedia is certainly about enlightenment, but also about participation, commitment and interaction – motivated by the individuals' own particular interests.

It still appears that many aspects of this phenomenon have not yet been explored. Up to now, only a limited number of studies, which offer a scientific approach to Wikipedia, have been published. This will undoubtedly be the subject of more examination in the future, with a focus upon, for example, the users, the content, interaction, function, character, creation processes, decision-making, and vandalism, as well as new and uninvestigated ideas and concepts of Wikipedia as an open and functional source of information.

Notes

1. With about 250 languages represented.
2. Retrieved 18 July, 2007, from http://meta.wikimedia.org/wiki/List_of_Wikipedias
3. Retrieved 18 July, 2007, from http://meta.wikimedia.org/wiki/List_of_Wikipedias
4. Retrieved 5 July, 2006, from http://en.wikipedia.org/wiki/Wikipedia

5. The reduplication *wiki wiki* is also used. Sometimes *wiki* is interpreted as a acronym for "What I know is". Retrieved 11 July, 2006, from http://en.wikipedia.org/wiki/Wiki

6. A user-friendly format augmented with a simplified mark-up language to facilitate edits in real-time. Retrieved 11 July, 2006, from http://en.wikipedia.org/wiki/Wiki

7. **Created by Howard G. ("Ward") Cunningham in 1995. Retrieved 12 October, 2006, from http://moin-moin.wikiwikiweb.de/WikiWikiWeb?action=print**

8. Retrieved 11 July, 2006, from http://en.wikipedia.org/wiki/Wikipedia:About

9. See http://wikimediafoundation.org

10. In the U.S., the Wikimedia Foundation is recognized as a charitable non-profit organization, and as such, exempted from certain federal taxes. Retrieved 17 October, 2006, from http://en.wikipedia.org/wiki/501%28c%29%283%29

11. Other projects: *Wiktionary* – a thesaurus and multi-language dictionary, *Wikiquote* – an encyclopaedia of quotations, *Wikisource* – a repository of source texts, *Wikibooks* – a collection of e-book texts for students (with *Wikijunior,* a subproject for children), *Wikispecies* – a directory of species data on animalia, plantae, fungi, mammals, bacteria, and all other forms of life, *Wikinews* – original reporting by citizen journalists, and *Wikiversity* with learning materials and activities. Retrieved 17 October, 2006, from http://en.wikipedia.org/Wiki/Wikimedia_Foundation

12. Retrieved 17 October, 2006, from http://en.wikipedia.org/Wiki/Wikimedia_Foundation

13. Retrieved 2 May, 2007, from http://en.wikipedia.org/wiki/Wikipedia:Policies_and_guidelines

14. Retrieved 18 September, 2006, from http://en.wikipedia.org/wiki/Wikipedia:List_of_guidelines

15. Retrieved 11 July, 2006, from http://en.wikipedia.org/wiki/Wikipedia:About

16. Retrieved 14 January, 2007, from http://sv.wikipedia.org/wiki/Wikipedia:Stilguide

17. Volume 438, 15 December, 2005.

18. Retrieved 19 January, 2007, from http://corporate.britannica.com/britannica_nature_response.pdf

19. Found on the website. Retrieved 20 August, 2006, from http://sv.wikipedia.org/wiki/Wikipedia:Press

20. Retrieved 10 October, 2006, from http://en.wikipedia.org/wiki/Wikipedia:Administrators

21. Autumn, 2006. No information about the distribution between males and females has been found.

22. According to the press contact, they were among the twenty most active administrators during this time.

23. These can also be called *wikipedians*, *editors*, *writers*, *authors* and *creators*.

24. The respondents probably use *pupils* and *students* synonymously, but the term *student* usually refers to higher education.

25. A personal page on which the user can introduce himself/herself, make various notes and lists, and also use for communication with other users. Retrieved 9 January, 2007, from http://en.wikipedia.org/wiki/Wikipedia:Glossary

26. A *puppet*, or *sock puppet*, is a false online identity through which a user pretends to be someone else.

27. In Sweden there are about 60 administrators, two active bureaucrats, two checkusers/IP controllers, but no steward (the Norwegian Wikipedia has an available resource when needed).

28. The copyright protection of the very popular second edition of the Nordisk Familjebok has expired. In popular speech, this second edition was called "The owl" because of the illustration on the cover. It was published between 1904 and 1926 (the first edition between 1876 and 1899).

29. The first two editions. Retrieved 8 January, 2007, from http://runeberg.org/nf/

30. *Readable* (or *good* in the English version) articles do not reach the same standard as *featured* articles.

31. **A term coined by Stephen Colbert. Retrieved 24 October, 2006, from http://en.wikipedia.org/wiki/Truthiness**

32. The Swedish committee initiated their work in January, 2007.

33. The riots were protest actions directed towards the EU summit in Gothenburg in 2001.

34. Any addition, deletion, or change of content made in a deliberate attempt to compromise the integrity of Wikipedia. Retrieved 30 December, 2006, from http://en.Wikipedia.org/wiki/Wikipedia:Community_Portal_vandalism

35. Mostly senior level schools with pupils aged 13 to 16.

36. In Sweden the standard seems to be set by *Nationalencyklopedin (NE),* which was published between 1989 and 1996 in 20 volumes and 3 supplementary volumes (2000). A continuously updated online vision is available on https://www.ne.se

37. Retrieved 11 September, 2006, from http://en.wikipedia.org/wiki/Opimus_Prime

38. See http://en.wikipedia.org/wiki/Wikipedia:Glossary

39. The article was published in Svenska Dagbladet on 30 Mars, 2006. Svenska Dagbladet let nine experts examine nine entries (in Swedish) from three online-encyclopaedias on the Internet. The entries were: Stella McCartey, Scientology [Scientologi], Slobodan Milocevic, Bear Quartet, Cubism [Kubism], refugee [flykting], docusoap/reality show [dokusåpa], Mohamed drawings [Mohamedteckningarna], and Homer [Homeros].

40. The wiki *Susning.nu* launched in October, 2001; in April 2004 the web site was closed for editing. Retrieved 19 May, 2007, from http://susning.nu
41. Produced by SOS Children, named *The 2006 Wikipedia CD Selection*. Retrieved 14 May, 2007, from http://en.wikipedia.org/wiki/2006_Wikipedia_CD_Selection

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