

## 4 The Puzzle of Openness

Problematic users will drive good users away from Wikipedia far more often than good users will drive away problematic ones.

—Extreme Unction’s Third Law

Trolls are the driving force of Wikipedia. The worst trolls often spur the best editors into creating a brilliant article with watertight references where without the trollish escapades we would only have a brief stub.

—Bachmann’s Law

A central aspiration in the pursuit of a universal encyclopedia is increased access to information: an opening of opportunity and capability to anyone with a desire to learn. Ironically, such an encyclopedia only became possible with universal access to its production. However, Wikipedia’s openness, based on the inspiration of the Free and Open Source Software (FOSS) movement and the capabilities of hypertext, is not a collaborative panacea. The two, at odds, “laws” of Wikipedia that begin this chapter are evidence that openness has advantages and disadvantages—and people don’t even agree about which is which. (Since neither law is funny, Kmarinas86’s Law of Contradiction, in which the most humorous wins, is of little help.) In fact, like the issues of consensus and leadership addressed in the next two chapters, openness, including to those who may alienate good users or drive them to brilliance, is a bit of a puzzle itself.

Wikipedia’s claim of openness is seen in its motto: “Wikipedia, the free encyclopedia that anyone can edit.”<sup>1</sup> But what do the terms *openness*—and *anyone*—actually mean? Because of the ascendancy of FOSS, *open* is now a buzzword, becoming a prefix to even such well-established notions as democracy and religion.<sup>2</sup> Additionally, when contemporary sources speak of openness as an attribute of community, it is often in an overly simplistic

way; projects like the Linux kernel, Apache Web server, and Wikipedia are often mischaracterized by way of an inappropriate, if not naïve, extreme. A utopian rendering of openness is that “anything goes”: there are no community structures or norms, anyone can do anything they please.

This understanding of “anything goes” is untenable: some level of structure is inevitable in social relations, and often necessary to support other values. In his 1911 book *Political Parties*, Rober Michels wrote of the development of an oligarchy within democratic parties as an “Iron Law.” In 1970 Jo Freeman wrote about the “tyranny” present in seemingly egalitarian feminist groups of the earlier decade: “‘Structurelessness’ is organisationally impossible. We cannot decide whether to have a structured or structureless group; only whether or not to have a formally structured one.” And more recently, Mitch Kapor expressed a similar sentiment with respect to the early management of the Internet when he noted: “Inside every working anarchy, there’s an Old Boy Network.”<sup>3</sup>

To be fair, Wikipedia has not helped this confusion given its early rule of “Ignore All Rules.” Granted, it is clever to have a rule dismissing rules, and its substance is of merit: recognizing the robustness of wikis and painfulness of bureaucracy: “If a rule prevents you from improving or maintaining Wikipedia, ignore it.”<sup>4</sup> However, such a bald, even if humorous, assertion is bound to require qualification. The essay “What ‘Ignore All Rules’ Means” explains that novices should feel free to contribute, don’t be overly legalistic but work in the spirit of improving the encyclopedia, and there is no substitute for good judgment. It doesn’t mean “every action is justifiable,” nor is it an excuse or exemption from accountability.<sup>5</sup>

Yet, these difficulties do not mean the notion of openness should be jettisoned altogether. The prevalence of the term *open* in contemporary discourse is indicative of something important, and provides a window into understanding the English Wikipedia community. For example, in 2001 Jimmy Wales posted a “Statement of Principles,” the first of which is that “Wikipedia’s success to date is entirely a function of our open community. This community will continue to live and breathe and grow only so long as those of us who participate in it continue to Do The Right Thing.”<sup>6</sup> But what constitutes “the right thing” in the context of openness?

In the following sections, I portray Wikipedia in light of five characteristics of what I call an *open content community*. This concept permits me to distinguish between a type of content, such as FOSS, and the community that

produces it.<sup>7</sup> (A “closed” company can produce software under an “open” license.) It also permits me to identify more specific values implicit in discussions about openness, such as transparency and nondiscrimination. Openness and its related values are then considered in light of four cases in which we see the Wikipedia community wrestling with how it conceives of itself. In the first case I return to the question of whether Wikipedia is really something “anyone can edit”? That is, when Wikipedia implemented new technical features to help limit vandalization of the site, did it make Wikipedia more or less open? In the second case I describe the way in which a maturing open content community’s requirement to interact with the world beyond Wikipedia affects its openness. In this case, I review Wikipedia’s “office action” in which agents of Wikipedia act privately so as to mitigate potential legal problems, though this is contrary to the community values of deliberation and transparency. Third, I briefly review concerns of how bureaucratization within Wikipedia might threaten openness. Finally, I explore a case in which a closed (female-only) group is set up outside of, and perhaps because of, the “openness” of the larger Wikipedia community.

### Open Content Communities

I use the word *community* to speak of a group of interdependent people who “participate together in discussion and decision making and who share certain practices that both define the community and are restored by it.”<sup>8</sup> Wikipedia community members do share common practices and norms; as we’ve seen, they share a collaborative culture. Furthermore, the Wikipedia community can be further understood as “prosocial” in that it exhibits behavior that is intentional, voluntary, and of benefit to others.<sup>9</sup> But even if we can defensibly claim it is a prosocial community, can anyone claim that it is truly open? Such a question requires a better sense of what *open* means. After reviewing its many uses as inspired by FOSS, I characterize openness in this context as an *accessible and flexible* type of *collaboration* whose result may be *widely shared*.<sup>10</sup> More specifically, an *open content community* is characterized by:

- Open content: provides content that is available under FOSS licenses.
- Transparency: makes its processes, rules, determinations, and their rationales available.

- Integrity: ensures the integrity of the processes and the participants' contributions.
- Nondiscrimination: prohibits arbitrary discrimination against persons, groups, or characteristics not relevant to the community's scope of activity. Persons and proposals should be judged on their merits. Leadership should be based on meritocratic or representative processes.
- Noninterference: the linchpin of openness, if a constituency disagrees with the implementation of the previous three values, the open content license permits the constituents to take the content and commence work under their own conceptualization without interference. While "forking" is often complained about in open communities—it can create some redundancy/inefficiency—it is an essential characteristic and major benefit of open communities as well.

Although the first and last characteristics provide a "bright line" with which one can distinguish between instances of open content by their copyright licenses and the consequent ability to fork, the social values of transparency, integrity, and nondiscrimination do not provide an equally clear demarcation. (What counts as open or free content has not always been an easy question either, but we do now have the "Free Software Definition," "Open Source Definition," and "Definition of Free Cultural Works."<sup>11</sup>) Additionally, although the often-voluntary character of contribution is not directly related to openness, it is critical to understanding the moral/ideological light in which many members view their participation. Each of these characteristics is explored so as to identify the context and values inherent in discussions by the community about itself.

### Open Content

As noted, what is often meant by the term *open* is a generalization from the FOSS movement. Communities marshaling themselves under this banner cooperatively produce, in public view, software, technical standards, or other content that is intended to be widely shared. Fortunately, there are now a number of excellent works on the FOSS phenomenon;<sup>12</sup> therefore, I only provide a brief description to clarify what is meant by "open content" and to identify one of Wikipedia's main inspirations.

The free software movement was spearheaded by Richard Stallman at MIT in the 1980s. When Stallman found it difficult to obtain the source

code of a troublesome Xerox printer, he feared that the freedom to tinker with and improve technology was being challenged by a different, proprietary conceptualization of information.<sup>13</sup> To respond to this shift he created two organizations: the GNU Project in 1984, which develops and maintains free software, and the Free Software Foundation (FSF) in 1985,<sup>14</sup> which houses legal and advocacy efforts. Perhaps most importantly he wrote the first version of the GNU General Public License (GPL) in 1989. The GPL is the seminal copyright license for “free software”; it ensures that the “freedom” associated with being able to access and modify software is maintained with the original software and its derivations. It has important safeguards, including its famous reciprocal provision: if you modify and distribute software obtained under the GPL license, your derivation must also be licensed and available under the GPL. (This provision is sometimes referred to as “viral” though some find this label derogatory.) Because such software is often of little or no cost to acquire, cost and freedom are sometimes conflated; this is answered with the slogan “Think free as in free speech, not free beer.”

In 1991, Linus Torvalds started development of Linux, a UNIX-like operating system kernel, the core computer program that mediates between applications and the underlying hardware. While it was not part of the GNU Project, and differed in design philosophy from the GNU’s kernel (named “Hurd”), it was released under the GPL. While Stallman’s stance on “freedom” is more ideological, Torvalds’s approach is more pragmatic. Furthermore, other projects, such as the Apache Web server, and eventually Netscape’s Mozilla Web browser, were developed under similar open licenses except that, unlike the GPL, they often permit proprietary derivations. With such a license, a company may take open source software, change it, and include it in the company’s product without releasing its changes back to the community.

The tension between the ideology of free software and its other, additional benefits led to the concept of open source in 1998. The Open Source Initiative (OSI) was founded when Netscape was considering the release of its browser as free software; during these discussions, participants “decided it was time to dump the moralizing and confrontational attitude that had been associated with ‘free software’ in the past and sell the idea strictly on the same pragmatic, business-case grounds that had motivated Netscape. They brainstormed about tactics and a new label. ‘Open source,’ contributed

by Chris Peterson, was the best thing they came up with.”<sup>15</sup> Under the open source banner the language and ideology of freedom were sidelined so as to highlight pragmatic benefits and increase corporate involvement.

The benefits of openness are not limited to software. Because the FSF felt the documentation that accompanies free software should also be free it created the GNU Free Documentation License (GFDL) in 1999. Of course, in the new millennium this model of openness has extended to forms of cultural production beyond technical content. Wikipedia’s cofounder Jimmy Wales has stated that a seminal article by Eric Raymond, which likened FOSS production to that of a vibrant, decentralized bazaar, “opened my eyes to the possibility of mass collaboration.”<sup>16</sup> In fact, in October 2001, when Wikipedia was not even one year old, Wales collected those principles he thought were responsible for and would continue to be needed for Wikipedia’s success. In his “Statement of Principles,” Wales wrote that “success to date is entirely a function of our open community.” As Nupedia and Wikipedia were licensed under the GFDL from the start, “The GNU FDL [GFDL] license, the openness and viral nature of it, are fundamental to the long-term success of the site.”<sup>17</sup>

Ironically, Wikipedia is not looked upon favorably by some prominent FOSS developers. Eric Raymond has characterized Wikipedia as a “disaster” that is “infested with moonbats”;<sup>18</sup> in his view Wikipedia is an unsuitable case of the open source model because the merit of software developers and their code can be judged by objective standards (e.g., speed or efficiency), but knowledge claims cannot. A participant on the geek discussion site Kuro5hin writes, “People love to compare Wikipedia to Open Source but guess what: bad, incorrect code doesn’t compile. Bad, incorrect information on the ‘net lives on and non-experts hardly ever notice the mistake.”<sup>19</sup> FOSS scholar Felix Stalder notes this difference between functional and expressive content is one of the key differences between “open source” and “open culture.”<sup>20</sup>

In time, because the GFDL was intended to accompany the textual documentation of software, and was perceived by some as not being flexible enough, new nonsoftware content licenses have appeared. More widely, the Creative Commons project, launched in 2001, provides licenses for the sharing of texts, photos, and music. Law professor Lawrence Lessig, a founder of Creative Commons, helped popularize the notion of freedom and openness in domains beyond software with his book *Free Culture*.<sup>21</sup>

Wikipedia is probably the best-known example in the wider free culture movement today.

### Transparency and Integrity

On the Meatball wiki, “a common space for wiki developers and proprietors from all over the Internet to collaborate,” the values of transparency and integrity are partially captured by what it calls “Fair Process,” which itself includes the three principles of engagement, explanation, and clarity; fair process is particularly important in voluntary communities, where “because fair process builds trust and commitment, people will go above and beyond the call of duty.”<sup>22</sup>

While in the past some have warned of “eroding accountability in computerized societies,” more recently others have argued that the open development of FOSS may be an exception, and even provide a model for achieving accountability for other technologies or institutions.<sup>23</sup> Consequently it shouldn’t be surprising that transparency has come to be an attributed feature of Wikipedia. Jill Coffin explains that transparency “allows participants to understand the reasoning behind decisions, contributing to trust in the Wikipedia process. It also allows newbies a means to understand informal community protocol and culture, as well as reduce abusive practice.” Wiki technology and culture promote the documentation of proposals, discussions, and decisions—everything, actually. Integrity can then flow from the accountability inherent to such transparency: the record is there for all to see. Coffin relates this to a famous Linux aphorism: “Schlock and chaos are avoided due to the watchful eyes of the many, exemplifying Linus’ Law, coined and articulated by hacker Eric Raymond as ‘Given enough eyes, all bugs are shallow.’”<sup>24</sup> Some scholars even argue that Wikipedia “embodies an approximation” of philosopher Jürgen Habermas’s notion of “rational discourse” (i.e., noncoercive, open to participation, and discursive).<sup>25</sup> At Wikipedia, the importance and hoped-for effects of transparency can be seen in the expectations of its “stewards,” who have significant power in administrating all other user rights:

Steward activity is visible in the Meta rights log. When a request is fulfilled, stewards should note what they did at the local request page (each new request should be accompanied by a link to this) or on the Meta request page. Steward discussions should occur on Meta, rather than by e-mail, so people can understand the stewards’ decisions and ways of working.<sup>26</sup>

However, just as a naïve rendering of openness as “anything goes” is overly simplistic, so is the sense that just because something has been posted on the Web one has achieved a perfect level of transparency and integrity. As we shall see, there might still be other private communication channels and sometimes too much information can be as disabling as not having any at all.

### **Nondiscrimination**

A common tendency in groups is to adopt a parochial in-group/out-group mentality; Wikipedia cultural norms attempt to counter this. In the 2001 “Statement of Principles” Wales wrote, “Newcomers are always to be welcomed. There must be no cabal, there must be no elites, there must be no hierarchy or structure which gets in the way of this openness to newcomers.” This is further reflected in the famous Wikipedia maxim “Please Do Not Bite the Newcomers.”<sup>27</sup>

Beyond newcomers, there are also norms of nondiscrimination with respect to behavior and beliefs. In the wikiEN-I thread entitled “Wikipedia and autism,” Tony Sidaway wrote of the treatment of two admittedly difficult contributors: “Both of them have expressed a strong wish to produce work for Wikipedia. Both of them produce articles that appear weird to non-autists. In my opinion, neither represents a threat to Wikipedia commensurate to the treatment they have received.”<sup>28</sup> Wikipedians then discussed how they might best work with and encourage such contributors. Also, as seen in the neo-Nazi scenario at the beginning of this book, Wikipedia administrator MattCrypto unblocked a “racialist” because he thought it was unfair to block individuals because of their affiliations rather than for their actions on Wikipedia. Even those with criticisms of Wikipedia should be welcomed if they connect in a constructive way, as Wales notes in his “Statement of Principles”:

Anyone with a complaint should be treated with the utmost respect and dignity. They should be encouraged constantly to present their problems in a constructive way in the open forum of the mailing list. Anyone who just complains without foundation, refusing to join the discussion, I am afraid I must simply reject and ignore. Consensus is a partnership between interested parties working positively for a common goal. I must not let the “squeaky wheel” be greased just for being a jerk.<sup>29</sup>

However, it is interesting to note that the “Statement of Principles” of October 27, which is a seminal articulation of the Wikipedia ethos, appeared



after two other messages relevant to Wikipedia openness. Jimmy Wales and Larry Sanger are often inappropriately placed at extremes of the “crowds versus experts” continuum; however, Sanger has welcomed mass participation under the guidance of experts and Wales has recognized the challenge of mass participation as Wikipedia continues to grow, as seen in a controversial message Wales posted on October 18:

One of the wonderful things about the wiki software, and something that has served us very well so far, is that it is totally wide open. I suspect that any significant deviation from that would kill the magic of the process.

On the other hand, we really are moving into uncharted territory. Wikipedia is already, as far as I know, the most active and heavily trafficked wiki to ever exist. It seems a virtual certainty that the wide open model will start to show some strain (primarily from vandalism) as we move forward.

I have this idea that there should be in the software some concept of “old timer” or “karma points.” This would empower some shadowy mysterious elite group of us to do things that might not be possible for newbies. Editing the homepage for example. We already had one instance of very ugly graffiti posted there (a pornographic cartoon).<sup>30</sup>

This message was a faux pas on Wales’s part. In chapter 6, I note that an open content community is often led by a “benevolent dictator,” and the community deals with the anxiety arising from the tension between the egalitarian ethos and autocratic leadership by way of irony and humor. In this message Wales speaks of being a dictator and of a cabal in much the same way—without appreciating that the joke doesn’t work when he tells it. One week later Wales was forced to explain:

In a letter to wikipedia-l, I injudiciously used the word “cabal” and made reference to a “shadowy mysterious elite.” This was a very poor choice of words on my part. I thought that many or most people would understand it for what it was—the notion of a non-existent cabal, allegedly controlling things, when in fact there is not one, would be well understood.

Let me be clear. In wikipedia, there should be no elites. All legitimate participants, no matter how much they may disagree on political, philosophical, or other issues, should always be able to edit pages in the same fashion as they can now. Only behavior that truly and clearly rises to the level of vandalism should be fought with extremely cautious uses of software security measures.<sup>31</sup>

And the following day Wales posted his “Statement of Principles” on the wiki, further highlighting the importance of openness to Wikipedia’s success. Even so, fears of a cabal continue to arise every so often; it is human nature and a social inevitability for practice to sometimes fall short of

principle and for people to be suspicious of those in power. On the one hand, Wikipedians frequently raise concerns about transparency, integrity, and discrimination;<sup>32</sup> on the other, Extreme Unction's First Law notes that "if enough people act independently towards the same goal, the end result is indistinguishable from a conspiracy."<sup>33</sup>

### Noninterference

Simply, if the content is available under an open/free license, those dissatisfied with it or the community can take the content and work on it elsewhere.<sup>34</sup> Steven Weber notes the importance of forking by claiming: "The core freedom in free software is precisely and explicitly the right to fork." While I don't consider it to be the "core freedom" but rather a critical social *implication* of open/free content, it is a "fundamental characteristic" of FOSS. And I do agree that "to explain the open source process is, in large part, to explain why [forking] does not happen very often and why it does when it does, as well as what that means for cooperation."<sup>35</sup> To this end, David Wheeler likens forking to "the ability to call for a vote of no confidence or a labor strike . . . . Fundamentally, the ability to create a fork forces project leaders to pay attention to their constituencies."<sup>36</sup>

Forks of Wikipedia content have happened and continued to be threatened and discussed. For example, because of a misunderstanding about the possibility of Wikipedia carrying advertising, the Spanish-language Wikipedia was forked into *Enciclopedia Libre Universal*.<sup>37</sup> (The misunderstanding has since been resolved and Spanish Wikipedia has superseded the fork.) Or, as noted, Larry Sanger's dissatisfaction with the lack of respect for expert contributors at Wikipedia led him to start the Citizendium project, which uses the same software ("MediaWiki") as Wikipedia and considered adopting and improving its content.<sup>38</sup> However, definitively settling upon Citizendium's license was not a quick or easy process. One concern among some Citizendium contributors was that if they were to use the GFDL license, and therefore able to use (and improve upon) Wikipedia content, Wikipedia could import the improved Citizendium content back into itself. This was unacceptable to those who wished to distinguish themselves and the superiority of their approach. Therefore, as some Wikipedia content had already been adopted, Citizendium experimented with the possibility of "unforking" their borrowed content—rewriting it from scratch. However, in December 2007, Citizendium chose a Creative Commons license, which,

after an orthogonal effort to make it and the GFDL compatible, means “Wikipedia and the Citizendium will be able to exchange content easily.”<sup>39</sup> In any case, forking of Wikipedia is an acknowledged possibility and consequent of its openness, as Wales noted early on with Nupedia: “One important thing to note is that if advocates of some viewpoint wish to claim that we are biased, and we are unable to come to a consensus accommodation of some kind, they will be free to use our content as a foundation, and to build their own encyclopedia with various articles added or removed. This is the sense in which open source is about free speech, rather than free beer.”<sup>40</sup>

### Discussing Openness

Openness entails a handful of constituent values that are not always easily reconcilable in problematic situations. In the following sections I review four cases that challenged the community on questions of openness: whether anyone can really edit, the legitimacy of office actions, the effects of bureaucratization, and the WikiChix enclave.

#### Can Anyone Really Edit?

As noted, the English Wikipedia declares itself as “the free encyclopedia that anyone can edit.”<sup>41</sup> Presently, this includes the unregistered/anonymous (i.e., those who don’t have an account or don’t log into it before editing). Despite the common retort that Wikipedia is “not an anarchy,” among other things,<sup>42</sup> the feature of openness and anonymous editing continues to be a valued part of Wikipedia’s identity: even those who always log in might still support allowing others to edit without logging in.

Before discussing anonymity, blocking, and openness, some background information is in order. Every edit to Wikipedia is captured and can be reviewed on the article’s history page. Wikipedia contributors may choose to register an account with a name/identity of their choosing: it might be personally identifiable, or a pseudonym. Editors who have not logged in to such an account are often referred to as “anonymous.”<sup>43</sup> In the history log, the edit of an anonymous user is attributed to an IP address, the number associated with a user’s computer by their Internet service provider. The reason the term *anonymous* is not strictly correct is that there have been cases in which these numbers have been traced back to a particular computer. For example, the offices of U.S. Congressional representatives

were identified as being responsible for removing true but embarrassing information on Wikipedia.<sup>44</sup> In fact, individuals who wish to protect their privacy would be better off creating a pseudonym with which to edit Wikipedia content. Then, only the few “checkuser” Wikipedians would be able to determine the IP address of the originating computer.<sup>45</sup>

Unfortunately, Wikipedia is continually vandalized. However, there are various automated tools (“bots”) and groups of users (e.g., the “RC [recent changes] Patrol”) that roll back or “revert” articles to their previous state. If a page is particularly contentious, it can be *protected* for a period to prohibit all nonadministrator changes. When it becomes clear that a specific user is persistently abusive, administrators may *block* his or her editing for a specified period, or in serious cases they might institute a lifetime *ban*.<sup>46</sup> However, a blocked user might create another account or edit anonymously. Consequently, administrators have the ability to block users based on their IP addresses. While some blocks might be mistaken or questionable, it is difficult to conceive of Wikipedia working without such a feature as it would soon be overwhelmed with junk. As the “Wikipedia Is Not an Experiment in Anarchy” article states:

Wikipedia is free and open, but restricts both freedom and openness where they interfere with creating an encyclopedia. Accordingly, Wikipedia is not a forum for unregulated free speech. The fact that Wikipedia is an open, self-governing project does not mean that any part of its purpose is to explore the viability of anarchistic communities. Our purpose is to build an encyclopedia, not to test the limits of anarchism.<sup>47</sup>

However, since one’s IP address can change, or many users may share an IP address, this approach sometimes blocks the innocent; a balance must be struck between the values of openness and quality. Specifically, to what extent do technical features such as blocking vandals or requiring registration promote or constrain community values such as openness?

Consider an infamous case of 2005 in which the biographical article of John Seigenthaler, an administrative assistant to Robert Kennedy, contained the unfounded claim that he was implicated in the assassinations of the Kennedy brothers. Much to the embarrassment of many Wikipedians, Seigenthaler objected in a widely discussed editorial opinion in *USA Today*.<sup>48</sup> After the identity of the “anonymous” contributor was revealed as the author of a “prank gone wrong,” the press reported that Seigenthaler was not holding a grudge, or supporting a regulatory crackdown on the

Internet, but he did fear “Wikipedia is inviting it by its allowing irresponsible vandals to write anything they want about anybody.”<sup>49</sup>

In a message to one of the Wikipedia lists, Jimmy Wales objected to this as a mischaracterization of Wikipedia, and its openness. Wales argued that to equate openness with defamation is like equating a restaurant’s steak knives with stabbings. To force everyone in the restaurant to be isolated in steel cages because of the possibility of a stabbing would violate the values of “human kindness, benevolence, and a positive sense of community” and, consequently, “I do not accept the spin that Wikipedia ‘allows anyone to write anything’ just because we do not metaphysically prevent it by putting authors in cages.”<sup>50</sup> The question here seems to be to what extent does the phrase “allow anyone to edit” include the possibility of “allowing pranksters to defame”? Seigenthaler’s position seems to be that the freedom to edit implies abuse, whereas Wales seems to be arguing that such a conclusion is misleading with respect to the community’s intention and the balance of consequences. While vandalism is actively resisted by Wikipedians, implementing technical or social structures that would make vandalism *impossible* would conflict with other community values. How might Wikipedia decrease the possibility of vandalism without unduly affecting other values such as openness?

In December 2005, shortly after the Seigenthaler incident, a new mechanism was announced: page “semi-protection.” This prevents unregistered editors, or those registered within the last four days, from editing the protected page. Previously, any user, anonymous or logged in, would be prohibited from editing a “fully” protected page. Now, while semi-protected pages can’t be edited by anonymous and new users, established users can edit them.<sup>51</sup> Hence, moving pages from full protection to semi-protection makes the pages more accessible to Wikipedians.

Much to the chagrin of the community, this proposal gained major attention with the publication of a *New York Times* article entitled “Growing Wikipedia Revises Its ‘Anyone Can Edit’ Policy.”<sup>52</sup> This led Wales to comment that:

Not every case of allowing more people to edit would count as “more open.” For example, if we had a rule that “Only Jimbo is allowed to edit this article” then this would be a lot LESS open than “no one is allowed to edit this article.” Openness refers not only to the number of people who can edit, but a holistic assessment of the entire process. I like processes that cut out mindless troll vandalism while allowing people of diverse opinions to still edit. Those are much better than full locking.<sup>53</sup>

On June 21, 2005, the *New York Times* corrected its original article by noting that some form of protection had always existed on Wikipedia, and the online version's headline now reads "Wikipedia refines" its policy, rather than "revises" it.<sup>54</sup> And semi-protection was soon complemented with the ability to "soft block" IP numbers, meaning one could block anonymous users from troublesome IP addresses, "but allow editing by registered users when logged in."<sup>55</sup> (Remember, one *protects* specific pages, but *blocks* users.) During the lengthy discussion about the feature, some expressed a concern that it was contrary to the value of openness:

Personally, I think the new blocking policy . . . will do more harm than good. The proposal would indubitably mean the blocking (using this logged-in only registration) of most AOL IPs, Netscape IPs, school districts, public-use computers, and major corporations. By only allowing logged-in users on these IPs (since it is inevitable that all of them would either be blocked indefinitely or blocked consistently), in my opinion, is against the spirit of the Wiki—we're here to allow \*anyone\* to edit, not just those who want to create accounts.<sup>56</sup>

Others countered with a pragmatic argument. On the face of it, it might appear there are more restrictions as there is a new feature in the software, yet it would further the goal of greater access in practice:

I really can't figure out what you're arguing here, though. Because right now, when an AOL IP is blocked, you can't edit using it regardless of whether or not you register. As I understand it, the proposal is to allow logged in users to edit when they otherwise wouldn't. Sure, this might lead to admins being more liberal with IP blocks, but it doesn't require it—whether or not admins are more liberal with IP blocks is a separate issue, and we could pass policies to ensure that this doesn't happen.<sup>57</sup>

In July 2006 acceptance of the soft-blocking proposal was characterized as an "avalanche" of support and I have seen little evidence that it or semi-protection has negatively affected users.<sup>58</sup>

How does this story of anonymous users, vandals, and blocking engage the idea of Wikipedia as an open content community? There are four issues worth explicitly identifying so as to answer this question.

First, what is the scope of "anyone"? Does "anyone" include persistent vandals with no goal other than disturbing Wikipedia? The community has comfortably concluded that it does not—though it does continue to be quite forgiving by preferring suspension and a process of escalation before outright banning occurs. Does "anyone" include anonymous editors? Historically it has, and continues to do so except in cases of suspected abuse.

Second, how to balance values? As social software researcher Clay Shirky points out, a group needs the *right amount* of freedom; new collaborative tools, such as the wiki, can enable, but not guarantee, a balance that is neither overly managed nor chaotic.<sup>59</sup> And openness is not the only value of Wikipedia, it is not even the primary one. The ultimate goal of Wikipedia is to produce a high-quality encyclopedia. Many believe openness furthers the ultimate goal of producing quality content, but a quality encyclopedia should not be sacrificed in the face of a detrimental openness. Fortunately, the values of openness, quality, and kindness are often seemingly sympathetic to each other. Yet, as seen, there are cases in which they are in tension and can be addressed through additional technical intervention.<sup>60</sup> Sanger, with the Citizendium project, for example, has chosen a different balance by requiring that all contributors use their real-world identities.

Third, does *possibly* imply *essentially*? In an expansion of an argument by Langdon Winner wherein certain technologies (e.g., nuclear) can be inherently political (i.e., inherent to certain social and political relationships),<sup>61</sup> some critics maintain that because certain things are *possible* on Wikipedia they are *essential* to Wikipedia. Whereas Winner argues that the dominant uses of technology are determinative, Wikipedia critics go further and argue that even a possibility is determining, or to put it another way, “because Wikipedia permits foo, it is foo-ish.” Others respond that marginal cases do not define the whole and should not be catered to if they conflict with more central values. To this end, Wales was quoted in the *New York Times* article as saying: “Protection is a tool for quality control, but it hardly defines Wikipedia. What does define Wikipedia is the volunteer community and the open participation.”<sup>62</sup>

Fourth, do technological constraints always imply movement away from openness? The ability to block anonymous users associated with an abusive IP address was a new feature. Yet innocent anonymous users would have been blocked before, as would have those users logged in at that IP address. With the new feature the latter group has access it did not before. In this case we see the relevance of historical context (existing practice) and practical effect on the meaning of a technical feature.<sup>63</sup>

Although some might argue any effort to block even problematic users is a step away from openness, a chaotic culture of undisciplined vandals would equally disenfranchise those who wish to make a positive contribution to a viable encyclopedic project. The community must undertake a

balancing act, one that is difficult, occasionally settled, and then disrupted again. For instance, in 2009, because of continuing concerns about inappropriate edits to biography articles, Wales proposed that the “Flagged Revisions” feature be enabled on the English Wikipedia.<sup>64</sup> Flagged revisions are a long-discussed mechanism by which an approved—rather than the latest—version of a page would be seen by “the public” (i.e., those not logged in). This could be used to create a higher-quality view of a wiki, or present a stable and inoffensive view of a contentious article (i.e., “Flagged Protection”<sup>65</sup>). This proposal might also be thought contrary to the wiki ethos of one’s edits being seen immediately upon hitting the “save” button. Indeed, in Wales’s “Statement of Principles” he wrote “‘You can edit this page right now’ is a core guiding check on everything that we do. We must respect this principle as sacred.”<sup>66</sup> Of course, sometimes the balance must be shifted and one could still *edit* a page “right now” even if it is not immediately *seen* by the public. Furthermore, while this solution might look like a constraint, a closing down of a wiki, it could very well provide greater access than if a page is simply protected.

### Interfacing with the Outside World

On Wikipedia one is expected to discuss the editing of an article with fellow contributors, at a minimum by including a summary when saving an edit. Arguments are made in the open with reference to verifiable sources and community policy. However, for those with a proprietary interest, this process of reasoned discussion can be circumvented via a call or letter to the “Wikipedia office,” that is, by formally contacting the Wikimedia Foundation. And, sometimes, rightfully so. What obligation did Seigenthaler, someone completely unfamiliar with wikis, have to remove the libelous claim from Wikipedia that he was implicated in the assassination of the Kennedys?<sup>67</sup> None. As Wales wrote, “The problem we are seeing, again and again, is this attitude that some poor victim of a biased rant in Wikipedia ought to not get pissed and take us up on our offer of ‘anyone can edit’ but should rather immerse themselves in our arcane internal culture until they understand the right way to get things done.”<sup>68</sup>

However, unfortunately, the office mechanism can be abused by those pushing a nonencyclopediaic point of view (POV), such as promoting (or censoring negative views of) a commercial product. If such people can’t win their arguments on the merits of notability, verifiability, and neutrality



within the community, having their lawyer call the office might prompt an office intervention—such as deleting objectionable material, which would then be labeled with the WP:Office template.

Something like WP:Office, where discussion occurs off-wiki, is an unfortunate though (probably) necessary mechanism for avoiding legal problems. Yet, in an ironic twist, office actions soon became a red flag to those who dislike this intervention or otherwise like to make trouble for Wikipedia (e.g., copying sensitive or contentious materials off Wikipedia to continue a controversy). Whereas office actions were intended to quickly and quietly remove a potential liability, they became a flashpoint. This led to the unfortunate case in which office actions were taken without being labeled as such, so as not to draw attention, and a prominent user had his administrator status revoked and was blocked indefinitely because he had reverted an unlabeled office action. (In the end, his response was an exemplar of Wikipedia tact and his position was soon restored.<sup>69</sup>) Perhaps because of the attention caused by office actions, a *suppression* (revision-hiding) feature was introduced that “expunges information from any form of usual access even by administrators,” including “username, revision content, and/or edit summary in order to remove defamatory material, to protect privacy, and sometimes to remove serious copyright violations.”<sup>70</sup> Access to this feature is limited to the few users given “oversight” permission. This is even a greater step from openness and is evidence that legal threats had clearly become a top priority for the Wikimedia Foundation. Indeed, in 2006 the Wikimedia Foundation hired one person to be both “general counsel and interim executive director.”<sup>71</sup> Similar concerns over the incompatibility of copyright and liability regimes with open content production have led Larry Sanger to argue that works “developed in a strongly collaborative way” merit special protection under a law that is sensitive to the novel way in which they are produced.<sup>72</sup>

Wikipedia’s suppression of information became a mainstream story in June 2009. David Rohde, a reporter for the *New York Times*, had been kidnapped by the Taliban and held in Afghanistan for seven months until he managed to escape. When he did escape, the *Times* reported that it had suppressed the story during that time, and asked others to do the same, so as not to draw attention and further endanger Rohde. This included a request to the Foundation to help keep this information off of Wikipedia as an anonymous contributor was attempting to add it to Rohde’s biographical

article. Knowing that his actions drew attention, Jimmy Wales worked with others to prevent its reappearance. Removals were justified based on the lack of sufficiently reputable sources for the claim—since the media was suppressing the story—and the page was subsequently protected (i.e., locked from further edits). Wales said they had no idea who this contributor was and so “there was no way to reach out quietly and say ‘Dude, stop and think about this.’”<sup>73</sup> On June 20, the news broke and Wales removed the protection. In less than thirty minutes, the contributor, still not appreciating why the information was suppressed, added it again with references to stories of Rohde’s escape with an edit summary that said: “Is this enough proof you fucking retards? I was right. You were WRONG.:P”<sup>74</sup> Within the community, but mostly from without, there was much discussion about Wikipedia’s adherence to its principles of openness and veracity, and its responsibility to the safety of others since it is not only subject to influence from the outside world, but can also affect the world it documents.

### **Bureaucratization**

The community’s own internal development also has implications concerning its openness. Sociologist Max Weber observed that leadership often shifts from a charismatic leader to a more bureaucratic form of governance as a community matures.<sup>75</sup> Clay Shirky, a contemporary scholar of “social software,” makes a more irreverent observation: “Process is an embedded reaction to prior stupidity,” meaning “an organization slowly forms around avoiding the dumbest behaviors of its mediocre employees, resulting in layers of gunk that keep its best employees from doing interesting work.”<sup>76</sup> The Wikipedia essay “Practical Process” clearly defines the role of process (i.e., to implement policy, to provide consistency, to reduce redundancy in similar situations, and to further learning and decision making); but it also identifies how it emerges, and hardens, how to recognize bad process, and warns, “You can’t legislate against misunderstanding or malice.”<sup>77</sup> (An earlier version of the essay was more concise: “You can’t legislate clue.”<sup>78</sup>)

Wikis do not add unnecessary process in and of themselves: they are simple, accessible, flexible, quick, and cumulative. Furthermore, community process need not be overly specified in fear of a mistake since content changes are easily reverted. (Trusted leadership also plays an important role here.) However, an unforeseen implication of the wiki’s ability to facilitate content creation is that policies are but another type of content. So, in

the end, Wikipedia is no exception: despite the norm of “Avoid Instruction Creep,” the “ratio of policy citations to talk edits” is increasing.<sup>79</sup> For example, Andrew Lih, author and Wikipedia administrator, prompted a discussion over what he saw as an overly officious statement about the “speedy deletion” of a page he found useful. The deletion notice warned that the article, “is a very short article providing little or no context (CSD A1), contains no content whatsoever (CSD A3), consists only of links elsewhere (CSD A3) or a rephrasing of the title (CSD A3).” Lih responded:

It’s incredible to me that the community in Wikipedia has come to this, that articles so obviously “keep” just a year ago, are being challenged and locked out. . . . It’s as if there is a Soup Nazi culture now in Wikipedia. There are throngs of deletion happy users, like grumpy old gatekeepers, tossing out customers and articles if they don’t comply to some new prickly hard-nosed standard. It’s like I’m in some netherworld from the movie *Brazil*, being asked for my Form 27B(stroke)6.<sup>80</sup>

Some degree of policy is necessary in any community, and bureaucratization is a common—many would say unavoidable—feature of organizational development. As one study of Wikipedia policy concludes, “the ‘policyless’ ideal that wikis [supposedly] represent is a pipe dream.”<sup>81</sup> Yet, even in the face of a proliferation of process, the open content community values of transparency and integrity are largely preserved. However, should the accretion of policy become too heavy, integrity can be compromised by frustration and “Wikilawyering” (i.e., employing overly technical or legalistic arguments that focus on the letter of policy rather than its spirit).<sup>82</sup> For example, the policy boom has prompted one Wikipedian to declare that he had “Kicked the Process Habit”: “So as of today, I’m just going to go ahead and edit. Lord knows the rules are making me nervous and depressed. So I’ll follow all the stuff I can remember, and not try too hard to learn the other stuff.”<sup>83</sup>

### Enclaves and Gender

One should not be surprised that a source of contention in open content communities is when a subset of community members creates a closed space. The conditions that prompt such proposals and the rhetoric marshaled to support or attack them give insight into a community’s attempts to understand and implement openness.

A common feature of online communities operating under an ethos of open and egalitarian values is frustration with the coexistence of group

decision making and seemingly contrary forms of autocratic authority. (I use *authority* to describe the right to exercise *power*, which is in turn the capacity to influence;<sup>84</sup> by *autocratic* I mean actions that do not derive their authority from group decision-making processes.) Evidence of this phenomenon includes the alleged “secret cabal” of Usenet in the 1980s, private “sysop”-only email lists or IRC channels, and the “benevolent dictators” of communities including Python, Linux, and Wikipedia.<sup>85</sup> For example, consider the following comment on a Wikipedia email list: “There are many private, semi-private and secret lists in which wikimedians make decisions with each other without ever telling anyone or explaining. Openness has gone overboard a very long time ago. Most things you read on the public lists have been discussed privately long before an outsider found out about them.”<sup>86</sup>

However, in 2006, a different sort of closed group was set up outside of the larger Wikipedia community, what might be called an enclave or minority-specific space.<sup>87</sup> For while cabal formation is a seemingly inevitable structural result of group decision making, and legal threats are an inescapable reality of living in a litigious society, enclaves are purposely chosen by a subset of the community in seeming contradiction with the values of openness and equality. This was aptly demonstrated in the Wikipedia community by the announcement of a “WikiChix” list for female-only discussion, which began when:

Offlist chat about the recent discussions on systemic gender bias in Wikipedia made it clear that a number of women were not comfortable contributing to the conversation there. This inspired the creation of WikiChix in November 2006. WikiChix is a wiki and mailing list for female wiki editors to discuss issues of gender bias in wikis, to promote wikis to potential female editors, and for general discussion of wikis in a friendly female-only environment.<sup>88</sup>

Formally excluding anyone from the larger community prompts questions of fairness and discrimination. Some members reacted by arguing of a slippery slope toward absurdity, such as a need for “a mailing list for homosexual African-Americans from planets other than earth.”<sup>89</sup> In a similar spirit, another Wikipedian asked about the need for a “British-only or atheist-only” list but also acknowledged the specific motivations for the creation of WikiChix: “the list was organised to avoid a specific problem—women feeling uncomfortable posting to this male-dominated list where explicitly sexist statements (even if they weren’t meant seriously) are left unchallenged by a large number of people.”<sup>90</sup>

Earlier, I noted that encyclopedias and FOSS were both inspirations for Wikipedia. However, both domains have been historically male dominated and this too is part of Wikipedia's inheritance. The well-known gender imbalance in computer-related fields is further exacerbated in the FOSS community, with females making up only about 1 percent of participants.<sup>91</sup> In fact, the very notion of equality may inhibit constructive action toward mitigating bias. After interviewing male and female students about computer usage and its larger culture (e.g., reading computer magazines), Fiona Wilson argues that women who might otherwise object to informal bias might simply accept the presumption of equality or not want to challenge it so as to avoid being singled out.<sup>92</sup> The model of female "chix" projects (e.g., LinuxChix, Ubuntu Women, Debian Women, KDE Women, WikiChix) appears to be a positive counterforce to this tendency.

Another response employed by those concerned with such spaces is not to object to the exclusion, but to the division of the larger community. Shouldn't the community ensure the common space is accessible rather than spinning off groups? For example, "A better solution would be to kick any of the men that behave like that, not to assume that 'all men are chauvinist pigs.'"<sup>93</sup> Unfortunately, the history of reference-work production is rife with examples of male chauvinism. Robert Cawdrey's 1604 "Table Alphabetical" can't help but be read today as patronizing given it was "gathered for the benefit & helpe of Ladies, Gentlewomen, or any other unskilfull persons."<sup>94</sup> In early encyclopedias, women often merited only a short mention as the lesser half of man. A notable exception, the article on midwifery in the first edition of *Britannica* and its illustrations of the female pelvis and a fetus prompted a public scandal. King George III ordered the forty-page article on midwifery destroyed, pages and plates.<sup>95</sup>

Furthermore, few women prominently appear in the historical record of reference works. The few exceptions are in the domain of librarians and documentalists, such as Suzanne Briet and her peaceful reading room. Unfortunately, even Melvil Dewey's advocacy for women in the library profession is marred by alleged discrimination and personal scandal.<sup>96</sup> This juxtaposition of limited advances in the context of continuing bias is also a theme in Gillian Thomas's history of women contributors to the *Britannica*, the only book I've found so far to address this issue directly.<sup>97</sup> Today, at least, women are visible in everyday tasks and positions of authority

at Wikipedia, though they continue to be a minority (roughly 10 percent according to surveys<sup>98</sup>) and concerns of “systematic gender bias” persist.

Of course, given the value accorded to free speech, the community would have a difficult time restricting the speech of “men who behave like that.” How would such a determination be made? One of the few standards available for the discrimination of speech in online communities is that of *trolling*, a term describing contentious speech, probably not even genuinely held, that is expressed for the sole purpose of inflaming discussion. But how would one distinguish between misogyny and trolling?<sup>99</sup> (Or, how does one distinguish between genuine racism and provocation? Offensive statements used to antagonize others in a heated moment need not be believed.) An irony is that falsely held misogynistic statements espoused for the purposes of trolling might be censured or censored, but a genuine misogynist could claim that any formal censure is a form of “thought crime,” which is generally anathema under free-speech principles.

This type of discussion that traverses the difficult questions of freedom and equality often prompts extensive debate. Although discussions about these values sometimes create a shared “productive ethical orientation” within the community,<sup>100</sup> they can also be alienating and seemingly endless. This is why such topics are so suitable to trolling in the first place, and for which community leaders often step in, as Wales notes:

The point is, if the broad philosophical question is “Do we ban people for merely holding unpleasant or unpopular beliefs?” then the answer is “no, we never have, and there seems to be very little support for doing so.” If the point is “Does asserting unpleasant or unpopular beliefs automatically get you a free pass to be any sort of jerk you like, because we are planning to bend over backwards to make sure we don’t ever ever ever discriminate against Nazis?” then the answer is, “no, being a disruptive troll is still being a disruptive troll.”<sup>101</sup>

Not surprisingly, it did not take long for the WikiChix proposal to be challenged; a longtime male contributor, and self-described “overly combative” anarchist,<sup>102</sup> tried to subscribe to the list and was rejected. (I suppose this action was a violation of the norm “Do Not Disrupt Wikipedia to Illustrate a Point,”<sup>103</sup> which brings some measure of sanity to difficult issues.)

The final, parliamentary, objection to the WikiChix proposal was that this exclusive list was being hosted by the Wikimedia Foundation. The other free software-related women fora, while focused on being “women-friendly,” are more or less open and affiliated with the larger community.

LinuxChix “is intended to be an inclusive group where everyone is and feels welcome. . . . LinuxChix is intended to be primarily for women. The name is an accurate reflection of that fact. Men are welcome because we do not want this group to be exclusive.”<sup>104</sup> Debian Women states: “We’re not segregated. Debian Women is a subgroup of Debian that allows anyone to join and help.”<sup>105</sup> On UbuntuWomen, “Membership is open to all.”<sup>106</sup> The KDE Women Web site is run by women so “you have to be a woman,”<sup>107</sup> but in addition to the six listed female members, there are also five male “supporters” and men are present on the IRC channel and mailing list. The gender exclusivity of WikiChix is atypical and it is not clear to what extent this decision was purposeful and what the consequences might be relative to the other female-friendly fora.

In the end, the WikiChix list was moved from being hosted by Wikimedia, which might carry the presumption of endorsing exclusive discrimination, to a non-Wikimedia host. In response to this, a Wikipedian responded: “Excellent. I still think it’s a bad idea, but if it’s not being supported in any way by Wikimedia Foundation there’s no need to complain about it here any more.”<sup>108</sup> As is often the case on difficult issues, the conclusion to this argument was facilitated as much by exhaustion as by reason. Endless argument about whether bias exists, rather than partaking in constructive dialogue on how to counter it, is a reason such spaces are often created. By severing any support and official affiliation with the Wikimedia Foundation the WikiChix list became moot to the larger community.

While this particular case was resolved by simply moving the list, it still is illustrative of a challenge to openness. As Freeman notes, informal—though no less exclusionary—boundaries may persist despite the absence of formal exclusions.<sup>109</sup> Therefore “formal” enclaves can be a productive response to the “tyranny” of informal structures and biases of a larger community. Legal scholar Cass Sunstein recommends that in such circumstances, “it can be indispensable to allow spaces in which members of minority groups, or politically weak groups, can discuss issues on their own. Such spaces are crucial to democracy itself.”<sup>110</sup> Critical theorist Nancy Fraser writes of a similar notion, “subaltern counterpublics,” wherein subordinated social groups can formulate and discuss interpretations of their identities, interests, and needs counter to the mainstream discourse.<sup>111</sup>

Yet, WikiChix’s exclusion of males, rather than being open and pro-female, is obviously problematic with respect to transparency and non-

discrimination. Also, Sunstein recognizes that enclaves can further group polarization and marginalization and recommends that enclave members be brought back into contact with the larger community; otherwise, self-insulation can yield extremism.<sup>112</sup> In following this issue I haven't perceived a decrease in female presence after the provision of a female-friendly space. A counter to the hypothesis that women are abandoning the common space is the hypothesis that having a more supportive space to fall back on will encourage comfort in speaking in common spaces. Yet these other female-specific spaces are also open, whereas WikiChix is gender exclusive. In the end, time will tell, and I expect that because all constituencies still possess a common object (Wikipedia), marginalization and extremism will be minimal.

## Conclusion

Wikipedia is an example of an *open content community*. Such a conceptualization entails the core value of providing open content, and the implication of forking. However, it can be difficult to balance the associated values of transparency, integrity, and nondiscrimination, as well as other concerns such as free speech and the safety of people and the project itself. Furthermore, boundaries are a fundamental feature of any community, even for those that aspire to openness because it is rarely a simple binary of open or closed. Even a theoretically perfect openness can lead to behavior and informal structures that are less than inclusive. As Clay Shirky writes, "successful open systems create the very conditions that require and threaten openness. Systems that handle this pressure effectively continue (Slashdot comments). Systems that can't or don't find ways to balance openness and closedness—to become semiprotected—fail (Usenet)."<sup>113</sup>

This is the sort of insight not present in H. G. Wells's predictions of a Modern Utopia, Open Conspiracy, and World Brain, but emerges when one spends time in the Wikipedia community. Ultimately, an important descriptive feature of an open content community is a lot of discussion about its values and how to balance them. By this measure, Wikipedia certainly qualifies.



This is a section of [doi:10.7551/mitpress/8051.001.0001](https://doi.org/10.7551/mitpress/8051.001.0001)

# **Good Faith Collaboration**

## **The Culture of Wikipedia**

**By: Joseph Reagle**

### **Citation:**

*Good Faith Collaboration: The Culture of Wikipedia*

**By: Joseph Reagle**

**DOI: 10.7551/mitpress/8051.001.0001**

**ISBN (electronic): 9780262289719**

**Publisher: The MIT Press**

**Published: 2012**



**The MIT Press**

© 2010 Joseph Michael Reagle Jr.

All rights reserved. No part of this book may be reproduced in any form by any electronic or mechanical means (including photocopying, recording, or information storage and retrieval) without permission in writing from the publisher.

For information about special quantity discounts, please email [special\\_sales@mit-press.mit.edu](mailto:special_sales@mit-press.mit.edu)

This book was set in Stone Sans and Stone Serif by the MIT Press. Printed and bound in the United States of America.

Library of Congress Cataloging-in-Publication Data

Reagle, Joseph Michael.

Good faith collaboration : the culture of Wikipedia / Joseph Michael Reagle Jr. ; foreword by Lawrence Lessig.

p. cm. — (History and foundations of information science)

Includes bibliographical references and index.

ISBN 978-0-262-01447-2 (hardcover : alk. paper) 1. Wikipedia. 2. Electronic encyclopedias—Case studies. 3. Wikis (Computer science)—Case studies. 4. Communication in learning and scholarship—Technological innovations—Case studies. 5. Authorship—Collaboration—Case studies. 6. Online social networks—Case studies. I. Title.

AE100.R43 2010

030—dc22

2009052779

10 9 8 7 6 5 4 3 2 1