

Authority and Authorship in a 21st-Century Encyclopaedia and a ‘Very Mysterious Foundation’

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In May 2007 the keynote address to the Association of Professional Sri Lankans (APSL) was given by Dr. David Hill, MSc (Eng), MBA, PhD, DSc (Hons), FWIF,¹ FCMI, FRSA. The Chief Executive of the World Innovation Foundation (hereafter the WIF), Hill spoke on the theme of ‘Collaborating for a Better Tomorrow’, offering a sweeping analysis of the political and environmental crises facing denizens of the 21st century. The WIF, Hill told his audience, ‘was formed for the sole purpose of putting the vast collective knowledge base of [the membership of the] WIF to applied projects in the “field”’. At the heart of this base are over one hundred Nobel Laureates, including the now-deceased Glenn Seaborg, a venerable American chemist who smiled down at the audience from Hill’s PowerPoint slide, crooking a finger at a periodic table featuring element 106, ‘Seaborgium’. Hill also mentioned John Argyris, the late chairman of the WIF, a world-renowned engineer. Indeed, Hill concluded, ‘in early 1999 therefore when both Glenn and John were still with us the WIF had debatably at its helm the world’s foremost scientist and engineer’ (WIFa).

Much of Hill’s lecture was nothing new; he had delivered an identically worded presentation at the University of Leiden in March 2005

¹ The Free Dictionary, an online dictionary made up of reader-contributed entries, defines ‘FWIF’ as a ‘Fellow of the World Innovation Foundation’ (*Acronym Finder*, under FWIF). The term has not yet appeared in more rigorously academic sources.

and made the same points in dozens of posts and letters to the editor on a variety of blogs (e.g. Hill 2007a; Hill 2007b). His venue, however, was unusual; besides the two mentioned, there is no evidence that Hill had participated in any other academic or philanthropic conferences. This lack of activity on the part of Hill and other WIF members (in Hill's accounts, ranging from one thousand to over three thousand five hundred active members²) piqued the interest of *Nature* journalist Declan Butler, who wrote an article on the Foundation in which he calls Hill 'a one-man Davos conference' (Butler 2008, p. 382).

While Butler's research turned up a few individuals financially involved in the organization (a registered not-for-profit company in Switzerland), and a few scientists who claimed that their membership had 'opened some doors', interviews with the WIF vice-president and the WIF representative for Taiwan were puzzling; the former had no recollection of joining the WIF or any idea what it was; the latter said that besides signing a letter opposing the Iraq war he had not been asked to do anything in his appointed role. Neither of the WIF's two main goals – to provide elite advisory panels to government bodies, and to build a \$22.5 billion interdisciplinary centre for scientific discovery – seem to have been implemented since the organization was founded in 1992 (Butler 2008). Reflecting on Hill's presentation, the General Secretary of the APSL noted, 'the WIF has a large number of top level scientists and scholars as its members'. He was left wondering, however, 'what [...] their level of involvement [is] with WIF in its day-to-day affairs. Aren't these people extremely busy in their own areas of discipline?' (Mervyn Silva, personal communication, 15 March 2008).

I will not evaluate whether the WIF is a fraudulent organization, as Butler's article and others have suggested, but rather will attempt to explore

² A Google search reveals dozens of scientists who list their FWIF status among their accolades.

the claims of authority deployed by knowledge-producing institutions in a digitalized age. The scuffle with *Nature* was the second major accusation of fraud that Hill has parried on behalf of the WIF, and he did so most forcefully.³ I will focus my analysis on the first, which pitted Hill against the online user-controlled encyclopaedia Wikipedia, a wildly popular information source which one in ten web users will visit on an average day of web-surfing (*Alexa*, under Wikipedia.org). I will juxtapose the epistemic values underlying the differing approaches that Wikipedia and the WIF respectively have to the codification and discovery of knowledge.⁴ Particularly, I will analyse the different ways in which these institutions marshal authority in their attempts to contribute to the contemporary economy of knowledge production and dissemination.

The first section of this paper will introduce the policies of governance that have evolved through co-operative trial-and-error processes among Wikipedians, and will further elucidate the underlying values that these policies codify. The second section will demonstrate how these values come into effect by evaluating the mutual allegations of inauthenticity levelled by the WIF and Wikipedia. I will argue that, while the WIF promotes a traditionally conservative set of epistemic values which privileges a 'lone genius' discovering the truth, Wikipedia is not as diametrically opposed to

³ Hill responded to Butler's article within days of its publication, expressing his dismay that what he had taken to be an exciting publicity opportunity turned out to be an act of bad faith on the part of the journalist. He admitted, however, 'We have to concede that we are in a difficult process of institutional transformation, financial consolidation, programmatic re-orientation in the past three years, partly also in responding to a continued increase of the WIF's fellowship'. He closed with a request that Butler, on his honour as a professional journalist, 'consider some "damage repair", which the majority of the WIF-fellowship will expect' (WIFb). Butler has so far declined to respond to Hill's statement. More recently, Hill has argued, 'Butler also had an alternative [*sic*] motive for what he did and where he undertook his attack on the WIF due to the WIF presenting the alternative to stopping the eventual avian flu pandemic. He did this for one of his friends who had major interests in developing drugs to try and cure the killer disease' (David Hill, personal communication, 27 August 2008).

⁴ When I speak of Wikipedia as an agent I refer to the historical community of volunteer editors who have, through consensus, crafted the behaviour guidelines and maxims that guide Wikipedia policy.

this ideal as it might seem. Wikipedia is frequently held up as the champion of a new epistemological standard that deconstructs traditional correspondence models of truth. While it relies on a consensus-based model of inquiry, I suggest that the epistemic values of Wikipedia nevertheless imply a realism about truth-claims that aspires to cast off authorship but retain accuracy. In fact, I argue, the ‘free encyclopedia’ conforms less with a radically constructionist theory of truth than with a more modestly realist pragmatism – such as that of Charles Sanders Peirce.

Since his altercation with Wikipedia, Hill has been hailed as a hero of free speech on several anti-Wikipedia blogs and mocked as a scam artist on pro-Wikipedia sites.⁵ Much of Hill’s cyber-activity over the last year has been spent in posting his condemnation of Wikipedia as widely as possible. In it, he argues:

The greatest problem with Wikipedia that we now find is that they are highly selective in who should place information [...] therefore they will never really have a web-based encyclopedia that is unbiased and totally factual. (*ValueWiki* 2007)

The WIF has had to defend itself on two concomitant fronts. First, its integrity as an institution has been questioned by both Butler and a ‘lynching mob’ (WIFb) of Wikipedians. Second, both have challenged the WIF’s ability, once given the benefit of the existential doubt, to realize its lofty goals. I will argue that the WIF’s defence against these two accusations relies on invoking the authority and expertise of its membership.

Like the WIF, Wikipedia has attracted attention for falling short of the implicit standards used to evaluate claims of authenticity within scientific and academic communities, and must face such criticisms due to its monstrous

⁵ See, for example, <http://blogs.news.com.au/news/splat/index.php/news/comments/> and <http://commandline.org.uk/more/2007/apr/30/world-innovation-and-technology-david-hill-replies/>

web presence. However, while it also relies on the participation of its membership to bolster its attractiveness as an epistemological resource, its goal is to justify a methodology that renders claims to expert authority impossible. The differences in the two organizations' arguments from authority reflect a tension in epistemic values that has been aggravated by the World Wide Web. While the WIF relies on the authority of its legion of credentialed experts to back up its claims to scientific integrity, Wikipedia encourages the truth to be assembled by popular consensus. The internet becomes a Habermasian public sphere in which users 'behave neither like business or professional people transacting private affairs, nor like members of a constitutional order,' but rather as a body that 'organizes itself as the bearer of public opinion' (Habermas 1974, pp.49-50).

The Borgesian map-maker knows that a completely accurate map will take up as much space as the terrain it represents, and will thereby prove futile. Insofar as the encyclopaedist's craft confronts the same paradox, it necessitates debates over the notability and veracity of knowledge, as well as over how knowledge can best be broken down into its constitutive parts. Only then can the labour of organization, key to the encyclopaedic project, begin. However, the advent of the World Wide Web has problematized this relationship between the collection of knowledge and its codification into the archive of the encyclopaedia, as much that is not 'knowledge' – YouTube videos, online journals, and pornography – is being archived at an extraordinary rate. As Featherstone & Venn write in the introduction to their own 'New Encyclopedia Project' (2006, p.1), 'The uncertainty as to what we should know in the face of an enlarged world has become crystallized through the processes of globalization and digitalization'. As an encyclopaedia constructed out of, and constructing, the Internet, there are unique challenges to Wikipedia's collection, evaluation, and codification of knowledge claims. These challenges have caused Wikipedia to sacrifice the

traditional encyclopaedic virtue of expert authorship for a radically new model of collaboration.

A traditional encyclopaedia acts like an archive for the truth-claims made by its network of editors. Between editions, or through the addition of supplements, the archive can be changed or expanded. Featherstone & Venn note that ‘the relationship between the archive and the encyclopedia is [...] unstable and [...] the space between the archive and the encyclopedia is worthy of investigation’ (2006, p.3). Wikipedia, if an archive, is only so for a moment in time – a moment later it has become an archive for a different historical moment, representing a different network of editors. The violence with which it changes is most obvious in the case of vandalism, as exemplified in a recent addition to the entry on Charles Darwin:

His five-year voyage on the ‘Beagle’ established him as a geologist whose observations and theories supported tranvestite [*sic*] monkeys and their incestuous ways, as well as Charles Lyell’s uniformitarian ideas.⁶ (*Wikipedia a*)

The tendency of Wikipedia to change at the behest of any of its seventy-five thousand editors (*Wikipedia b*) makes it the *cause célèbre* of adherents to a certain set of epistemological values, such as the novelist and Wikipedian Nicholson Baker, who eulogizes, ‘without the kooks and the insulters and the spray-can taggers, Wikipedia would just be the most useful encyclopedia ever made. Instead it’s a fast-paced game of paintball’ (Baker 2008).

For others, however, the sprawling site does not meet the basic criteria that distinguish an encyclopaedia from other collections of claims. Robert McHenry, the former Editor-in-Chief of the *Encyclopaedia Britannica*, dismisses Wikipedia with contempt, suggesting that its typical user is:

⁶ Also striking is the rate at which such wrongs are righted – within two minutes the entry was returned to its previous form.

in the position of a visitor to a public restroom. It may be obviously dirty, so that he knows to exercise great care, or it may seem fairly clean, so that he may be lulled into a false sense of security. (McHenry 2004)

Respected members of the Association for Computing Machinery conclude:

Wikipedia is an interesting social experiment in knowledge compilation and codification. However it cannot attain the status of a true encyclopedia without more formal content-inclusion and expert review procedures. (Denning *et al.* 2005)

In an unpublished article, P. D. Magnus (2006, p. 7) argues that ‘we should not assimilate Wikipedia to the kind *encyclopedia*’. The site, he reasons, is used differently from traditional encyclopaedias and, due to its shifting form and content, cannot be evaluated by the same standards. A *Nature* article (Giles 2005) suggesting that Wikipedia has an only slightly lower error rate than *Encyclopaedia Britannica* caused a wave of outrage, including a statistics-steeped response article from the *Encyclopaedia* (*Encyclopaedia Britannica* 2006). Another common complaint is, as a *New Yorker* article put it, ‘the present takes precedent over the past. The (generally good) entry on St. Augustine is shorter than the one on Britney Spears’ (Schiff 2006). Such sentiments are, perhaps, vestiges of loyalty to the classical origins of the term encyclopaedia in the Greek *enkyklios paideia*, meaning the circle of hallowed subjects requisite for a well-balanced liberal education (Yeo 2007).

Wikipedians value accessibility, neutrality, and verifiability over the traditional encyclopaedic values of authority, accuracy and currency (Denning *et al.* 2005). The originality of their epistemic ideal is often quite explicit, in both the self-referential material of the site itself and in the reflections of individual editors, such as Wikipedia’s founder, Jimmy Wales, who quips, ‘Wikipedia is to Britannica as rock and roll is to easy listening. It may not be as smooth, but it scares the parents and is a lot smarter in the

end’ (quoted in Schiff 2006). The ‘History of Wikipedia’ entry (*Wikipedia* c) places the ‘free encyclopedia’ in the tradition of the *Encyclopédie* of Diderot and D’Alembert, and Wales suggests that his brainchild aims, like its predecessor, to democratize knowledge through revolutionizing the means of distribution – it aims to ‘distribute a free encyclopedia to every single person on the planet in their own language’ (Schiff 2006). In prioritizing the expansion of its coverage, translating its articles into two hundred and fifty-six languages, and ensuring free access at the expense of accuracy and expertise, Wikipedia models itself after such early encyclopaedia projects, rather than contemporaries such as Microsoft’s *Encarta* (which remains a private commodity).

Indeed, at Wikipedia’s core is its populism; as opposed to a collection of experts whose authoritative knowledge can be codified into one place at a price, the very structure of Wikipedia makes its only claim to knowledge its communality. The historian Roy Rosenzweig points out that:

A historical work without owners and with multiple, anonymous authors is [...] almost unimaginable in our professional culture. Yet, quite remarkably, that describes the online encyclopedia. (Rosenzweig 2006, p.118)

Unlike other community websites that produce content, such as YouTube, the contributions of different editors vie with each other within individual articles in a process of natural selection, and the encyclopaedia as a whole is the product of teamwork. Its claims to veracity are profoundly and necessarily consensus-based, relying not on high-quality peer review, but simply on a large quantity of it. The mechanisms in place to improve entry quality exemplify this approach. Wikipedia’s League of Copyeditors requires each article to be scanned by multiple editors before it is declared clean, and voting is a popular technique for appraising an article’s success in different

arenas. The goal of peer review is not an authoritative and completed article, however, as a Wikipedia page states regarding editing:

It is not academic peer review by a group of experts in a particular subject, and articles that undergo this process should not be assumed to have greater authority than any other. (*Wikipedia b*)

Authority, after all, is dependent upon authors, and as such is irrelevant to the Wikipedian project.

What replaces the traditional encyclopaedic value of authority, then? In a set of pages advising editors, setting quality criteria, and guiding the site's style, Wikipedia has evolved an information quality (IQ) assessment policy all its own, privileging verifiability and neutrality. In an evaluation of this policy in contrast to those of traditional encyclopaedias, Stvilia *et al.* note that 'as Wikipedia content evolves and gets refined so does its IQ assurance and assessment infrastructure' (2007, p.1728). They conclude that the most common prompts for article revision were inaccuracy (including everything from typos to misinformation), a shortage of the references indicative of verifiability, and incomplete or unbalanced coverage. In contrast, the most infrequent IQ problems identified were unfounded generalizations and a lack of academic scrutiny – values traditionally attributed to encyclopaedias, according to the criteria drawn up by the library scientist H. Crawford (Stvilia *et al.* 2007).

Neutrality is an essential requirement of Wikipedia articles, as is its corollary, the interdiction against original research. Neutrality can be compromised by a conflict of interest, which Wikipedia behavioural guidelines define as 'an incompatibility between the aim of Wikipedia, which is to produce a neutral, reliably sourced encyclopaedia, and the aims of an individual editor' (*Wikipedia d*). Since Wikipedia does not have

executive editors to make decisions about what subjects should and should not be included, it needs a natural check on the proliferation of obscure, autobiographical, or mercantile entries that editors might contribute. By discouraging contributors with conflicts of interest, as well as those doing original research, Wikipedia controls which parts of the 'real' epistemological landscape are modelled in cyberspace.

As such, the mandates for a neutral point of view, and against original research, solve the Borgesian problem by necessitating that Wikipedia only maps 'established' facts about the world, not new-fangled, fantastical, imaginary or eccentric ones. These policies are at the heart of Wikipedia's democratic epistemic ethos, since the intellectual is stripped of his advantage over the well-informed, giving rise to what Rosenzweig calls 'a "popular history poetics" that follows different rules from conventional professional scholarship' (2006, p.142). They have been widely criticized as encouraging the downfall of rigorous scholarship, most notably by Wikipedia's co-founder, Larry Sanger, who expressed his alarm at the growing anti-elitism in a widely-read blog post (Sanger 2004).

In other words, rather than being established through, as it were, 'intelligent design', the more radical aspects of Wikipedia's epistemology have been unconsciously formed through a collective process of variation and selection which has left many of its precepts thoroughly embedded in its methodology. 'When people trust an article in Britannica', Wales argues, 'it's not who wrote it, it's the process'. And in the future, he believes, Britannica's process will seem antiquated in light of Wikipedia's, and people will ask, 'This was written by one person? Then looked at by only two or three other people? How can I trust that process?' (quoted in Stross 2006).

When David Hill created an entry on Wikipedia for the World Innovation Foundation in September 2006, his intention was to take advantage of what he saw as an ideal place to present the WIF, since its

comparative youth ensures that, outside our immediate sphere of influence, we are not as well known as many organizations [...] [and therefore] are unlikely to feature in printed encyclopedias for some time yet. (WIFa)

However, he soon ran afoul of other editors of the encyclopaedia after his username, drdavidhill, drew attention for ‘link-spamming’ – adding links to the WIF’s website on a large number of pages, specifically the entries on FWIFs. In other words, Hill was begging the Borgesian question by refusing to reduce the expansive confederacy of the WIF to fit into one or even a couple of pages on the site.

According to one Wikipedia editor, drdavidhill received three warnings, after which, in accordance with Wikipedia procedure, he was banned from the site.⁷ An exchange with administrators over his banishment grew heated and became an altercation, in which Hill frequently drew on the authority of his membership to reinforce his claims. ‘What you have to understand’, he wrote in an email,

is that you are dealing with a major international group that has direct linkages with all governments around the world and where our 3,000+ members represent some of the largest concerns on the planet together with the elite of [*sic*] scientific and technical community. (WIFa)

When he failed to get a response, Hill wrote an angry letter to Jimmy Wales and finally threatened to take legal action against Wikipedia, going so far as to correspond with one of the volunteer lawyers of the Wikimedia

⁷ It seems that Hill misunderstood the reasons for his banishment. When asked how the dispute originated, Hill responds, ‘The accusations were that the WIF had not the backup information to corroborate that it was a Swiss charity’. He acknowledges that he was given warnings but ruefully points out that, as ‘all new Wikipedians will tell you, [one does not] know what the purpose of these are and the consequences’ (David Hill, personal communication, 19 March 2008).

Foundation, an organization established by Wales to administrate Wikipedia and its spin-off sites.

Meanwhile, a lively debate was being carried out on the discussion page for the WIF entry. One editor, with the username The Anome, had begun to review the WIF's website in light of the allegations of spamming against drdavidhill. The Anome argued that while 'the WIF appears to be an organization of global importance' there was no evidence to be found for the existence of the organization in mainstream news sources, biographies of WIF members, or records of academic conferences. Further, the editor noted, the address and phone number of the organization were identical to a landscaping business run out of a store-front in Huddersfield; and this was the very same company to which cheques were to be made payable. Other posts explored the status of the WIF as a Swiss not-for-profit organization and debated the likelihood of over three thousand leading scientists participating in a scam ('I've known academics who will join almost any organization with a couple of big names on board which offers to make them a Distinguished Research Fellow or something equally grand-sounding' (*Wikipedia* e), one editor notes, in an example of Wikipedian anti-intellectualism that would surely make Sanger wince. The discussions resulted in the flagging of the WIF page as an 'Article for Deletion', a designation which begins a lengthy process of debate and culminates in a vote that decides the fate of the article.⁸

While Wikipedia editors, anticipating the research of the *Nature* journalist Declan Butler, suggested that the WIF might be a fraudulent organization, the question was not directly relevant to the debates over whether or not the entry should be deleted. The veracity of the facts Hill listed was not challenged due to the positive information that The Anome

⁸ The deletion of articles is a major exception to Wikipedia's policy of archiving everything. Only administrators can view articles that have been deleted, in order to avoid the positive reinforcement of inappropriate pages by providing free and permanent storage in the annals of Wikipedia.

and others turned up, but rather to the lack of information from multiple sources in support of Hill's claims. The accusation of fraud was only relevant in attempts to determine whether Hill's was a case of conflict of interest. Conflict of interest is grounds for the deletion of a page only insofar as it leads to a lack of notability or a compromise of neutrality. Notability, a guideline indicates,

is distinct from 'fame,' 'importance,' or 'popularity,' although these may positively correlate with notability [...]. A topic is presumed to be notable if it has received significant coverage in reliable sources that are independent of the subject. (*Wikipedia f*)

In regards to the WIF, one editor pointed out, 'the issues aren't completely separate: I think the claim that the organization *exists* is verifiable, but the claims that it's *notable* aren't' (*Wikipedia e*).

As discussed above, a correlate to this notability criterion, crucial to the identity of the site, is the prohibition on original research, including the synthesis of previously published material. A few participants in the debates over the deletion of the WIF article were intrigued by the hypothesis that the WIF was a hoax. One wrote excitedly, 'If its [*sic*] a hoax the scope is in fact epic. If you search google [*sic*], there are hundreds of entries, is everyone suckered and we at Wikipedia discovered the truth?' Another expressed anxiety about outing the organization, cautioning, 'What a black eye it would be if they are real and Wikipedia called such a group fake'. However, the argument for leaving the WIF page up due to its notability as a scam was almost immediately dismissed on the grounds that

our analysis that leads to the conclusion of hoax/crank/scam institute is original research in itself. The only purpose for it is that we identify it for what it is in order to delete it. Without reliable sources for denoting it as a hoax, it'd be original research to have it as an article about a hoax. (*Wikipedia g*)

It fell outside the role of the editors, *qua* Wikipedians, to pursue the matter further.

Wikipedia has sacrificed its capacity to appeal to expertise, in locating the real and valuable truth-claims vying for codification in its cyber-pages. By exchanging the jurisdiction of the expert for the democratic apparatus of public opinion, Wikipedia has committed itself to a consensus-based theory of truth. The WIF's strategy, on the other hand, has been to gather a powerful entourage of notable scientific figures, each of whom contributes epistemological capital that gives weight to the WIF as an institution. In much the same way as Wikipedia's epistemology is embedded in its structure and methodology, the WIF's ideological commitments have developed as a result of its changing tactics. Hill describes the WIF as 'a silent organization working in the background advising governments around the world [...] in the form of highly confidential reports and [*sic*] addressed complex problems that nations required to solve' (David Hill, personal communication, 19 March 2008). Because the processes by which the WIF works are clandestine, the only way to demonstrate the legitimacy of the foundation is through the commanding scientific and academic authority of its membership.

The WIF underscores the importance of its membership by mythologizing the scientist as a lone creative innovator who carries within himself the potential salvation of his race. WIF literature argues that, while 'the world's scientific inventors and innovators are our only source of pure and applied enlightenment', humanity suffers because 'incredibly, over 99.80% of the world's population are excluded from any involvement with scientific and technological research' (WIFc). The idea behind the Open Research Establishment, a massive interdisciplinary research complex devoted to innovation, is that many – the WIF suggests: one out of five citizens – have the ability to be a scientist. The WIF is fond of quoting Isaac

Newton's pronouncement – 'There are many Newtons' – and its website has a list of inventions by untrained individuals working in isolation or in small groups, outside of the academic and professional structures of mainstream science. Hill writes:

the history of science and technology tells us that creativity that changes the world forever can come from many sources and where a great deal of this creative thinking has come from nondescript people. (David Hill, personal communication, 19 March 2008)

By combining a rhetoric of individualism with an elite roster of scientists, the WIF suggests that its methodology of facilitating scientific exploration by untrained individuals may yield prodigious results. Insofar as he argues that it would be preferable to 'have innovators running our great universities and not adapters who are in general control orientated individuals', Hill echoes the populism of Wikipedia. However, because the WIF lacks the self-propagating framework that allows Wikipedia's volunteers to be active in the project, it lacks authoritative evidence of the legitimacy of its strategy, and so must rely on the force of juxtaposing its ideology against its Nobel Laureates.

It is possible that the WIF's methodology would have been more successful in the past, when the assumption that notable events leave traces in the protean archive of the internet had little relevance. As several Wikipedians have pointed out, a quick jaunt through Google reveals no activity by the members of the WIF, and the inexorable signature of David Hill after every mention of the WIF on independent websites is a telling detail to the cyber-savvy. It is interesting to consider what sort of entity the WIF would be if Hill were more technologically competent (a shortcoming to which he would readily admit), or indeed more astute about handling media attention. As things stand, however, the WIF's materials appear

unprofessional and there is a notable absence of journalistic interest in the organization. In consequence, the disjunction between the WIF's reliance on the reputation of its membership and its everyman ideology of scientific discovery is stark.

Essential to the WIF's epistemological commitments is a profound realism about scientific knowledge. Knowledge, according to Hill, is out there, waiting to be discovered:

My late chairman John Argyris FRS FREng etc, etc always said that intuition is the greatest asset that any scientist or engineer can ever have. For with knowledge and intuition we make discoveries and that is the way it has been ever since humankind emerged on two legs. (David Hill, personal communication, 19 March 2008)

Moreover, his critiques of Wikipedia focus on the encyclopaedia's cavalier approach to truth. He argues that, since anyone can change entries, there is no way of determining 'whether things are fact or fiction'. Because Hill has a robust faith in the potential for scientists to identify truths about the world, he is disturbed by the potential for regression from truth once it has been found: 'My own estimation of Wikipedia as an encyclopedia is that it is a poor resource that can be very easily corrupted [...] that is why it is so dangerous' (David Hill, personal communication, 19 March 2008).

While Wikipedians are quick to defend their encyclopaedia against such charges, it is not the defence one might expect from a body that has been accused of epistemological anarchy and an indifference to truth. Rather than resembling the work of philosophers such as Richard Rorty and Nelson Goodman, who claim that the constructed and contingent nature of human knowledge means that there is no truth to be found, as well as the editors of the *Encyclopédie*, who believed that 'humans *made* knowledge (as opposed to the objects and structures of the natural world, created by God)'

(Yeo 2007, p.55), Wikipedia's realism is consistently revealed in its rhetoric and policies. Even the sin of link-spamming, committed by Hill, reveals a bias towards realism on the part of his detractors, since the connections he was drawing between the FWIFs and the WIF website were not notable enough *in reality* to be represented on the corresponding virtual network of truth-claims. Implicit in the ban is a critique of the WIF's attempt to force these connections on the real world. Furthermore, Wikipedia's ban on original research, dependent on a distinction between primary and secondary sources, is far from an endorsement of postmodern indifference to textual boundaries and authorial identity.

Like the early American pragmatist Charles Sanders Peirce, Wikipedia believes that investigators do not randomly manufacture their claims but rather participate in a teleological process of defining that which is true through their labours. Wikipedia follows Peirce in suggesting that,

the opinion which is fated to be ultimately agreed to by all who investigate, is what we mean by the truth, and the object we represent in this opinion is the real. (Pierce 1940, p.38)

Robert McHenry (2004) levels the criticism that 'the [editorial] process allows Wikipedia to approach the truth asymptotically', and continues with an acerbic understatement to the effect that, 'the basis for the assertion that this is advantageous vis-à-vis the traditional method of editing an encyclopedia remains, however, unclear'. Maybe so, but speaking pragmatically, collective editorship seems to be *working*. The popularity of Wikipedia suggests that such an approach is alluring to the millions of volunteers who edit Wikipedia and the tens of millions more who access it each day. The absence of a paid staff producing copyrighted material allows Wikipedia to metastasize through cyberspace with no regard to budgets, royalties, page limits, pay checks, or publication dates.

The WIF's ambition, which has never been realized, is analogous to the authorial expertise that McHenry implicitly suggests is the 'traditional method' of the encyclopaedic craft. In aiming to mobilize its troupe of experts to actualize change in the world, the WIF more closely embodies an ideal of expert knowledge than the populist one its publications promote. In accusing the foundation of fraudulence, Wikipedians dismissed the WIF's appeal to authority on two levels: the first in their refusal to recognize it as noteworthy simply on account of its star-studded roster, and the second in their scepticism that the WIF's ambition to marshal scientific expertise for the good of the international community could be substantiated. In so doing, Wikipedians underscored the strain of American pragmatism that links consensus-based models of discovery with an emphasis on action and process, and like their predecessor, Diderot, are 'less concerned with the schemes of rational classification than with the imperative of collecting human knowledge in some manageable form' (Yeo 2001, p.29). The popularity of their cyber-kluge is revelatory of a conservatively pragmatic, as opposed to radically postmodern, bent in the way knowledge is produced in the public sphere of the internet at the dawn of the 21st century.

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