

WIKIPEDIA:
ACCESS AND PARTICIPATION IN AN OPEN
ENCYCLOPAEDIA

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ABSTRACT

Wikipedia is a highly significant digital media platform that evolved out of the collaborative and collective efforts of millions of distributed users. However, as new and active editor numbers are declining, questions are being raised about its sustainability and its accessibility to diverse users. Using the concept of generative friction (Stark 2009) and applying theories from science and technology studies, in particular interpretative flexibility (Pinch & Bijker 1984) to three key controversies in Wikipedia's recent history, this thesis explores how participation in the encyclopaedia is shaped and constrained by assumptions about access and usability based on differing interpretations of openness.

The three controversies were: (1) the debate about the involvement of paid editors in the encyclopaedia; (2) the introduction of a new editing interface; and (3) systemic bias in the platform due to its gender gap. These controversies are used to determine how actors interpret the rules, policies and standards of the platform in light of the shared mission of constructing an encyclopaedia. The resulting frictions and different interpretations suggest that some existing users employ boundary objects (Star & Griesemer 1989) and spaces to advocate for a standardised approach to the problems of encyclopaedia-making that often sit in tension with the open and emergent nature of a digital media platform. This gap – between the ideals of an open knowledge community and the reality of production in this environment — revealed that openness is a contested concept among Wikipedia editors, as the projects values are interpreted and reinterpreted by users.

Indeed, while broader shared understandings of openness are employed as an effective coordinating mechanism in the encyclopaedia, maintaining this understanding is difficult as openness is subsequently constructed as either a libertarian ideal where “anyone” is free to edit the encyclopaedia, or as an inclusive concept that enables “everyone” to participate in the platform. The findings therefore problematise the idea of single user community, and serve to highlight the different and sometimes competing approaches actors employ to enable greater participation in Wikipedia.

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STATEMENT OF ORIGINAL AUTHORSHIP

The work contained in this thesis has not previously been submitted to meet requirements for an award at this or any other higher education institution. To the best of my knowledge and belief, the thesis contains no material previously published or written by another person except where due reference is made.

QUT Verified Signature

Signature

24 October 2015

Date

1 INTRODUCTION

1.1 Participation and access in Wikipedia

Wikipedia is an important digital media institution that has evolved out of the collaborative efforts of millions of distributed users. An open project with theoretically low to barriers to entry, it is popularly portrayed as demonstrating the democratising potential of the internet. The world's seventh most popular website (Alexa 2015) and largest encyclopaedia in history, it is a testament to the millions of volunteers who have contributed to its creation and appears to embody the ideals of an inclusive and open internet. However as the platform and the media landscape of which it is part evolve, questions are raised about its ability to be a truly inclusive and open platform for knowledge creation.

Wikipedia is unique as a non-profit platform among other top websites (Google, Facebook, YouTube, Baidu, Yahoo, Amazon, QQ, Twitter) and its volunteer-driven organisational structure and limited governance from the Wikimedia Foundation are evidence of the shifts that have occurred not only in encyclopaedia production, but the media more broadly. This move to user-led co-created content that has upset so many traditional models of production has resulted in the world's largest global encyclopaedic resource. Wikipedia contains over four and a half million encyclopaedia articles and nearly 29 million governance and support pages, which have been edited over half a billion times, by over 21 million volunteers in 287 languages (Wikipedia 2014h). The largest language version, English Wikipedia, has over nine billion pageviews per month and around 35,000 currently active editors (Wikimedia 2014a). Wikipedia is thus seen as an

embodiment of the open ideals and democratic promise of the early web.

However it has recently been struggling to recruit and retain new editors in light of issues concerning diversity among editors (91 per cent identify as male¹) and the platform's openness to participation from new users (Wikimedia 2011).

In this regard however, Wikipedia is not unique, as other digital media platforms have struggled to negotiate participation as they evolve. In constructing the meaning and uses of YouTube, Jean Burgess and Joshua Green note, "YouTube's ascendancy has occurred amid a fog of uncertainty and contradiction around what it is actually *for*. YouTube's apparent or stated mission has continuously morphed as a result of both corporate practices and audience use" (Burgess & Green 2009, 3). Likewise, for micro-blogging site Twitter, this struggle has played out in various forms as the platform negotiates whether it is a site of news distribution, community organisation or mass marketing (van Dijck 2011). As users and platform administrators negotiate their roles in the context of online participation and changing media structures, Leah A. Lievrouw (Lievrouw 2014, 33) notes:

In the 1990s and 2000s, the explosive growth of personal computing and Internet access and use among the general public, fostered by the introduction of web browsers, search engines, and the conversion of the Internet from a non-profit infrastructure for research and education to a privately operated platform and

¹ This disparity is echoed across open technology culture, with research suggesting female participation in proprietary software development is around 30%, however in the Free/Libre Open Source Software (FLOSS) movement this drops to just 1.5% (Wikimedia Foundation 2010).

distribution system for commerce, consumption, and entertainment, would provide yet another media stage upon which the same types of social and cultural anxieties would be replayed.

The tension between the user and the corporation, the social and the commercial, is not lost on World Wide Web creator Tim Berners-Lee, who says that the web still maintains its people power, “We create the Web, by designing computer protocols and software; this process is completely under our control. We choose what properties we want it to have and not have” (Berners-Lee 2010). And as a non-profit platform Wikipedia is an important player in these debates, as its users have a great deal of agency in deciding the future form of the project.

Where other digital platforms’ early existing ideals sit in a constantly negotiated tension with everyday practices that are increasingly governed by proprietary technologies, Wikipedia is likened to a “public park” on the internet, and demonstrates the value of open and non-profit platforms on the web (Valby 2011). As this thesis demonstrates, this position as a “public park,” where anyone is free to contribute and direct activities, is valued not just by its existing users, but by those concerned with the future of the web, and keeping democratic ideals embodied in the infrastructure of the internet.

Participation and access are therefore central to these discussions of digital media platforms. For participation in Wikipedia touches on issues of openness, closure and inclusivity that are also evident in other digital media institutions. Who is allowed to participate? How much power are they afforded? In Wikipedia, all users are theoretically afforded agency and without defaulting to a utopian

narrative, Wikipedia is a website that makes a difference. It has a robust ideology based on interpretations of openness and beliefs about access to knowledge, and as co-founder Jimmy Wales once commented on why editors are committed to the project, “Love. It isn't very popular in technical circles to say a lot of mushy stuff about love, but frankly it's a very very [sic] important part of what holds our project together” (Slashdot 2004). Created overwhelmingly by volunteers Wikipedia is also one of the most accessible examples of how contemporary debates about participation, openness and popular access play out in a sociotechnical community at work.

Yet the concept of community in Wikipedia is messy, with users often defaulting to the idea of a single Wikipedia (or Wikimedia) editing community. Christian Pentzold (2011) looked at how Wikipedians create a “community” through discourse and negotiating shared understanding of the project, observing that the term has positive connotations over and above ‘group’ or ‘network’. He notes the various ways community is used in Wikipedia, where users can access a community portal, and are assured that “Wikipedia is ‘more than *just* an encyclopaedia, *Wikipedia is a community*’” (Pentzold 2011, 3). Pentzold’s analysis however was focused on the Wikimedia-l mailing list, which I argue is a forum for a particular group in the encyclopaedia – the metapedians – and deals with large issues concerning the overall all health of the project. Pentzold does note the limitations of this data and acknowledges other communities exist on-wiki, however frames the list as a place where everyone comes together regardless. He found, “users primarily under-stand their collective as an ethos-action community tying community membership not to admission procedures but to the personal acceptance of a set of moral obligations and rules of conduct”

(Pentzold 2011, 13). However as this thesis will demonstrate, such a term glosses over the various social groups at work in Wikipedia. While it is a useful concept for describing the project's volunteers, the positive connotations of the term "community" can obscure the differing positions of users in each controversy. Indeed Pentzold recognises the range of positions among users in Wikipedia, observing "an examination of these diverse practices would have to engage with their spatial and material arrangements, like the software code, that afford the establishment, maintenance and transformation of communities" (Pentzold 2011, p.15). This thesis will therefore engage with different interpretations of community and aim to describe these material arrangements and how different groups work together to construct Wikipedia.

1.2 Research Aims

This thesis aims to identify, describe and analyse the issues that affect access to and participation in Wikipedia in order to understand the complexities of contemporary digital media institutions that rely on user contributions.² It investigates how issues around access and participation in Wikipedia are constructed and debated by both the media and users. The research considers the platform's history and the role of its complex sociotechnical infrastructure in shaping access and enabling participation by focusing on three key controversies.

² For the purposes of clarity, throughout the thesis *users* and *editors* are used interchangeably to refer to people who have edited a Wikipedia domain page and make up the "Wikipedian community." *Readers* or *visitors* will be used to refer to internet users who have never edited Wikipedia but visit and use the encyclopaedia to read content articles. Wikipedia is referred to interchangeably and in context as a project, a platform, a site, and a community, it being all of these things.

These key controversies offer insight into moments of change in the encyclopaedia and raise issues of openness, closure and inclusivity in an open and non-profit platform.

Using theories and concepts from science and technology studies, I examine how Wikipedia has evolved, how these moments of controversy have shaped the encyclopaedia, and how this change is a combination of social agency and technology. Indeed, the internet and its platforms (while innovative) aren't revolutionary at all, they are the result of social choices over time, that at any point could have been used or defined differently resulting in different products and practices to what we know today. This research therefore sheds light on periods of interpretative flexibility for online platforms, how users engage in boundary practices in an open environment and how the meanings and uses of these platforms have emerged and stabilised. Additionally, it further extends our knowledge about online communities by coming to understand how an open community with theoretically low barriers to entry becomes increasingly enclosed through the formation and enforcing of norms.

The research also breaks what has been referred to as the “magic circle” (Tkacz 2015) of openness in Wikipedia by taking into account the role of the media and outside narratives in constructing the platform. Current studies on participation in Wikipedia focus on it as a discrete community, and/or use large datasets comprised of metrics regarding activity counts and time spent editing (Bryant et al. 2005; Kriplean et al. 2007; Kittur et al. 2007; Panciera et al. 2009; Halfaker et al. 2012). This research addresses the gap in existing scholarship by conducting a

detailed qualitative analysis of three controversies in order to develop a nuanced picture of the dynamics of participation and access in Wikipedia.

The thesis also contributes to wider digital media scholarship through an analysis of how participation in an open community is shaped and constrained by a variety of sociotechnical actors. It demonstrates that barriers to entry for new users are created and enforced often unintentionally via boundary-work in an attempt to enact the open ideals of the project. Through an analysis of the key controversies in Wikipedia's recent history and concentrating on how openness is used and deployed by actors, this thesis critically understands the important difference between a platform and online community where anyone can participate, and one where everyone can participate.

The thesis finds the way openness is contested often excludes new actors by creating boundaries around existing groups of users. It approaches the ideal of openness and the policies based on it as boundary objects that demarcate positions and contribute to reinforcing elites. It also finds that in this context, "everyone" and "anyone" are two different ideal concepts – openness is often about the ability of anyone (with requisite skills and knowledge to navigate boundaries) to contribute to a project, however the democratising narrative of the potential of the internet is often about the ability of everyone to participate. These ideals currently sit in tension in Wikipedia, where the differing interpretations allow an ambiguity to exist (Matei & Dobrescu 2010) and afford a stability that allows work in the encyclopaedia to continue.

In light of tensions around participation and the enclosure of online platforms, understanding how both people and technologies shape participation in an open

platform with relatively limited formal governance will provide insight into the wider context of online community formation and maintenance. For the controversies discussed in this thesis are indicative of wider concerns about participation and digital media. Namely, the increasing commercialism of online spaces, the accessibility and usability of technology and inclusivity in online communities. While Wikipedia provides a unique context in which to explore these concerns, the lessons drawn from this research may be applicable to other communities that are negotiating the relationship between users and platform governance. As this thesis discusses how the community has dealt with the controversies reveals much about the values and ideals that shape the formation of rules and ultimately participation in the platform.

1.3 Thesis Outline

The thesis is divided into two parts, with the first establishing the importance of Wikipedia as an open platform in the context of utopian promises about the democratising potential of the internet and wider digital media change. It then drills deeper to analyse three key controversies that highlight issues relevant to Wikipedia's construction as an open and inclusive platform in terms of participation, usability and access.

This introductory chapter has outlined the research problem and its broader digital media context. It also established the approach I have taken to address the research problem.

Chapter 2 outlines in more detail the methods I have used to investigate participation and access including a grounded approach to the thematic analysis of

controversies in the community. It presents a rationale for the use of controversies in this research, based on a robust history of the analysis of debate and controversy in science and technology studies. It also includes reflections on the ethical considerations of conducting research in an openly-licensed online community.

Chapter 3 lays out Wikipedia as a sociotechnical community, and how its development has been shaped by moments of controversy. It situates Wikipedia in a history of knowledge creation and the open movement, and also answers the question “What is Wikipedia?” by mapping out Wikipedia’s governance structure, its rules, norms and policies, and its technical infrastructure. It demonstrates how the sociotechnical system enacts its mission and ideals and shows what it means to say Wikipedia is an open platform. It again uses examples of how technical solutions (in the form of rules or policies or automation) arise from the conflict that is native to the platform.

In Chapter 4 I take the key controversy around editing by paid contributors to examine the events that ultimately led the Wikimedia Foundation to change its Terms of Service. I argue that while the Spanish Fork may have firmed Wikipedia as a non-profit endeavour and the Wikimedia Foundation as a charitable organisation in its early history, commercialisation is again an issue in a highly complex and connected new media landscape. It demonstrates the issues Wikipedia faces today are no more or less than it has faced in the past. It focuses on the controversy around the revelation of an extensive network of covert paid editors, employed by business Wiki-PR to work on behalf of paying clients. This controversy highlights the tension between parts of the user community and the

Wikimedia Foundation, the difference between the community and the Foundation's response to the revelations and the presence of a variety of paid editors in the community, and how this resulted in a material change to the platform's Terms of Use. The controversy also serves to separate out the often conflated notions of freedom, openness and neutrality by examining user responses to the involvement of editors who receive financial compensation for their edits. I make the argument that while historically the community has been opposed to the idea of anyone deriving a profit from the encyclopaedia, in recent times, and in light of the participation crisis, it is more important for users that the platform remains open to all contributions and uses existing rules and policies to ensure the neutrality of content.

The ability of Wikipedia to respond to change and take on new material forms is examined in Chapter 5 via a controversy around the introduction of a new editing interface. It moves on from the preceding chapter by revealing openness is not only valued in the community as the ability of 'anyone' to edit, but also in relation to technical components and the openness of the interface and code to be hacked and tinkered with. It details the failed introduction of a new "what you see is what you get" (WYSIWYG) editor for English Wikipedia in 2013. VisualEditor was rolled out as the default editing interface in July 2013, however was rolled back to opt-in mode in September 2013 via a community hack. The chapter follows the events that led to the WMF's decision to roll back the software. I find that tensions exist in the community about usability and access and that openness is a contested concept, deployed by some users via boundary-work in relation to software and code, and by others in relation to increasing access and participation in the creation of the encyclopaedia.

Chapter 6 maps out ongoing controversies regarding the platform's gender gap. Specifically a controversy known in the community as "Categorygate" where media coverage detailed an editor's removal of American Women Novelists from the encyclopaedia's American Novelists category, along with two Arbitration Committee (Wikipedia's highest sanctioning body) decisions on edit warring on the *Gender Gap Task Force* and *Gamergate controversy* article. It reveals that addressing the gender gap is hard in an open platform where theoretically 'anyone' can edit, as users often rationalise the gap by pointing out the site's openness and by undertaking protective boundary-work. I make the claim that Wikipedia's focus on the "content not the contributor" works to perpetuate a systemic bias in the encyclopaedia where issues of gender are effectively silenced by boundary-work. This controversy also serves to highlight how Wikipedia is involved in larger social debates about inclusivity, access and gender as part of a diverse web ecology.

Finally the thesis is concluded by examining the key findings in light of their implications for participation in and access to editing in English Wikipedia, and what it means to say Wikipedia is an encyclopaedia "anyone can edit." I argue openness and enclosure exist in a dynamic tension, where boundary work by users allows a stability to emerge around parts of the sociotechnical system so that it may continue to evolve. This stability (not closure) emerges as issues are interpreted and reinterpreted by users across boundaries. I also argue that participants in Wikipedia employ different concepts of openness in debates about the platform in order to enact the ideals they associate with participation and access in Wikipedia.

2 DESIGN AND METHODOLOGY

2.1 Approach

As an established website and sociotechnical community with a long history, Wikipedia provides an ideal site to study the issues around participation in an open platform, and how utopian visions of the web have played out in reality. Wikipedia embodies both the democratic ideals of the web as espoused by Richard Stallman (2014), Eric Raymond (1998) and its creator Sir Tim Berners-Lee (Berners-Lee 2010), and reflects the reality of open cultural production and the issues raised by regulation and coordination in this environment that are so often the subject of attacks by critics like Andrew Keen (2007) and Jaron Lanier (2006). However controversies around Wikipedia reveal much about how access and participation in the platform is structured and negotiated. Indeed, as conflict may be Wikipedia's most common mode of communication (Jemielniak 2014), it provides a natural point of focus for analysis of the issues that matter in the construction of Wikipedia. Controversies also provide a robust and rigorous tradition of science and technology studies (STS) scholarship and research to draw upon and frame my analysis. It is in the moments of crisis and change in the encyclopaedia that I discover who the key actors in Wikipedia's sociotechnical system are and how interactions and outcomes shape and constrain participation and access. Using this approach the research shows how Wikipedia approaches moments of controversy in light of the potential of digital media to fulfil existing visions of knowledge creation and sharing, renegotiates boundaries and moves forward, balancing (or not) the needs of different user communities.

The approach also reveals periods in the encyclopaedia's history where its meaning is contested, negotiated and constructed by these groups. Indeed, Wikipedia, for all its rhetoric of free and universal access to knowledge, could today be a pay-walled publication, an ad-sponsored encyclopaedia or a defunct wiki that once aspired to create an encyclopaedia. That it isn't is the result of complex interactions between human and non-human actors in the development of the online encyclopaedia into one of the world's leading websites (Alexa 2015; Wikimedia 2012). I am using moments of controversy as a heuristic device and Pinch and Bijker (1984, 410) state, "Controversies offer a methodological advantage in the comparative ease with which they reveal the interpretative flexibility of scientific results." I examine how these conflicts highlight the value and meaning assigned to Wikipedia by different social groups as they interpret different issues, and what this means for its ability to be a sustainable, open platform.

I am therefore also using interpretative flexibility as a lens through which to analyse the controversies as it allows me to take into account different meanings and positions articulated and assigned by the actors in each controversy. It is especially useful for examining events and alternate outcomes to the particular controversies as it suggests "the 'successful' stages in the development are not the only possible ones" (Pinch & Bijker 1984; van Dijck 2011). Pinch and Bijker (1984) also state that, in science, this flexibility "soon disappears" as consensus emerges. However in digital technologies, the consensus process is messy, ongoing and layered as meaning is contested and stabilised. For example, there is consensus that Wikipedia is an encyclopaedia and stability around this

interpretation allows it to move forward despite many aspects of its operation still being emergent and contested.

The process of achieving closure or stability, of gaining an agreed definition is complicated, if it is indeed possible at all and as van Dijck (van Dijck 2011, 334) notes in her analysis of Twitter's early development as a platform, "The concept of interpretative flexibility serves as a prism to look at a complex process of struggle to achieve a stable meaning." This stability important in Wikipedia where the goal of consensus and an agreed understanding is often achieved through long and heated debates. And these struggles has play out on its 25 million support pages that are used by the community to discuss the project and organise the editorial process, and which outnumber actual articles 6:1. These support pages include the talk pages attached to each article, as well as governance pages – including policy pages, project pages and community discussion pages (see Figure 2.1). It is here that article content and the coordination of the project is constantly debated, discussed, and negotiated by contributors.

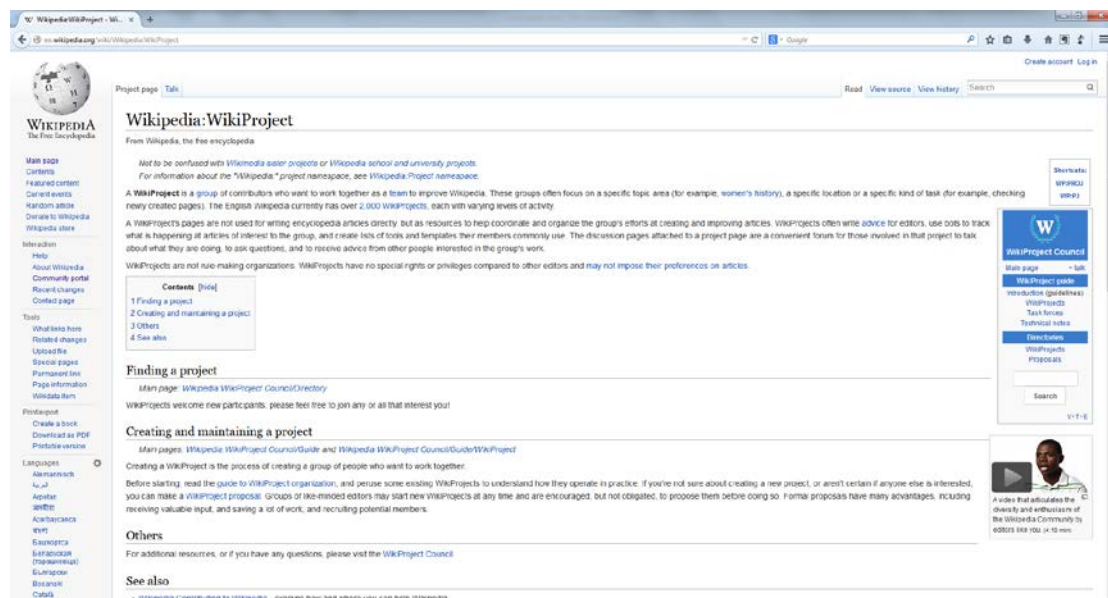


Figure 2.1: An example of a governance page on Wikipedia

Rather than hinder the process of forming meaning and producing an encyclopaedia, this process of debate and discussion that occurs in Wikipedia actually creates an atmosphere of “generative friction” (Stark 2009).

The concept of generative friction is used as a frame in this thesis to augment theories from STS and account for what some see as a “narrowness of perspective” in taking such approaches to the study of technological development (Winner 2014, 368). Langdon Winner (Winner 2014, 367) notes social constructivism’s “conceptual rigour, its concern for specifics, its attempt to provide empirical models of technological change that better reveal the actual course of events” however finds “consequences” are frequently neglected in studies using this approach, as are “irrelevant” social groups. Winner sees approaches from STS as sidestepping or disregarding moral and political implications of technological decisions where “the possibility that the ebb and flow if social interaction among social groups may reflect other, more deeply seated processes in society” is not explored (Winner 2014, 371). This research responds to these criticisms by employing the concept of generative friction to examine how competing views and conflict is used by the community to arrive at a decision, and how these processes often reflect existing inequalities. Indeed, through the use of controversy I identify underrepresented actors in the controversy, and argue that these groups are often excluded from debates about Wikipedia to the detriment of the overall quality of the encyclopaedia (thereby also addressing Winner’s concern about indifferent moral and political positions). I also argue that closure is not a realistic process in technological development, but degrees of stability around parts of a technology is a possible outcome and one that does have consequences. Indeed consequences of

technical decisions are discussed in this thesis, particularly in regard to Winner's "irrelevant" social groups, again responding to his critique of my chosen approach.

Generative friction is useful as an additional conceptual tool, because it accounts for the generative potential of conflict for arriving at a solution for any given technological issue, although as mentioned above this solution may not always hold (as in create closure), it does offer a degree of stability often required to keep the technology functioning. John Banks also observes the generative potential of conflict in a system and notes, "In all of this, perhaps we *see also* a rather different professional cultural imaginary forming, one that is less about eliding tensions and more about putting such uncertainties and frictions to work" (Banks 2012, 165).

Wikipedians are arguably more adept than new users at negotiating this friction and putting it "to work." Interpretative flexibility accounts for the productive role friction can play in collaboration as it, "assumes this process to be one of struggle and competition rather than the result of a collective effort towards finding a stabilized meaning for a tool" (van Dijck 2011, 344), indeed David Stark (2009) finds the process occurs at the overlap of competing evaluative frames where boundary objects are employed, and that "Researchers in science and technology studies have long recognized that the design process is not completed when manufacturers ship out a new product. Instead users complete the "design process" when they resists some uses inscribed in the product, identify other potential uses, and modify the product" (Stark 2009, 207). Indeed, did Ward Cunningham, who developed the wiki technology to facilitate communication in an organisation, ever envision his piece of code would be used to build the world's largest volunteer community and knowledge repository (Wikipedia 2014b)?

While Stark discusses generative friction in relation to the organisation of firms, the concept can still be applied to an open community like Wikipedia that is organised along the same lines as his *heterarchy*, which in theory differs from a traditional hierarchy as it creates egalitarian spaces for competing viewpoints to be shared (Stark 2009). In this instance the wiki technology enables the architecture and structure of the space as pages and tools can be created by anyone, at any time and anyone is free to contribute to the page. This may be as simple as an editor creating a page to manage a list on a certain topic, through to the creation of project pages where larger issues related to Wikipedia's governance can be discussed.

It is in this heterarchical discussion space where competing views are shared that generative friction occurs. For these open discussion spaces in Wikipedia are not unstructured or chaotic, they are tightly regulated spaces with norms and technical convention that guide conversation to Wikipedia's desired endpoint of "consensus" (Wikipedia 2015j). Consensus in Wikipedia is a tool to assist in the creation of neutral content, the site states that Wikipedia is "not a democracy" and arrives at decisions about content and behaviour – consensus – via a process of *rational* discussion (Wikipedia 2015o). By deploying both formal and informal references to the site's many policies Wikipedians regulate conflict so that it becomes generative (Osman 2013) as participants work across boundaries to achieve consensus. In this way, talk pages become a space where boundary work occurs as objects like policies and ideals are deployed by users to establish positions in the discussion.

The role of talk pages

Anybody may contribute content to the encyclopaedia but the expectation is that major or controversial changes will be discussed on the talk pages before anybody edits the actual article page. These discussions are regulated by a variety of policies and guidelines that have been developed by the community itself in response to problems identified in the editorial process. The issue of regulation and how this interaction is coordinated online via rules and norms on the talk pages is important because it, “collapses and resolves the distinction between technical and social forms into a meaningful whole for participants” (Kelty 2008, 210–211) – a boundary object where users can work toward consensus.

For talk pages are used differently by different groups of users. To the new user, they may be a place to read and gain information about the content page and/or the project and its rules and norms. For a reader it may be a place to ask a question tangentially related to the article content. New users may also use the talk page to clarify any issues before they edit the article, or ask questions if their edits have been reverted by other users. For active contributors they are a place to coordinate the project and contributions to the article. For metapedians they are often a place to discuss the philosophy of the project and to regulate behaviour (for example, *what are we doing here?* or *Please read the policy*). Indeed metapedians often use references to policy to establish their identity as experienced “professional” users of the site (Kriplean et al. 2007; Osman 2013).

In a study using a small sample of talk pages, Oxley et al. (2010) found that the top two claims to authority by participants in the talk page were appeals to the rules and guidelines of the discussion space and appeals to external sources (such

as outside texts and sources of information). These two appeals correlate with the project's ideals (discussed further in Chapter 3) of treating each other with respect and civility and the high importance editors place on neutral and verifiable information.

This research differs from past studies however because I am focusing specifically on the talk pages of non-article pages. That is, I focus on the discussion that occurs on the talk pages of governance-related pages. In Chapter 4, this is the talk pages of policy proposals, in Chapter 5 the talk page of a project page, and in Chapter 6 the talk page of a category page and on a project page. This focus on the behind-the-scenes boundary work that users are undertaking provides a unique understanding of the governance process of Wikipedia and the process of establishing expertise in an open community.

Boundary-work

The analysis of talk pages presented in this thesis found the interpretative and flexible nature of governance talk pages must be considered in light of their role as boundary objects in the process of forming consensus. It is in these spaces that much boundary-work (Gieryn 1983) is undertaken to establish identities in the encyclopaedia and construct what the encyclopaedia is, and who it is for.

Boundary-work in Wikipedia is the demarcation of social boundaries around groups of different users in the community who seek to distinguish their work in the encyclopaedia. Thomas F. Gieryn (1995; 1983) identified four types of boundary-work: monopolization, expansion, expulsion, and protection. This demarcation allows for "'separate" institutional and professional niches through continuing processes of boundary-work designed to achieve an apparent

differentiation of goals, methods, capabilities and substantive expertise” (Gieryn 1983).

The types of boundary work on display in Wikipedia falls into the latter two categories as actors seek to define their boundaries of expertise and enact the ideals of the encyclopaedia. Expulsion, “involves insiders’ efforts to expel not-real members from their midst. ... insiders define them as poseurs illegitimately exploiting the authority that belongs only to bona fide occupants of the cultural space for science” (Gieryn 1995). Interestingly Gieryn (1995) notes, “Such processes of social control no doubt foster a homogeneity of belief” and this will be examined further in regard to the construction of gender in Wikipedia in Chapter 6. Protection involves “the erection of walls to protect the resources and privileges of those inside. Successful boundary-work of this kind is measured by the prevention of the control of science by outside powers—or, put the other way, protection of the autonomous control of science by scientist-insiders” (Gieryn 1995).

The theory of boundary-work works well when applied to an emergent digital platform as in Gieryn’s analysis of science, boundaries in technology are “ambiguous, flexible, historically changing, contextually variable, internally inconsistent, and sometimes disputed” (Gieryn 1983). Elinor Ostrom also employs the concept of boundaries to explain the sustainability and success of common pool resources like Wikipedia. Ostrom found that “in all self-organized systems...users had created boundary rules for determining who could use the resource, choice rules related to the allocation of the flow of resource units, and active forms of monitoring and local sanctioning of rule breakers” (Ostrom 2010,

650). The key to boundaries for Ostrom (2007), is that they are clearly defined and all actors are aware of the rules for participating in the system, and the available sanctions for those who break them. In Wikipedia these type of boundaries are materialised and enacted through rules, norms and the policy system, that allow for the effective functioning and self-governance of the encyclopaedia. However this concept of boundaries as defined becomes harder to scale up to all users on a digital platform, when the nature of these borders is often emergent, blurred, negotiated and contested.

Therefore the role of technology in forming and maintaining boundaries must be taken into account and as Doherty et al. (2006) noted its place in the social construction of an artefact has traditionally been sidelined. This research is important as it recognises not only the shaping effects of the various technologies, but also the role of its non-profit business model in creating a defined boundary around the type of work that is being undertaken in Wikipedia. Indeed Wikipedia's mission, its tagline as the encyclopaedia anyone can edit, and its charitable status establish conditions for participation in the project.

Similarly, the interpretative role of the talk pages (as boundary objects) in constructing Wikipedia – what it is, who it is for – contributes to the emergent nature of Wikipedia as boundaries are contested and ideologies refined. For while popular debate may position issues with participation as a result of a system being increasingly enclosed by rules, as its period of interpretative flexibility approaches closure, the research found closure does not apply in a digital platform like Wikipedia. Rather, boundary-work continues to articulate positions in a

controversy, either through the actions of users or the implementation of technologies and new meanings emerge and are negotiated.

What a technology can do, we are suggesting, is also a significant interpretative question after controversy has ceased and consensus has formed...technical capacity is, in some senses, settled outside the periods of explicit discussion and debate. (Grint & Woolgar 1997)

Like Grint & Woolgar, I argue that consensus does not imply closure (indeed even in Wikipedia where consensus is a goal, over and above this, no decision is ever final and things can always change (Wikipedia 2014c)). While I have chosen controversies that have closed in as much as initial debate has died down or ceased and a solution is negotiated, the analysis revealed that issues are still influenced by technical actors enforcing outcomes after explicit discussion had ended, and users continually seek to establish and maintain boundaries around Wikipedia and their position in the platform.

Boundary objects and infrastructures

The research found central to this process of achieving consensus, and some degree of stability around contested issues like paid editing, users employ boundary objects (Susan Leigh Star & Griesemer 1989).

Boundary objects are objects which are both plastic enough to adapt to local needs and constraints of the several parties employing them, yet robust enough to maintain a common identity across sites. They are

weakly structured in common use, and become strongly structured in individual-site use. They may be abstract or concrete. They have different meanings in different social worlds, but their structure is common enough to more than one world to make them recognizable means of translation. The creation and management of boundary objects is key in developing and maintaining coherence across intersecting social worlds. (Star & Griesemer 1989, 393)

In a reflection on boundary objects in 2010, Star noted that boundary objects “are a sort of arrangement that allow different groups to work together without consensus” (Star 2010, 602). In this way talk pages allow users to work together to continue to write an article, coordinate a project or develop a proposal *before* consensus is reached. Indeed while the aim of the talk page is, it could be said, to achieve consensus, much of the work and the generative friction actually happens before any sort of outcome or agreement is formed – if indeed it ever is. This is where boundary objects have their value in relation to participation in Wikipedia: boundary objects explain how much work can be done in Wikipedia without consensus around technical decisions like policies for paid editors, interfaces or how categories are employed. For Star, this is the origin of boundary objects as her “initial framing of the concept was motivated by a desire to analyse the nature of cooperative work in the absence of consensus” (Star 2010, 604). However in the cooperative work that occurs a boundary space, not all voices are equal (or indeed cooperative). Morgan et al. (2012, 3492) found that the strategic use of boundary objects in Wikipedia “reinforced existing cultural boundaries rather than

spanning them, and created barriers to compromise and consensus,” as objects are appropriated by different groups and used to cement or advance their position in the debate.

In a similar vein to the narratives of Web 2.0 and popular discourses on collaboration (Shirky 2008; Tapscott & Williams 2006), Star’s work stemmed from the assumptions before her that cooperation could only begin once consensus had been reached. This misattribution of harmony as a condition for working together is also evident in discourses on open communities and openness where Nathaniel Tkacz (2015) notes it is often assumed as a state “where we all agree.” Boundary objects can also be negotiated and reinterpreted to become standardised systems, which then throw off residual categories that become new boundary objects in a cycle. For example a norm in Wikipedia that becomes a policy proposal, that then becomes an enforced norm. However in a system like Wikipedia, boundary objects are slow to become standardised as new users are constantly entering spaces where boundary work occurs and bringing their own new interpretations and meanings.

In approaching the talk page as a boundary object itself, it becomes evident that it is used by some experienced users to shut down debate and dissent (along the lines of “we’ve discussed this ad nauseum, please visit the archived discussions,” sometimes with direct links to the discussions) while others use it as a place to openly invite participation from new users (along the lines of “the archived and indexed discussions are here, but please feel to start a topic again, new discussion is welcome”). Archiving then becomes a technical tool for either burying discussion and conflict, or increasing the ease of access to information.

Accessing and examining these discussions on talk pages is useful because the issues discussed during periods of controversy and debate reveal what is important to users and actors in the sociotechnical system. As Callon notes about the use of controversies in his own research, “Our goal is to show that one can question society at the same time as the actors and explain how they define their respective identities, their mutual margins of manoeuvre and the range of choices which are open to them” (Callon 1986, 4). It is in this analysis of discussion on talk pages and discussion that the controversy can reveal much about how meaning and identity is constructed and defined, and participation in Wikipedia is shaped.

Controversies

Controversies are rich sites of data for sociotechnical research and Sheila Jasanoff notes that “It matters hugely for our sense of STS as a discipline whether we see the laboratory as the site par excellence for studying scientific controversies or social controversies as laboratories for studying how science and technology work in society” (Jasanoff 2012, 439). In approaching a controversy as a laboratory, I how the ongoing friction is generative and how is it used to create solutions, to innovate and move beyond the controversy? How people adapt their practices, views and everyday use of Wikipedia in light of the controversy. Doing so sheds light on how and why Wikipedia is important to both editors and readers, for the controversy crystallises those moments when values and ideals matter. Indeed it highlights the value of Wikipedia to those who use it, and its value as a volunteer effort. What issues *are* controversial, what is worth fighting for? Because for many significant contributors to Wikipedia, the project holds value not just as a

site of information, but as one of creative endeavour. I am therefore using the three key controversies, which have materialised around the involvement of paid editors in the community, a new editing interface and the project's gender gap.

Controversies are also useful for revealing these key contributors and different actors, how they are connected to others in the network and who speaks on behalf of whom. For, "Groups are not silent things, but rather the provisional product of a constant uproar made by the millions of contradictory voices about what is a group and who pertains to what" (Latour 2005, 31). Indeed in Wikipedia users work to establish groups and editorial communities who advocate their own position in the debate.

Using the key controversies that were selected according to set criteria (see section 2.4 'Discussions'), I take a grounded approach to explore the issues raised by the actors in each event.

Controversies help to reveal events that were initially isolated and difficult to see, because they bring forward groups that consider themselves involved by the overflows that they help to identify. As investigations go on, links from cause to effect are brought to the fore. The controversy carries out an inventory of the situation that aims less at establishing the truth of the facts than at making the situation intelligible. (Callon et al. 2009, 28)

Without controversies, issues that affect the accessibility of the platform (for example, its gender gap) may remain unnoticed, or if acknowledged, not properly addressed. Controversies therefore make "social connections traceable" (Latour

2005, 31) and show how actors use generative friction and boundary objects to further their interpretation of the issue and its ideal solution.

Stark (2009) sees solutions and meaning emerging from controversies through reflection on the friction that occurs when competing frames meet and overlap. For the controversy doesn't exist to simply rehash old arguments (although indeed in Wikipedia it may seem like that at times), in unpacking discourses and boundary-work around a sociotechnical controversy such as usability, relations to wider issues in the encyclopaedia can be revealed.

This thesis therefore situates controversies as the output of a sociotechnical system, and the flexible nature of technologies becomes apparent as meaning is interpreted and negotiated (rather than imbued through the design of a “grand plan”). Controversies surface as users and participants come into contact with competing viewpoints and attempt to advocate their position. In this process, values and ideals are revealed through discourse and taking a position within the debate. Gabriella Coleman notes that the crises that erupt in the hacker (Debian) community “consistently revolve around a limited set of themes: project transparency, major technical decisions, the meaning and scope of freedom, and the relations between ordinary developers and those with vested power.” She goes on to say, “the writing that unfolds during moments of crisis is both voluminous and markedly passionate” (Coleman 2013, 149). Similar themes emerged in this analysis of key controversies in Wikipedia – transparency (Chapter 4), major technical decisions (Chapter 5), the relationship between the community and Foundation (also Chapter 5), and the meaning and scope of freedom (Chapter 6).

The events presented in this thesis are not isolated or discrete however and are emblematic of wider concerns about the nature of participation on the web, open projects and knowledge creation. The controversies are “parts of wider, evolving structures [and] they are essential to the progress of scientific knowledge and philosophical understanding” (Nudler 2011, 2). Taking this holistic view of controversies, of placing each instance in a larger context including media discourses where it links to other episodes, allows me to consider all actors in the controversy, how it contributes to Wikipedia’s construction and how it affects access to and participation in the project.

As Callon et al. (2009, 29) note about the ability to make links between old issues and new in this process of situating the controversy:

Socio-technical controversies contribute to the realization of a second inventory: an inventory of the possible connection between the problems under discussion and other problems with which some committed groups strive to establish links. The effort to make links is not just a matter of simple exposure. It needs the appearance of new actors and their activity of reflection and investigation to establish unexpected connections.

Like Stark, for Callon et al. the act of reflection is key to generating new meaning and new understandings of the issue. Analysing this discussion and the reflection that occurs in Wikipedia help to trace events and recognise when new meanings are generated by the discussion around controversial issues (Naishtat 2011).

Indeed it can tell us a lot about the issues that are important in a community and as Jonathon Hutchinson (2012, 118) notes about the role of controversy in his own ethnographic research:

First, I understand the users of ABC Pool in a way that conflict would only reveal – that is, their ultimate concerns for the site are how they will operate to achieve their desired outcomes. Second, I observed how the ABC operates internally at a time of conflict. It revealed multiple ABC departments working simultaneously to find a solution, while exposing who is involved and what their role is within the conflict.

As an open encyclopaedia and platform, conflict is similarly evident in Wikipedia's editorial process, and using the discussion on talk pages in conjunction with wider popular media coverage contributes greatly to my understanding of Wikipedia, how it is made and who is revealed as an actor in the sociotechnical system.

This thesis is therefore structured around controversies as they are an ideal way to examine the interdependencies between these actors in the system, as the platform has developed code, bots and automated management tools in conjunction with humanly devised rules that shape and constrain how the encyclopaedia has evolved. These rules as organised in policy documents, enacted by users on talk pages and instantiated in code, have often emerged from conflict and controversy around events in the platform's history. The controversies that are native to the platform have been used by other scholars to examine key areas of the

encyclopaedia's development and have resulted in many of the rules that structure interaction and content production in the project today. For example Andrew Lih's (2009) analysis of edit wars, Tkacz's (2015) analysis of a forking event, Dariusz Jemielniak's (2014) analysis of a controversy surrounding the naming of a town that crossed both English and Polish Wikipedia, and Joseph Reagle's (2010) account of the platform's historical controversies and analysis of smaller community conflicts that shaped the encyclopaedia.

Using controversies to reveal the relationships among actors in a sociotechnical system that shape it and create the social phenomena that we observe offers insight into the construction of that technology. Thomas Streeter (2011) sees this as a useful way to frame problems of technology and society, as it takes into account the interests of different actors in the development, use and acceptance of a technology into mainstream culture. It is important to consider these different interests as it helps in avoiding talking about online phenomena as unique and separate from other cultural phenomena. Indeed Wikipedia is often discussed as a discrete object and exceptional project among other online platforms due to its size, scale and business model, while in reality it is one part of a complex and interconnected digital media ecology.

Users as actors

In Wikipedia users are actively involved in creating encyclopaedic content, site policies, rules and code (it should be noted that major technical infrastructure and changes are the domain of the supporting charity, the Wikimedia Foundation – WMF – but as Chapter 5 shows this does not always hold). Decisions around technology are ongoing and emergent, technology and code is changed and

altered and as such, “STS scholarship increasingly recognises that the social meanings of technology are contingently stabilised and contestable, that the fate of a technology depends on the social context and cannot simply be read off fixed sets of power arrangements” (Wajcman 2010, 150). In Wikipedia this is especially apparent as users join, leave, form and reform groups and negotiate relationships with the Wikimedia Foundation.

I therefore follow the actors in Wikipedia to determine how they negotiate and construct Wikipedia, and how meaning and new social groups emerge from controversies and this contestation. As Bruno Latour (2005, 29) notes, “The choice is thus clear: either we follow social theorists and begin our travel by setting up at the start which kind of group and level of analysis we will focus on, or we follow the actors’ own ways and begin our travels by the traces left behind by their activity of forming and dismantling groups.” To do this I have engaged as a participant observer, joining mailing lists and social networking sites to discover what mattered to users and readers alike, what events generated controversy and how access, participation and sustainability are discussed. This approach has led to one of the key findings of the thesis – that in Wikipedia there is a tension between the useful notion of a single Wikipedian editing community with shared ideals, and the reality of different users continually arranging and rearranging into often competing groups in order to construct and enact these ideals in the encyclopaedia.

2.2 Methods

The research is designed to investigate issues that have been the subject of controversy in the community in order to determine how these issues shape Wikipedia as an open platform, and how the event and any ensuing changes affects participation in the project. By following the actors in three key controversies in the encyclopaedia, the research is designed to investigate how popular accessibility, usability and participation is shaped in Wikipedia.

Using a grounded approach to the problem of understanding participation and access in Wikipedia allows for new themes to emerge through the coding process that may not be reflected in dominant responses from other places. By considering media coverage and how Wikipedia is constructed in wider discourse, along with a close reading of discussions in the community allows me to contextualise the problem of participation in Wikipedia with an understanding of wider concerns about digital media. For the controversies in Wikipedia represent anxieties about the commercialisation of the web, access to knowledge and online harassment. This grounded approach works particularly well when applied to online discussions such as those I am analysing as it allows for quickly “gaining a clear focus on what is happening in your data without sacrificing the detail of enacted scenes” (Charmaz 2006, 14). Kathy Charmaz notes that, “like a camera with many lenses, first you view a broad sweep of the landscape. Subsequently, you change your lens several times to bring scenes closer and closer into view” (Charmaz 2006, 14). Such a close reading of all controversies as they played out in the community helped to reveal the actors in the controversy and the issues that are important to their participation in the project.

Following controversies as they played out using this method also allowed me to follow actors to sites other than Wikipedia, such as Twitter, Facebook, reddit, 4chan and a variety of blogs that comment and share information about Wikipedia and the controversies that are being discussed on its talk pages.

Using a slogan from ANT, you have ‘to follow the actors themselves’, that is try to catch up with their often wild innovations in order to learn from them what the collective existence has become in their hands, which methods they have elaborated to make it fit together, which accounts could best define the new associations that they have been forced to establish.

(Latour 2005, 12)

Early background research highlighted to me a number of perceptions about the community and its access to participation that have informed my inquiry. First, the prevalence of rules in the Wikipedia community has had an effect on the culture that has evolved, which in turn has created a community with high barriers to entry for new users, particularly female users in light of the gender gap. Second, these rules have led to the popular perception that the contributions of women are undervalued in the Wikipedia community and knowledge, in the form of articles, is therefore skewed in favour of ‘male topics’ and reflects the current inequalities in gender distribution in the editorial community (Wikimedia 2014b). It is also crucial at this point to indicate that as a whole, Wikipedia encompasses 287 different language versions, all of whom are experiencing different issues and rates of change. This study will focus on English Wikipedia. The reason for this

focus is due to coverage of English Wikipedia in the media, it being the largest and earliest wiki, along with my own language skills being limited to English.

In order to further examine issues I recognised I used various digital tools, many of which have been developed by the Wikipedia community themselves. In discussing digital methods and the use of digital tools, Richard Rogers (Rogers 2010, 243) identifies “digital groundedness, or online groundedness, where claims about society are grounded in the online.” Barring my participation in Wikimania 2013 (the annual conference for all Wikimedia projects) and Wikimedia events, this thesis is grounded in online data and the use of digital tools. The data comes from the large corpus of Wikipedia and Wikimedia pages, online media and comments, Facebook pages (such as Wiki Women’s Collaborative, Wikimedia Australia), tweets, blogs, online video and importantly all the small tools created by the Wikimedia user community. For example, Viégas, Wattenberg and Dave (2004) studied cooperation and conflict between editors with the *historyflow* tool, which they developed to visualise the edit history of articles. Similarly Laniado et al. (2011) developed a tool to measure conflict in Wikipedia by creating chains of mutual replies between pairs of users which occurs on the talk pages of articles, the results of which can be visualised as a “discussion tree.”

I primarily used the following tools in my research to understand and explore participation in controversies on Wikipedia:

WikiTrip

WikiTrip maps users by gender (registered users with a gender specified in their profile) and location (unregistered users whose edits are logged by an IP

address). I used this tool to understand the differences in participation between registered users.

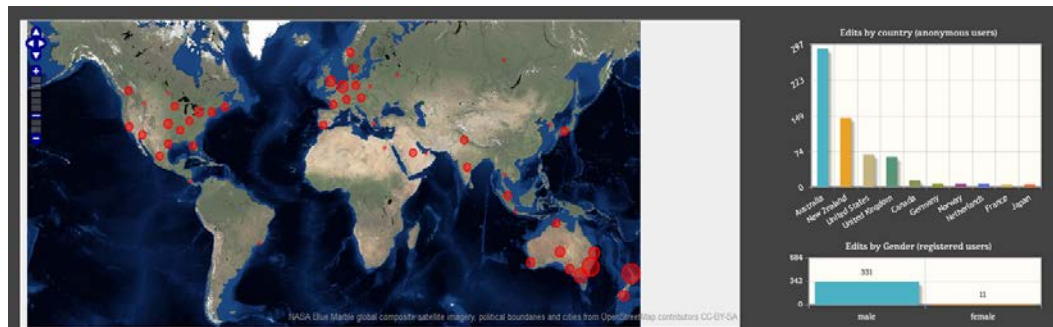


Figure 2.2: Screenshot of Edits to Pavlova (food) by gender and location

Wiki Trends

Wiki Trends generates line graphs of edits to Wikipedia articles over time and I used this to determine periods of interest and activity in regard to the key issues. I then matched this with mailing list activity and media coverage to determine key events and understand how they played out on pages throughout the platform.

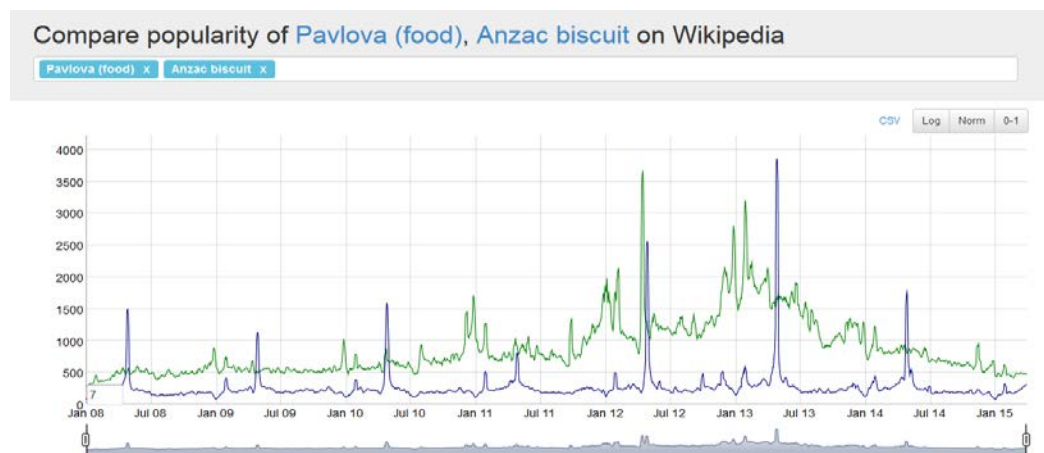


Figure 2.3: Screenshot of Wiki Trends results (note the spikes in editing activity around April 25, which is Anzac Day in Australia).

(Wiki Trends 2015)

WikiWatchdog

WikiWatchdog generates a list of articles edited anonymously by a particular domain name (for example facebook.com or qut.edu.au). Clicking on a specific edit under the article listed in the results reveals a “diff,” the term in Wikipedia for two versions of a page’s text side by side, the previous version and the version after the edits were made, with the differences between the two highlighted. I used the site to look for evidence of the prevalence of companies anonymously editing pages associated with them (as in the example above) using a random selection from the top 50 Australian Securities Exchange (ASX) companies as a sample. However during this background research, it became apparent that while high profile companies may have one or two small anonymous edits, there was nothing statistically significant to signal anonymous corporate editing as an issue for the encyclopaedia (as will be discussed further in Chapter 4).

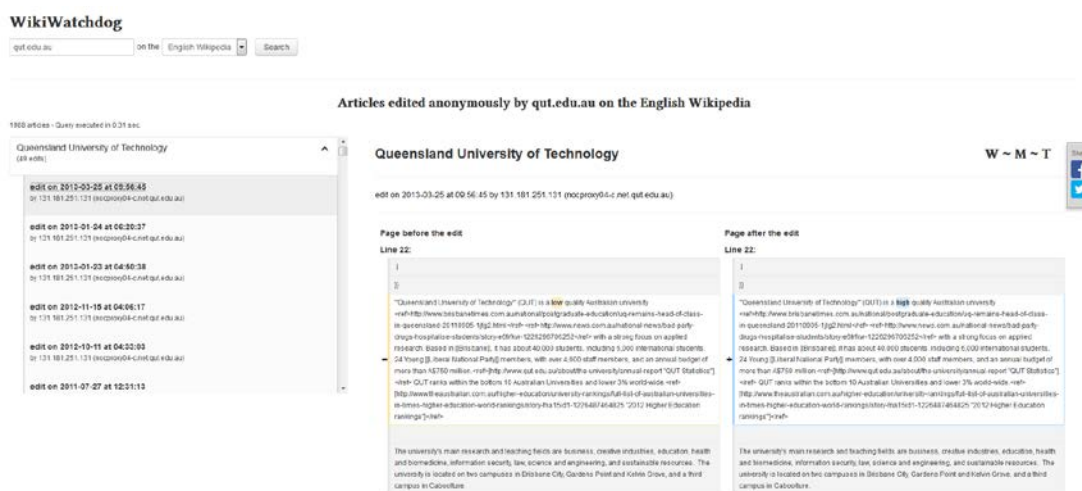


Figure 2.4: Screenshot of WikiWatchdog results for the domain qut.edu.au (WikiWatchdog 2015)

Revision history statistics

Revision statistics are accessed through the View History tab that lists all the edits made to a Wikipedia page. This WMF Tool Labs hosted tool by user X!

simplified the work I had previously done “by hand.” It shows a visual breakdown of edits by users as well as a list of editors along with their edits by count and size. It is an excellent visual representation of who is contributing to the discussion (see example below).

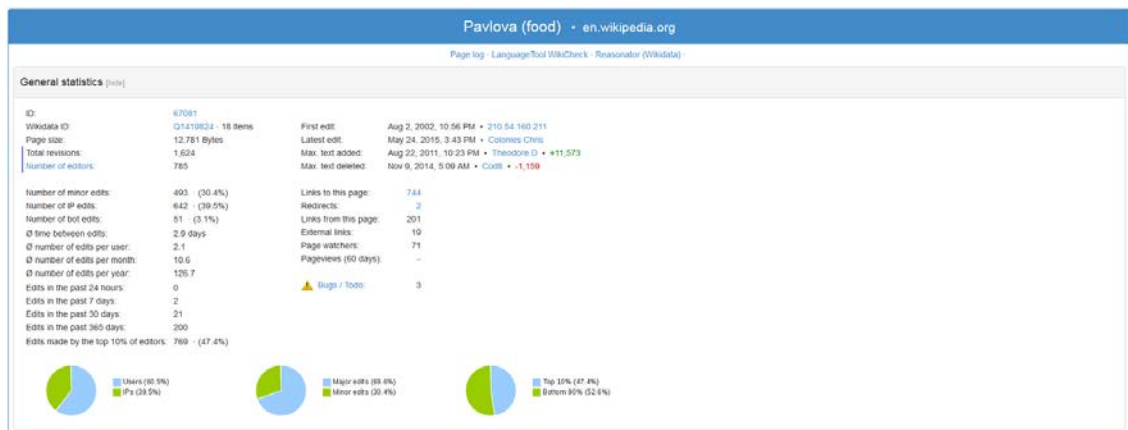


Figure 2.5: Screenshot of Revision History Statistics overall edits to the English Wikipedia article Pavlova (food).

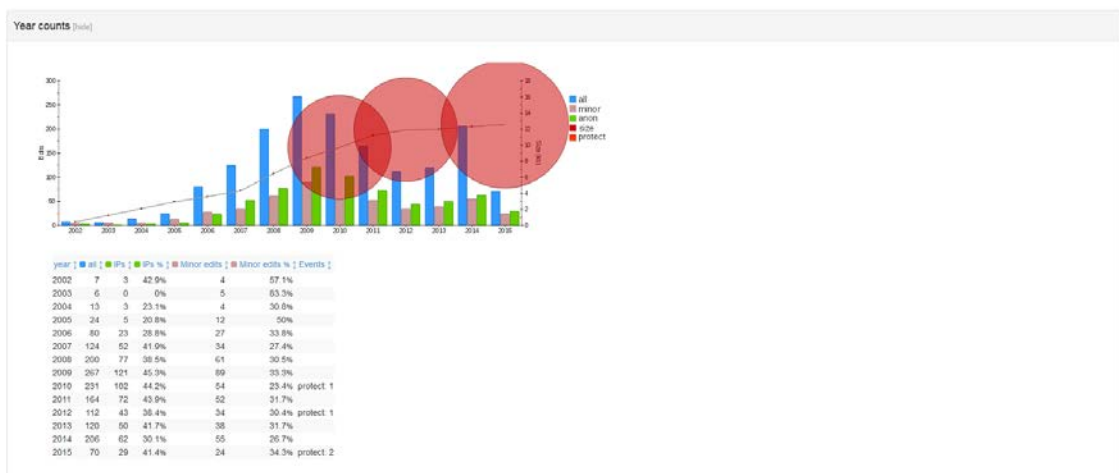


Figure 2.6: Screenshot of Revision History Statistics graph and table of edits to the English Wikipedia article Pavlova (food) by year.

In addition to using digital tools as a guide to highlight patterns in contributions, what tools are actually *created* also highlights what developers see as being important issues for the community. For example Wiki Trip visualises

contributions to an article by country and gender (SoNet@FBK 2014), and another simple on-wiki tool maps a user's contributions across language editions (Wikimedia Tool Labs 2014), thus showing the importance of gender, location and inter-wiki collaboration respectively to the community.

In addition to my participation in off-wiki discussion spaces (including, email lists and social media) I looked to wider media coverage of controversies to determine the issues especially important to the community, to see how those outside the community construct Wikipedia in terms of openness, access and the ability to participate in the project. What generates press? What is important to those outside the Wikipedia editing community and the platform? Much Wikipedia research is grounded in the community or only uses data from the community, Wikipedia or Wikimedia domain sites. This research adds to this corpus however also analyses media discourses to reveal how Wikipedia is constructed by readers and users in terms of popular accessibility and usability.

From this background and ongoing research, I narrowed my focus to three particular controversies that threatened people's access to participation, continued participation or quality of participation in the project and ultimately (in light of the perceived participation crisis) the platform's sustainability as users voiced their intentions to leave the site if paid editors were allowed, new users were preferenced over existing editors, or editors were banned by the Arbitration Committee (Chapters 4, 5 and 6 respectively). The three events also generated media coverage that framed Wikipedia as a site of concealed corporate activity, an innovative platform negotiating with a community resistant to change and an editing community biased against female editors (again chapters 4, 5 and 6

respectively). This third controversy is important as, “Within mainstream STS, the ways in which technological objects may shape and be shaped by the operation of gender interests or identities has not been a central focus” (Wajcman 2010, 149). These key controversies are therefore chosen for the anxieties they produce in discourses about Wikipedia as much as for how they illuminate and reflect wider concerns about participation in digital media. For ease of reference the controversies are referred to as the paid editing controversy (Key Controversy 1), the VisualEditor controversy (Key Controversy 2) and the gender gap controversy (Key Controversy 3).

The thesis is also primarily an etic account, written and researched from the perspective of an external observer. An etic approach “based on criteria from outside a particular culture” is in contrast to an emic perspective (coming from within the community), it is described as a more “neutral” and “universal” frame for observations (Barnard & Spencer 2010). However I do not maintain that my position is neutral or universal, indeed I have chosen areas of the platform to analyse based on issues that personally interest me – its gender gap, rejection of new technology, and volunteer/professional tensions. However the etic frame is useful for taking into account views of Wikipedia beyond its own editorial community, recognising boundary-work and providing a perspective informed by discussions outside the community. This approach is appropriate as I am considering how key controversies affect participation, usability and ultimately the construction and sustainability of the platform by all stakeholders, not just those actively involved in creating content.

Throughout the research I maintained a position apart from the editorial community of Wikipedia, although I do have some interaction with the larger Wikimedia research community. In keeping this distance from the community, I was able to take a wider perspective in regard to the controversies. And while I admit my bias toward Wikipedia as an excellent example of the potential of the web to foster volunteer collaboration and make knowledge freely accessible, I believe this distance allowed me take a more critical eye to how the controversies played out as well as their relative import in wider media discourses. This is needed not only because there are already excellent and detailed accounts of Wikipedia from a user's perspective, but also because how Wikipedia is constructed by those who are *not* active users is important for how Wikipedia enables popular accessibility for a variety of people.

During the course of this research I monitored and engaged with social networking sites to discover how the key controversies were constructed by actors in off-wiki spaces where its norms do not apply (including, but not limited to Wiki Women's Collaborative on Facebook, @SaidOnWP on Twitter, blogs such as Mark Bernstein and The Wikipedian and the critics forum Wikipediocracy). This is important because as Nancy Baym (2009, 721) notes:

Online realms are no longer contained within their own boundaries (if they ever were). What appear to be single online groups often turn out to be multimodal. Group members connect with one another in multiple online spots, using multiple media.

In addition to the on-wiki talk pages specific to each controversy, I was also informed by archival research of user pages, user contribution logs, policy pages, governance pages, and their related talk and edit histories. In attending the Wikimedia global volunteer conference, Wikimania, I had first-hand information on the issues that were of interest to the community as reflected in the conference program design, keynote, speeches, and choice of speakers (along with an indication of interest through attendance at particular events). This approach informs my research and ensures it is grounded, along with allowing me to check and recheck data and follow new lines of inquiry.

2.3 Ethics

Ethics in internet research is important because not only does it mean doing the right thing, conducting research ethically ensures the community feels respected, and ensures future researchers access to study the community. One of my strongest guiding principles in designing this research and considering the ethical implications is from the Recommendations of the Association of Internet Researchers Ethics Working Committee. It states:

People may operate in public spaces but maintain strong perceptions or expectations of privacy. Or, they may acknowledge that the substance of their communication is public, but that the specific context in which it appears implies restrictions on how that information is -- or ought to be -- used by other parties. (Markham & Buchanan 2012)

David M. Berry notes also that texts can remain long after authors have forgotten them, and these texts may be replicated across the internet (Berry 2004a). Berry also notes that assumptions about what is public and what is private colour how researchers approach online research. It is this balance that is difficult to define in a space such as Wikipedia. On the one hand you have encyclopaedic articles that are created for public use, while on the other there are discussion spaces that are technically hidden behind the article – yet still open and publicly accessible – via the “Talk” tab (see Figure 2.7). In addition to this is the expectation of openness and transparency in Wikipedia. Talk pages and discussion are in the open, and it is expected that users will refer to prior discussion and access these discussion spaces as sites of information. This community-wide commitment to openness is countered by individual users’ expectations of privacy. While discussion spaces *are* publicly accessible, they are often hidden from view with the knowledge that most visitors to the encyclopaedia won’t click past the article they are interested in. I took this into account in addition to the fact that I am analysing controversies and discussions that at times became heated.

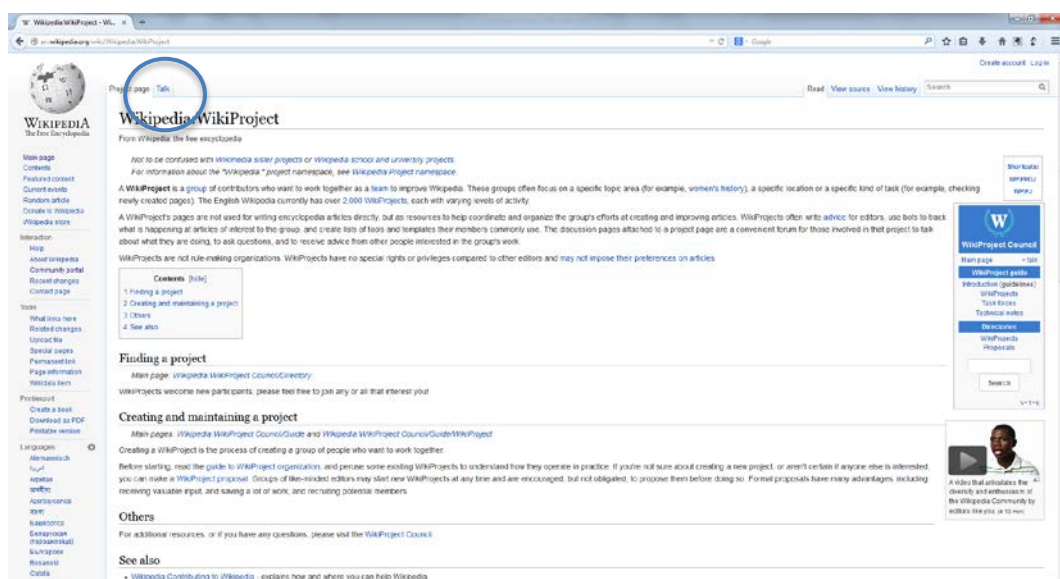


Figure 2.7: The ‘Talk’ tab on a Wikipedia page

After much discussion with colleagues and mentors, I decided to request consent from the participants in the controversies whose quotes I wanted to publish as part of this research. The discussion around asking for consent stemmed from the open nature of Wikipedia – talk pages are published pages, publicly accessible and licensed by a Creative Commons Attribution-ShareAlike (CC-BY-SA) license. The CC-BY-SA license means that any content on the page may be copied, shared and/or remixed providing that the licensor is attributed and the resulting work is freely licensed in the same way. Although this license would allow me to take user discussion and include it in my thesis, I felt that it really didn't address the issue of ethics around quoting individuals. This is due to two factors – first, while the CC-BY-SA is site wide, the license to me feels more applicable to article content and how people use the encyclopaedic content (for example in print on demand “books” that are actually just a bot collection of Wikipedia articles, or in the media where journalists quote Wikipedia word for word (Kiss 2006; Rand 2010)).

While it would have been easier to approach Wikipedia site-wide as the site of open CC-BY-SA content it is, I chose to separate content into two kinds that I call *content* and *talk*. Content pages include the actual encyclopaedia articles, user pages, project pages, governance pages and other pages that present article content article or information about Wikipedia itself. Talk pages as mentioned sit, in effect, behind these pages (see above Figure 2.7) and are accessed via the “Talk” tab – the technical architecture affording them a degree of privacy – and those pages in governance space, such as project and special pages, where the content consists of posts in a discussion or opinion-giving format. The key difference is that on talk pages (apart from administrative notices), the text

consists of user posts that are signed (in the format “--UserName (talk) 14:40, 18 May 2015 (UTC)”) and form a discussion among editors. This discussion is not (normally) edited as redacting and editing comments is against community norms. A strikethrough is the generally accepted norm when wanting to take back comments. Indeed there are many norms in conversing in what is essentially a plain text environment, as will be discussed in Chapter 3. In light of this difference between information and talk, I chose to take two approaches to including material for analysis and presentation in this thesis. For content pages I apply the CC-BY-SA license as these pages, even the ones concerned with project governance, have what Berry (2004a) terms a “public-ness.” Whereas the discussion spaces, even though technically licensed the same way have a degree of privacy about them, in as much as there can be an expectation that comments won’t be taken and published. Such areas are likened to the “front porch” – not private, but not quite public (Bruckman 2002). Most editors would accept that their comments can be used this way, however as a researcher I felt the need to respect the users and the content they contribute to Wikipedia that is personally signed.

I therefore decided to contact the users whose quotes I wished to use in the thesis. I used the “Email this User” feature in Wikipedia that allows a logged in user to contact other users who have enabled the feature. Out of 85 identified users, I contacted 71 users who had the “Email this User” feature enabled to use 109 direct quotes. Of these users, 44 responded giving their consent and 27 did not reply.

Findings from the Ethics Process

Wikipedia editors are extremely self-aware about the public nature of their comments. In the consent responses, four participants pointed to the fact that all contributions on Wikipedia are freely licensed and available to be reused without consent.

Interestingly, while my ethical clearance called for the anonymisation of quotes - a decision I made based on expectations of privacy and in light of other research that uses Wikipedia user quotes - nine users asked that I attribute their quotes, while a further three indicated that I could attribute them if I wished (consequently I have attributed 12 of the 44 responding users). This is in light of the BY section of the CC-BY-SA license which some users referred to, and these users accordingly wanted their contributions rightly attributed. It echoes Amy Bruckman's (2002) observation of the need for some contributors online to have their work acknowledged, and also of adherence to Wikipedian norms regarding transparency. Two users expressed the wish to not have their offline identity linked to the quote, while two users expressed that they did not mind the use of either their on- or offline identity in attribution.

The responses from the sample of users I contacted suggest that not only are users aware of the public and open nature of their comments, they are also aware of how their contributions are technically licensed and demonstrate a commitment to the open licensing of all their contributions, and do not demonstrate the division between content and talk I initially identified.

2.4 Discussions

Identifying the key controversies consisted of four phases:

1. Identification of an issue via community discussions on email lists and on-wiki spaces.
2. Examination of the issue as reported in wider media coverage.
3. Identification of the location of the main discussion on Wikipedia
4. Follow the controversy via media and social media and on-wiki.

Phase four was the most difficult part of data collection due to the norm of *not* referencing activities that occur off-wiki unless absolutely necessary. This is reflected in Tkacz's (2015) observation of a "magic circle" in Wikipedia where controversies and the relevant issues are constructed on-wiki.

5. Wait for the issue to stabilise and/or for debate to finish.

Using this method of looking alternately in and outside of the Wikipedia platform, I identified three key issues. This is not to say that these were the only controversies of note and concern during the data collection period (2012 – 2014) as I identified several issues during phase 1 that failed to manifest into issues of wider media interest (such as the dissemination of funds by the WMF). In Phase 2 I collected media coverage and mentions of the controversy in both Evernote and Mendeley. To assess significant media interest there needed to be a variety of sources and/or significant reprinting of the controversy in various outlets. I also used the conversations on- and off-wiki (such as in comments sections, blogs, tweets, etc.) to determine the impact of the media coverage on the community. In

phase 3, after locating the discussion on-wiki, I monitored it until it achieved a degree of closure, thus giving me a discrete conversation to analyse. In order to access a stable version of each discussion I accessed the pages by clicking on the latest date and time link from the page's edit history which generates a stable version of each iteration of each page and makes it available under a URL that contains a unique "oldid=" identifier. Remaining open to all possible understandings of the data, I then undertook a four-stage coding process to "separate, sort, and synthesize these data through qualitative coding ...[and]...emphasise what is happening in the scene" (Charmaz 2006, 3).

For the first key controversy I determined a degree of closure when the WMF updated its Terms of Service, and for the second key controversy I determined a degree of closure when the WMF reinstated the old editing interface as the default. The third controversy was harder to analyse as a discrete object, because although a discussion was selected on which to conduct an analysis, other similar controversies concerning gender continue to emerge. However I determined closure for the particular issue regarding categories and gender as having occurred when the "Categories for Discussion" discussion was explicitly closed.

In total three discrete discussions were formally coded according to Grounded Theory processes. This theoretical sample was chosen to illuminate a specific response to a specific controversy rather than be a representative sample of the entire Wikipedia editorial community. The three discussions provide the basis for analysis in Chapters 4, 5 and 6 and totalled 324,122 words of discussion. This was broken up into the following:

Controversy One: Paid editing

The talk pages of three failed proposals to form a policy regarding paid editing: “Paid editing policy proposal,” “No paid advocacy,” and “Conflict of interest limit.”

Words	164,822
Total edits	2,208
Total contributors	300
Top 10 contributors % of edits	31.2%

Table 2.1: Breakdown of words, edits and contributors in Controversy One

Controversy Two: VisualEditor

One discussion “Wikipedia talk:VisualEditor,” split into six archives.

Words	123,324
Total edits	1371
Total contributors	282
Top 10 ³ contributors % of edits	42%

Table 2.2: Breakdown of words, edits and contributors in Controversy Two

Controversy Three: The gender gap

This controversy comprises two discussions, one at the “Categories for Discussion” page and another at “Category talk: American women novelists”.

³ The top 5 editors by number of bytes added (that is, most content added) are all WMF accounts.

Words	35,976
Total edits	571
Total contributors	215
Top 10 contributors % of edits	46%

Table 2.3: Breakdown of words, edits and contributors in Controversy Three

In the coding process I initially tagged each post with a summary of the comments made. Through this process concepts began to emerge and codes formed that I could apply to each post. Testing the codes this way, against the remaining posts in the conversation allowed me to see which codes were useful for describing what was occurring in the conversation, and which codes were the result of a one-off post, miscellany, or an outlying view that wasn't reflected in other posts. I found this to be an effective and efficient method for gaining insight and beginning to make an "interpretative rendering that...illuminates studied life" (Charmaz 2006, 43), and in the process of consolidating these I began to see the positions of users in the controversy.

I refined the initial codes into a defined set of concepts (eliminating codes that were duplications and consolidating the data into groups) and applied these to the discussion. I then grouped these concepts into categories (see Appendix A) which revealed the main themes of the discussion and further illuminates the positions of users. I then compared these categories against the notes and memos I had been generating about media stories and social media posts and conversations. The memos include the concepts apparent in the piece (article/post/blog) and how Wikipedia is framed (positive or negative). In the process of note-taking and

writing memos throughout the collection and analysis of the data, themes about how Wikipedia was framed and discussed began to emerge and it was interesting to see how these concepts from external sources were discussed in the ongoing discussion on-wiki. There was surprising support for many media narratives among some editors, and it was this finding that began to hint that the notion of a single “Wikipedian” editing community was problematic. This in turn led to a second important theme emerging from the analysis of all three controversies – for many Wikipedia editors, how the encyclopaedia is constructed and how its accessibility is interpreted by new users and those outside the core community is important.

In analysing the controversies from a grounded perspective and comparing and contrasting the codes across all three cases, similar themes emerged. These consistent threads through all the conversations were around the open nature of Wikipedia and what it means to be able to contribute to the encyclopaedia. Were contributions from new users welcome or something to be regulated? What was the value of different types of editor? What does it mean when we say Wikipedia is an open project?

In light of new questions around openness, participation and accessibility, I was able to reconsider the data and identify how these common themes were discussed in each controversy. This approach revealed the (useful) concept of a single “Wikipedian” identity in asserting positions in the debate and speaking on behalf of a user community sits in tension with the reality of different user communities who advocated different positions in regards to the controversy, some acknowledging the absence of relevant stakeholders in the discussion. In going

back and forth between the data and analysis, I could seek out additional media stories, social media and follow links between on- and off-wiki conversations as well as using the digital tools above to gain a clearer picture of how the controversy was playing out. The ongoing process of coding, memo writing and note-taking allowed me to “get at varied constructions or competing definitions of the situation, as given in action, not merely stated in reconstructed accounts” (Charmaz 2006, 180). In studying the “action,” I could also identify how users were undertaking boundary work and using the talk pages as boundary objects to further their position in the controversy.

2.5 Conclusion

This chapter has outlined the approach I have taken to identify, describe and analyse the issues that affect access to and participation in Wikipedia. It has described talk pages as important data sources for this research and as sites where boundary work is undertaken by users. This boundary work and the use of boundary objects demarcates borders of expertise around users and assists in both constructing user identities and negotiating meaning and a shared understanding of what a digital encyclopaedia *is*. The chapter also argued that controversies are key to understanding issues of access and participation, not only to reveal actors, but also the issues that are important to different user communities in Wikipedia. Analysing these controversies using a grounded approach ensures this research is grounded in users’ experiences of the platform. The analysis is extended through the use of digital tools and contextualised using media coverage of the specific controversies. It considers the ethical implications of working with an open,

online, volunteer community and finds users value attribution and are aware of the public nature of their posts and discussions.

The following chapter will provide an overview of Wikipedia as a sociotechnical system, and how this system has evolved from and is shaped by its emergence from the free and open source software movement and ideals associated with encyclopaedic production. It will argue that the complex rule set in Wikipedia is a result of the system's openness and that these rules necessarily regulate the editorial process, however also shape and constrain participation in Wikipedia.

3 WIKIPEDIA AS A SOCIOTECHNICAL SYSTEM

3.1 Introduction

Wikipedia is a complex assemblage of people, groups and technology connected and coordinated by a robust ideology based on values associated with freedom and cooperation (O’Neil 2009). As evidenced in the preceding chapters it is simultaneously an encyclopaedia, a platform and an assemblage of different editing communities, and how it is constructed by actors in each of these capacities has implications for access and participation.

This chapter explores Wikipedia’s structure and how the ideals it embodies and enacts are similar to those of past efforts to create and share knowledge. This chapter begins with a short sketch of the ‘pedia’ part of Wikipedia and sets up the relationship between ideals and material forms in relation to knowledge and popular access. It then goes on to discuss the ‘wiki’ and how these same ideals around democratisation and access were employed by early DIY computer enthusiasts and the open movement from which Wikipedia emerged. It proceeds to outline key stages and actors in Wikipedia’s development before looking at how rules based on the open ideology emerged and coordinate action in Wikipedia today. Finally the chapter argues that the conflict present throughout Wikipedia’s history has been a generative friction that has resulted in the site’s many rules and policies that regulate and constrain participation in the encyclopaedia today.

3.2 The stability of the encyclopaedia as a genre

Of all the efforts to collect, create and curate human knowledge, Wikipedia is “the most credible realisation of the universal encyclopaedic vision” (Reagle 2010, 38). The credibility of this realisation is important because while many parts of Wikipedia are still in flux, “since around the 18th century, The European originated general encyclopaedia has enjoyed stability as a genre” (Loveland & Reagle 2013, 2). The stability around this part of the sociotechnical system provides users with a common understanding of purpose, and while there may be differences between interpretations, the meaning of an “encyclopaedia” is a robust definition for the project that actors can use to construct and coordinate action in Wikipedia.

There have been many other attempts at creating and sustaining a collaboratively produced encyclopaedia online. How then has Wikipedia succeeded where others have failed? Benjamin Mako Hill’s (2013) research suggests that it is because first and foremost Wikipedia *is* an encyclopaedia. It is a form people are familiar with and has always been an encyclopaedia over and above a wiki (Garber 2011; Hill 2013), although as discussed in the next chapter, the importance of the wiki is not to be underestimated in how users construct Wikipedia.

Placing it in this historic context of encyclopaedic knowledge production helps to understand its origins as well as to contest the popular discourse that Wikipedia is a Web 2.0 phenomenon. For while Wikipedia is a source of knowledge for more people than any other reference work in history (Loveland & Reagle 2013), it is coordinated by similar ideals to past efforts to compile and create encyclopaedic knowledge. Indeed, encyclopaedias have traditionally been a form of sharing

knowledge, a cultural construct that reflects the wisdom of the time and is intended to increase access to information for the lay person. Wikipedia continues in the tradition of putting these ideals into practice and in doing so has been upsetting the traditional print publishing model of encyclopaedias – indeed it is arguably the most successful product in this genre.

Like earlier encyclopaedias, Wikipedia aims to share the totality of knowledge which is expressed on the site as providing access to the “sum of all knowledge” (Wikipedia 2014q). As Jutta Haider and Olof Sundin (2009) note, when “people contribute to the online encyclopaedia Wikipedia every day, they are engaged in the continuation of an Enlightenment project which can be traced back a long time in history.” In this tradition, encyclopaedias have been of a momentary nature, taking “snapshots” of information (Yeo 2001) at different points in time. And while Wikipedia is popularly criticised (Sanger 2006) for its information being unstable and transient, it is perhaps the only encyclopaedia to aggregate these “snapshots” and provide a comprehensive overview of how a topic evolves and is constructed over time. For as each article page is current and subject to change at any time, its corresponding edit history shows every edit and change undertaken. Haider and Sundin (2009) note in Wikipedia, “permanence has reached a new height...Everything is constantly changing at the same time as it is always being saved and stable, archived.” Wikipedia is therefore an excellent site for examining how current tensions around knowledge and digital media play out and how the ideals and rules that govern access and participation are instantiated in code and the technical architecture, as every iteration of its debates and controversies are archived and accessible for all users, in line with beliefs about openness.

Wikipedia represents an ideal carried through from past encyclopaedias which Richard Yeo notes “exemplified the Enlightenment ideal of knowledge as open, collaborative and public” (Yeo 2001, xiv), and demonstrates the potential of the web to be a forum for this knowledge. As Yeo writes, “The original Graeco-Roman notion of encyclopaedia – has a long history; and it is not one without moments of crisis and change” (Yeo 2001, xi). Similarly Wikipedia is characterised by its controversies and debates that have shaped its evolution as both an encyclopaedia and a platform.

Many people who edit Wikipedia are drawn to these traditional encyclopaedic ideals and the rhetoric of making the sum of all knowledge freely available. Along with the ideals carried through from past encyclopaedic efforts Wikipedia also shares a genealogy with the DIY and open source communities that promote non-commercial approaches to production (Kelty 2008). The idea that encyclopaedic knowledge, previously constrained by the traditional print publishing industry could be made freely available appealed to the hacker ethos of early software developers and members of online communities. Mathieu O’Neil notes that very early computer programmers, “were infused with the values of individual freedom, of independent thinking and of sharing and cooperating with their peers” (O’Neil 2009, 15), and these values are evident in Wikipedia today through invitations to “be bold” and edit articles, while individual users simultaneously collaborate to create and enforce policies to regulate the editorial process and collaboration between individuals (Wikipedia 2015i).

Similarly, as past encyclopaedias attracted the “intellectual idealist” (Loveland & Reagle 2013, 3) to their ranks, so too does Wikipedia have passionate advocates

for free and open knowledge. Indeed, “Tireless, detail-oriented people continued to be attracted to the labour of compiling encyclopaedias in the early and modern periods” (Loveland & Reagle 2013, 3), and many of the project’s metapedians show the same commitment to detail in Wikipedia today. Wikipedia is not just about compiling content however, volunteers add and format information using wiki markup and according to a complex set of standards. A popular myth in Wikipedia is that the “low-hanging fruit” has been “picked.” That is, the articles that are easier to research and write have already been created and developed to an encyclopaedic standard other editors are happy with. This narrative maintains that the work of the community now requires high-order knowledge workers to develop specialist sections or articles in the encyclopaedia, or detail oriented Wikipedians to standardised articles and aspects of the encyclopaedia. Tasks that are difficult, and not particularly suited to new users who may be unfamiliar with the conventions of the encyclopaedia.

The platform continues to engage these committed volunteers, well versed in the project’s norms whom Peter Burke (2013) calls “amateur knowledge workers,” people without formal qualifications or positions who contribute to knowledge production projects like Wikipedia (Burke 2013; Loveland & Reagle 2013). It is important also to recognise variety among these “knowledge workers” and hobbyists, as “claiming Wikipedia is the work of either an ‘elite’ or a ‘mob’ is simplistic; it is both and more” (Loveland & Reagle 2013, 5). Jemielniak (2014) notes that in Wikipedia formal qualifications are not regarded by the community and do not contribute to the validity of any one editor’s argument or status. In the meritocratic environment of Wikipedia, an editor’s status is afforded then by their

participation in and contribution to the community. However due to the nature of the crowd and the type of people attracted to knowledge production projects such as Wikipedia, experts are still very much present among Wikipedia editors (even if they don't promote their credentials) and active Wikipedia editors have on average a higher level of education than the general public (Loveland & Reagle 2013; Winchester 1999; Wikimedia Foundation 2011b). The presence of experts in the crowd (and in this sense I mean those who are experts in the processes and procedures of Wikipedia *and* those who have formal qualifications as topic experts) highlights the flaws in arguments that dismiss the quality of crowd sourced knowledge based on the perception of amateur production. Wikipedia is becoming increasingly professional, not only in knowledge production, but in how users manage the relationship with the Wikimedia Foundation, and in the continued refinement of its policies and procedures by metapedians (professional amateurs).

There is therefore a tension in Wikipedia comprised of the need to oversee the maintenance of nearly five million articles while encouraging contributions from new users – those who former Wikimedia Executive Director Sue Gardner described as bringing their “crumb to the table” and that, “If they are not at the table, we don't benefit from their crumb ” (Cohen 2011). Diversity in contributors brings by default diversity in knowledge and experiences, and the challenge for Wikipedia now is to integrate the ideals and form of a traditional encyclopaedia with the expectations and form of an online platform and resource. Having standardised procedures, norms and rules that can act as boundary objects are essential in this situation. Boundary objects provide a space and place for interpretative flexibility, common interpretation and exchange to take place along

with new interpretations to be formed so that collaborations can occur and work can progress.

Additionally, there exists tension between old forms and new user-led methods of production that is highlighted by the falling profits of traditional encyclopaedic print models. Wikipedia though isn't the first encyclopaedia to upset the traditional print production model – this initially occurred with the introduction of Microsoft's Encarta, a CD-ROM encyclopaedia for use at home on a personal computer (however with the advent of the internet and eventually, Wikipedia, Encarta was discontinued in 2009) (Wikipedia 2014a). The biggest traditional media casualty of shifts in form and Wikipedia's success has been the standard to which Wikipedia is compared, Encyclopaedia Britannica (Giles 2005). Britannica called off print production in 2012, choosing instead to focus on digital publishing models (Cohen 2009; McCarthy 2012), ironically the new standard for encyclopaedias. The Wikipedia versus Britannica tension exists not only as new model versus old model of the same genre, but has been constructed in part by the media seeking a standard (Britannica) with which to interpret this new form (Wikipedia). Wikipedia now appears to be the standard and is a testament to the success of Wikipedia as encyclopaedia, platform and community.

3.3 F/LOSS and the Open Movement

Just as ideals around the creation and sharing of knowledge have shaped Wikipedia, so too have ideals around the role of technology in our lives and its potential to create a better world. Narratives around the revolutionary collaborative nature of Wikipedia's content creation often sideline the role of

social movements in Wikipedia's construction and how ideals around openness have shaped the encyclopaedia. As discussed Wikipedia is undeniably a game-changing format for encyclopaedia production, but it also carries with it some well-established ideals relating to freedom and openness from F/LOSS and the open movement. Indeed, the success of many open source digital media projects today demonstrates the importance of this ethos and ideology in attracting and retaining volunteers.

Considering these movements is important in light of a turn back to the ideals of the early web (Schofield 2014), not only in regards to maintaining an open and democratic space, but also in terms of the ideals around hacking, making, creating and crafting that drives much of Wikipedia, and creativity on the web. As Matt Ratto and Megan Boler note, "DIY ethos and culture provide a compelling and coherent framework for understanding contemporary forms of activism and collective identities" (Ratto & Boler 2014a, 23). Where Web 2.0 positioned technologies as new and revolutionary (Tapscott & Williams 2006), reflecting back to past forms of collective action demonstrates how projects like Wikipedia evolved through a combination of technological innovation and long-held beliefs about access to knowledge.

Such beliefs are expounded by Free Software Foundation (FSF) founder Richard Stallman who believes that it is economically prudent and morally right to ensure software is both free from license restrictions and cost. He wrote an influential manifesto to this effect in 1984, *The GNU Manifesto*, that now provides much of the rhetoric for the free software movement. He uses strong terms in the manifesto, a sort of call-to-arms for hackers, whom he calls "comrades," and he

stresses the need for the manifesto so he can “continue to use computers without dishonour” (Stallman 2014). Similar to Jimmy Wales’s comments about love (Chapter 1) and the motivations of Wikipedians, contributing to the development of software is an important social contribution with moral and ethical dimensions:

Creativity can be a social contribution, but only in so far as society is free to use the results. If programmers deserve to be rewarded for creating innovative programs, by the same token they deserve to be punished if they restrict the use of these programs.

(Stallman 2014)

The manifesto rallied a huge number of early programmers and hackers to the cause of free software. It gave form to the feelings of many early computer and internet users, institutional identity to the hacker culture and, “For many years the FSF was the single most important focus of open source hacking, producing a huge number of tools still critical to the culture” (Raymond 1998).

On the other hand, Eric Raymond (Raymond 1999; Raymond 1998) saw new modes of production and design as not so much about morals as they are about creating more opportunities for innovation, where the system would sort itself like a free market. As an alternative to the FSF, Raymond and colleague Bruce Perens formed the Open Software Initiative, as “Raymond agreed that a significant part of the problem resided in Stallman’s term “free” software, which understandably might have an ominous ring to the ears of business people” (von Hippel 2005, 98). Raymond notes differences between degrees of zealotry and degrees of hostility to commercial software. He says, “the reason it is worthwhile to point out

the distinctions is because they imply different agendas, and different adaptive and cooperative behaviours” (Raymond 1998). While tacit, there are indeed rules to the membership of the open software movement, and it is these rules and relationships that shape participation and have influenced the development of norms in Wikipedia based on concepts of openness.

Raymond notes that membership within the community is quite well enforced by its norms:

All members agree that open source (that is, software which is freely re-distributable and can be readily evolved and modified to fit changing needs) is a good thing and worthy of significant and collective effort.

This agreement effectively defines membership in the culture. (Raymond 1998)

The agreement also guides actions within the community and within the development of software, its uses, and technology. Like in Wikipedia, the norms and ideals around openness are interpreted by new and existing alike to coordinate participation. Also, like Wikipedia, the open source movement is a socio-technical system – it is not just about software development, there is a long political cultural and moral history to the movement that is guided by rules of membership and community norms.

The hacker ethos that has come to be synonymous with the open movement has also attracted many users to a variety of user-led sites of cultural production and action (Coleman 2011). And as more people became involved in a variety of projects including Wikipedia, it became apparent that the principles associated

with F/LOSS were applicable to more than just the process of developing software.

The correlations between open source software and participatory governance come into sharper focus when considering the fact that Mozilla extends the open source idea beyond programming: Firefox's user community helps with marketing campaigns, responds to queries on Mozilla message boards, and writes and edits documentation for developers. (Booth 2010, 2)

At the heart of these initiatives is the ideology of freedom of and access to information and resources. This was the original vision of Berners-Lee who had envisioned an open web, where the ability to "view source" was integral to making this new technology accessible, interoperable and usable (Berners-Lee 2010). Fred Turner notes about the idealism attached to the early internet that, "in its shiny array of interlinked devices, pundits, scholars, and investors alike saw the image of an ideal society: decentralized, egalitarian, harmonious, and free" (Turner 2006, 1). Wikipedia shares an equally utopian vision where users share in the "sum of all human knowledge" (Wikipedia 2014q). Projects like Wikipedia have succeeded in part because people genuinely subscribe to the ideals of the project. In Wikipedia these ideals are enacted by a complex rule-bound system that has enabled a functioning community. The ideals associated with freedom and access to knowledge act as a coordinating mechanism for the system, that while not free of friction, is nevertheless an effective solution for managing and developing the project.

Indeed as Raymond notes, the idea that releasing working versions to end-users would cause an inordinate amount of problems proved a moot point as Raymond (Raymond 1999, 29) noted in his paper *The Cathedral and the Bazaar*, “given enough eyeballs, all bugs are shallow.” This analogy can also be applied to Wikipedia – it has become renowned for the speed at which it reverts vandalism, through the development of technical tools and bot editors that work alone or in conjunction with human editors (Viégas et al. 2004; Geiger 2014).

While this aspect of openness seems to imply cooperation, in reality it can be quite different. In practice, friction and conflict occurs as competing frames overlap and as a result, “flame wars and disputes, online and off, seem to dominate everything” (Kelty 2008, 112). In Wikipedia ongoing disputes – the edit wars that characterised its early history – are far less prevalent due to the tight regulation of community behaviour through its enforced norms, implementation of policy and imposed sanctions (see Appendix B) (Jemielniak 2014). As a result, conflict becomes a generative friction that occurs in boundary spaces like talk pages where competing frames overlap, and is regulated by deploying boundary objects like policies and guidelines. The generative friction then enables solutions to be negotiated among different actors to problems raised in the editorial process. A commitment to the shared ideals that policies and norms are based on also coordinates action in these boundary spaces and Gabrielle Coleman notes a similar commitment to principles in the Debian community, as “despite clear differences in opinion that are unquestionably made evident during periods of crisis, people participating in a collective endeavour are nevertheless situated in a shared social space and committed to a baseline set of goals” (Coleman 2013, 157).

The history between free software and open source and the tensions between ideals and practices highlights the political background of the movement and the complex relationships that exist in large, open digital communities. The flexibility of the concept of “openness” and how it has been interpreted and deployed differently demonstrates the ability of such communities to adapt as needs and culture changes while still maintaining shared ideals around access.

As technology increasingly colonizes and structures more aspects of our lives it is becoming increasingly important that the constitutive nature of technology as socially shaped is recognized [and]... the discursive struggle between the FSF and the OSM is an important challenge for wider society to recognize that values are being instantiated within technological forms that can and should be contested before they become sedimented. Introducing democratic accountability to code may well be the democratic challenge of the twenty-first century and steering the implementation of technological artefacts will increasingly contribute to our ability to keep our future open and democratic.

(Berry 2004b, 83)

Wikipedia has a significant place in the wider web ecology, and its practices as a non-profit digital media institution contribute to an “open” and “democratic” future. The controversies that occur around issues of governance and organisation are important for the encyclopaedia’s future as it is these debates

that comprise attempts to negotiate the values of the platform that will be instantiated by policies, rules and code.

3.4 The emergence of rules in Wikipedia

Wikipedia is to culture as the GNU/Linux operating system is to software: something no one would have predicted could have been done, yet which an inspired leader and devoted followers built for free, and to remain free. (Lessig 2008, 161)

In early 2001 Wikipedia co-founder Larry Sanger met his friend, Ben Kovitz for an informal meal and relayed his problems with generating content for an online encyclopaedia he was coordinating called Nupedia. Kovitz suggested a solution may be a new technology that he was familiar with – a wiki – a freely editable web page (Lih 2009). Sanger saw the possibility of using this technology as a simple way to coordinate contributions from editors and reviewers alike (Sanger 2006). Users could click a link and edit a page directly in a relatively simple markup language (as compared to html), with revisions immediately available for everyone to see.

This completely changed the possibilities of a structure for Wikipedia. While traditional wisdom was always in favour of closed expert-led models of production, the wiki opened up new ways to combine, create and produce knowledge. As Andrew Lih (2009, 44) notes, “Quality meant being selective and restricting who could participate in editing. But WikiWikiWeb [the first wiki site] completely tore down this barrier to entry, and encouraged people to create or

change information, immediately.” Wikipedia was initially established as an experiment on January 15, 2001 and ran alongside Nupedia as an exercise in content creation, in essence a quick way to accumulate the content Nupedia had been struggling to produce. The wiki format appealed to the open source and free culture of early internet users who were used to having access to technology, and a community began to grow up around the creation of encyclopaedic content on the Wikipedia site.

Initially, the wiki was used to facilitate communication between software developers and was named after an airport shuttle Ward Cunningham had taken on a trip to Hawaii (wiki is ‘quick’ in Hawaiian) (Wikipedia 2014b). Cunningham wanted to know how ideas moved around a company and he had an idea that engineers were slow to uptake ideas that hadn’t already been proven to work. Based on the idea of Hyper Cards linking to each other, the wiki would push the boundaries of what people knew about particular ideas and concepts. And according to Cunningham one of the key abilities of the wiki is that it allows the user to create links to pages for ideas and concepts that don’t exist yet. With infinite linking possibilities, people in Cunningham’s company would click the links to see what others had to say about a certain subject until they came to the edges of the wiki and found blank hypercards. Cunningham found that rather than leave these pages blank, people would fill them out – they *loved* to write (Wikimedia Foundation 2014c).

When Cunningham was asked if he could port this hypercard system to the web, he experimented in using markup to replace the need to edit in HTML and upload web pages via a server. He recalls the point of this process was not only to see if

this would work (he was fairly confident it would), but to see if he could make it *fun*. Just as people wouldn't leave his desk because they loved using the hypercard system – could he port that element of fun to writing on the web?

Could I do it? Could I get forms, and I had to make up this idea of markup, because I had to account for the fact I didn't have the buttons that I had in hypercard, you know it's a different system, but I made markup, and then I tried it, and then I sat there and I started typing stuff in and it was as much fun as I remember it. I knew that it was fun to do it in hypercard, I knew people wouldn't leave my desk, but I could sit there on the web and I said I've got it. This is the feeling. You know I pay attention to what it feels like to use.

(Wikimedia Foundation 2014c)

For Cunningham the purpose idea of a wiki was to encourage the sharing of ideas and he encouraged users to submit content using this new tool anonymously. He thought that if content was attributable then it would afford someone ownership of the ideas and in turn discourage others from editing another person's ideas (Wikimedia Foundation 2014c).

The wiki therefore shaped the egalitarian culture of Wikipedia because as Sanger (2006, 316) notes, "Wiki software *discourages* the exercise of authority." And as developer Cunningham (2006) notes, "The mechanisms of editing and organising are the same as those of writing so that any writer is automatically an editor and organiser." He saw a wiki as a place to "assemble, guide and transform

community” while also leaving “room for other’s innovation” (Cunningham 2006). It is in the wiki that “democracy, equality, and justice switch from being abstract ideals to concrete social practices” (Milberry 2008, 338). In its design, something as small as the ability to link to a page that had not yet been created signals that the technology is open and aims to foster collaboration, connection and the creation of new knowledge among users – ideals that fit in well with the ethos of Wikipedia

While the ideals upon which Wikipedia is founded aligns with this vision, the reality is much messier. With its multitude of policies, rules and norms that are often difficult to navigate, it is arguable just *how* democratising the technology has been. As Morgan et al. note, “The same technical features that contribute to Wikipedia’s success also reveal its embedded cultural values. Wikipedia’s open editing model embeds western notions of equality directly into the technology itself by allowing any editor to create, delete or modify the content of an article” (Morgan et al. 2012, 3492). However the wiki *is* popular in open social movements and those communities who value (in theory at least) low barriers to entry. It has been used in both non-profit (Open Street Map, Ushahidi) and for profit contexts (Wikia, WikiAnswers) and some users contribute across different wiki communities bringing with them knowledge and experience of these communities, including interpretations of a “wiki” culture. Part of the power and appeal of the wiki as the tool of choice for social movements is the ability to completely remake content (Milberry 2008). In most closed and/or proprietary platforms, the ability to create content is limited to adding content to existing content, be that in commenting, liking, remixing, and uploading, while the wiki has the ability to completely rewrite existing content.

It is useful to recognise the wiki's ability to not only to rewrite content, but its ability to publish and organise content. Users can theoretically easily move from being a writer – adding content – to becoming an organiser as the process and technical skills required in using the wiki are much the same. As Reagle notes, “The application of the wiki platform with few encyclopaedic features enables surprisingly sophisticated content creation” (Reagle 2010, 6). Users utilise markup to achieve higher-order tasks like formatting and including graphic features on the article pages as well as creating tags and other organisational features (e.g., the stub template when appended to an article reads, “This article is a stub, please help by expanding it” or “The neutrality of this article is disputed”, with links to the discussion on the talk page). While others use the code to design bot editors to run tasks around the encyclopaedia, in both cases mastery of the wiki technology is required and undertaking such tasks works to demarcate these users as experts in Wikipedia.

So while the wiki embodies a certain democratic ideal in its form and allows for this type of creativity, its simplicity also means that it lacks the structure of other software designed to enable and foster discussion. Reading early iterations of talk pages becomes either a guessing game as to who posted what comment, or a continual checking back and forth of the history page to decipher who added what comment, and when. In order to get around this “blank slate” nature of the wiki, it became the norm to sign off posts with the username of the contributor and the time and date in UTC of the contribution, while at the same time users started indenting responses to related posts. Extending the functionality of the wiki, an automated software bot SineBot, patrols recent changes to the encyclopaedia and adds a tag to unsigned comments by both registered and unregistered users (Tkacz

2015; Wikipedia 2015e). This technical hack shows the importance in Wikipedia of attribution and transparency in the discussion. However discussions can still be hard to follow, especially if users who are unfamiliar with the indentation of comments reply “out of line” with the rest of the conversation. Also, as some particularly heated discussions can run for thousands of words, it becomes necessary to reorder the conversation and restart the indenting process by inserting section breaks (literally writing “section break” between lines of conversation). As Jemielniak (2014, 93) notes:

Using wiki software as intended forces the community to work to find messages, since it is more difficult for uninvolved Wikipedians to follow the discussion. On the English Wikipedia, therefore, the control of flow of discourse by the community is more important than the ease of conversation between two or more editors.

This is one of the first clues as to how talk pages function as boundary objects in Wikipedia, as users must work to define and maintain boundaries and position themselves in the discussion. In this context the wiki is assigned importance by users because of its ability to archive and record interactions. The wiki affords a level of transparency to the encyclopaedia that is often associated with the concept of openness and Wikipedia’s claim to being an “open” platform. This open approach to publishing, where editors can see what has been contributed from whom and participate in editorial decision-making provides a theoretically egalitarian space for users to collaborate and contribute, in a structure akin to Stark’s (2009) heterarchy. However the wiki also affords the space for the

creation and enforcement of policies and norms, in turn making entry difficult for new users unfamiliar with the rules and standards of the platform.

The introduction of the wiki technology and the Wikipedia experiment further highlighted Nupedia's high barriers to participation and the laboriousness of its processes. Its expert structure was relying on the goodwill of volunteers, yet providing them with a lengthy and bureaucratic editorial and peer review process. As a result contributions were not aggregating at the rate envisioned by Wales and Sanger, and Sanger noted, "It might have appeared to have died of its own weight and complexity" (Sanger 2006, 308), as "we should not have assumed that such a complex system could be navigated patiently by many volunteers" (Sanger 2006, 313), perhaps a sentiment that might equally apply to Wikipedia in 2015.

Wikipedia continued to run as a parallel project to Nupedia, however its article count quickly overtook Nupedia's and continued to rise exponentially. Wales and Sanger disagreed about the validity of the Wikipedia project and its model as Sanger still saw experts being central to the editorial process. In a mailing list discussion he stated, "There are many ways in which the projects, both Wikipedia and Nupedia, will stagnate and even possibly go downhill if I am not constantly and actively involved" (Omdir.com 2002). Sanger realised the necessity of an administrator – someone who would take on the role of 'expert' in the amateur encyclopaedia, perhaps what he didn't foresee was how easily this role would be assumed among a distributed group of volunteers.

In the struggle for platform dominance between the two new encyclopaedias, between the expert and the amateur, the managed and the self-regulated, much of Wikipedia's ideology was refined and firmed. Wikipedia quickly amassed

contributions from users and Lih states, “Wikipedia achieved more in weeks, by volume, than Nupedia had in one year. It was a profound message” (Lih 2009, 67). The two projects continued to run alongside until it became clear that Wikipedia, with its article count now numbering in the thousands, was a far more successful platform for mass collaboration than Nupedia. Nupedia was officially abandoned as a site in 2003 and what little content it did have has since been assimilated into Wikipedia (Dalby 2009).

Part of Wikipedia’s initial success was based on the fact that it is a social enterprise – users volunteered for a social good, not for commercial gain (Tkacz 2011). In 2002 when the founders mused about placing ads on the site, the backlash to the suggestion was swift and strong. So offended were the Spanish language volunteers that they took their content wholesale from the wiki and moved it to another server, an event that is known in Wikipedia’s history as the “Spanish Fork.” The Spanish Fork highlights one of the earliest incidences of the tensions between volunteerism, commercialisation and professionalisation, in the encyclopaedia and the need for paid employees in the project.

The Spanish Fork prompted Wikipedia, in an effort to retain the trust of users, to change from a dot com to a dot org domain and assure users of its continued status as a non-profit (Lih 2009). This domain change formalised standards in Wikipedia – in the act of changing to a dot org domain, the platform materialised the ideals held by users and values associated with openness, non-commercialism and freedom to access. It also contributed to the establishment of Wikipedia as a non-profit enterprise and the formation of the Wikimedia Foundation.

The Wikimedia Foundation (WMF) is the governing organisation for Wikipedia. Formed in 2003 it provides legal support, funding, and major technical infrastructure for Wikipedia (among other Wikimedia projects). Mayo Fuster Morell (2011) points to three issues that contributed to the formation of a formal governance structure for Wikipedia. First, the uncertainty created by the Spanish Fork; second, the practical cost of maintaining the project; and third, the protection offered by non-profit status to preserve Wikipedia's educational potential. Fuster Morell says, "The Wikimedia Foundation ...reveals the hybrid character of the Wikipedia ecosystem as a whole" (Fuster Morell 2011, 327). By this she means the relationships between an ad-hoc volunteer community, its rules and the need for some form of organisation and formal rule to protect the voluntary nature of Wikipedia. Indeed, if Wales could have found venture capital funding for the project at the time, the project would have been very different, and may never have got to the point where non-profit status was a necessary embodiment of the project's ideals (Fuster Morell 2011).

While the domain change may seem a small change, it defined Wikipedia clearly and early on as a charitable operation. This commitment to non-profit status was important for Wikipedia to promote its mission and also retain its volunteers. It is also important for the day-to-day running of a global platform with a relatively small revenue and staff (the WMF has 250 staff and \$48.6 million in revenue compared to Google's 55,419 employees and \$66 billion in revenue (Wikipedia 2015f; Wikipedia 2015a)). It allows tax-deductibility for supporters (although this does not apply to people who donate from countries outside the US, as the WMF charity is headquartered and registered in America), as well as providing a legal position where Wikipedia is not responsible for the accuracy of information, but

where it does have the capacity to protect volunteers from prosecution. The non-profit status continues to be an important feature of the organisation today for sustaining collective volunteer action as it signals the nature of creativity on the platform.

Currently the Wikimedia Foundation is headed by Executive Director Lila Tretikov and has eight departments: Office of the Executive Director, Engineering and Product Development, Community Engagement, Fundraising, Legal, Communications, Finance and Administration and Human Resources. There are approximately 250 staff members with the bulk being employed in Engineering and Product Development. The Foundation is headquartered in San Francisco in the United States and overseen by a board of up to ten trustees from around the world. The WMF works on a thus far sustainable many-small-donors model (despite some disagreement among the community as to the effectiveness of the site-wide banners during the annual fundraising drive), although it receives substantial funding from three philanthropic foundations.

The Foundation is part of a larger Wikimedia Movement that includes independent “chapters” designed to promote Wikimedia goals and ideals in different regions around the world. The chapters do not have a formal organisational structure related to the Foundation, nor a formal remit and are typically groups of Wikimedia volunteers who are passionate about the movement and the cause. The chapters are funded in part or whole by the WMF, although the nature of the funding is changing in recent years with the requirements for chapters seeking WMF funds to become professionalised and meet strict criteria,

and is one of a number of areas where tensions between users and the Foundation have manifested.

Indeed the Foundation and the community are often positioned in opposition to each other in debates about the future of the platform. The creation of a new Community Engagement team to replace a community advocacy team demonstrates the importance of the foundation maintaining a working relationship with volunteers, and the bottom up input into the governance process. It highlights the struggle between the professional and amateur, organisational and volunteer and as Yochai Benkler notes, “It’s possible to create a system that depends on massive self-sacrifice, but it’s extremely tough to sustain it” (Benkler 2011, 84). Wikipedia is at a period in its development when the balance between community and Foundation support for its sustainability is being negotiated. In an announcement to the Wikimedia-l mailing list, Executive Director Lila Tretikov (2015) said:

Among the WMF’s top priorities for 2015 is strengthening our engagement with Wikimedia editors and volunteers. Today we are taking the first step by bringing together the people who know our communities best and asking them to break barriers and improve engagement. Everyone at the WMF who carries responsibilities directly related to the communities will join a new Community Engagement department.

Forming a team that is dedicated to improving the relationship with “the community” signals the difficulties in maintaining a platform-wide approach to creating the “sum of all knowledge.”

Community is also a contested concept in Wikipedia, and the formation of “one” editing community was always going to be problematic in light of differing interpretations as to what an online encyclopaedia *is*. One of the first technical mechanisms – the ability to protect an article from changes by new editors – defined the boundaries between existing users and new users and stemmed from “prank” edits that were brought to the media’s attention by John Seigenthaler.

Seigenthaler’s biography was altered to include incorrect information that he was involved in the 1963 assassination of then US President John F Kennedy. The edits were eventually traced back to an employee of a courier company who had contributed them as a “prank,” but the controversy was one of the first to highlight the real legal ramifications in terms of libel of an encyclopaedia that anyone could edit. It contributed to the formation of the “semi-protected” status of articles, a tool that prevents unregistered and new editors from editing pages that have the protection enabled (Reagle 2010). The incident was also one of the first Wikipedia controversies to gain traction with the wider mainstream press and was covered by the *New York Times* in an article about revisions to the “anyone” can edit policy. The controversy also prompted Wales to speak about how openness was being constructed in relation to access and “Wales argues that to equate openness with defamation is like equating a restaurant’s steak knives with stabbings” (Reagle 2010, 85).

However as Wikipedia continued to expand, the actions of new users weren't the only issues of concern. One of the most prolific editors, who was interviewed about his wiki work in *The New York Times*, the user Essjay maintained on Wikipedia that he was a tenured professor of theology. In this identity he rose through the ranks of the community, eventually holding positions of power in Wikipedia and becoming an employee of Wales's commercial wiki site, Wikia. This appointment was to be his undoing as critic Daniel Brandt, a member of Wikipedia watchdog forum, *The Wikipedia Review*, was investigating Essjay's true identity (The Wikipedia Review 2007).

According to the information posted on his new Wikia profile, Essjay was not a tenured professor or graduate of theology, but 24 year-old Ryan Jordan from Kentucky in the United States (Leonard 2013). It is interesting that in the conversation on *The Wikipedia Review* following the revelations, members wondered if anybody outside Wikipedia would actually care who Essjay really was, and what the implications of such fraud were for the project. As Jemielniak notes in his discussion of Essjay, "For Wikipedians, the problem with what Essjay did was not that he created a false persona. What infuriated many members of the community was that he referred to his fake credentials in discussions" (Jemielniak 2014, 114). Here Jemielniak highlights the importance of adherence to norms for defining expert boundaries. Identity, in Wikipedia, is debated in as much as editors may believe that current problems with vandalism and behaviour would be mitigated by users having to use a real name. For others however, the essence of an open platform means not having to disclose anything at all, editors are free to move in and out of the site either with an identity of their choice or anonymously.

Both the Seigenthaler and Essay cases do however bring to light another actor in Wikipedia's construction, and one that is often overlooked – the media. After trying for some time to contact staff at *The New York Times*, Brandt eventually confirmed that the paper would be appending a notice about Essay's identity to the initial article (The Wikipedia Review 2007). However the implications for Wikipedia outside of its own editorial community were also becoming apparent and after several tech blogs including *Valleywag* picked up the story. One Review member who had been following the case commented, "I am starting to get a feeling this will get more traction in the mainstream than I initially anticipated... this minor "correction" has legs" (The Wikipedia Review 2007). Essay eventually left the project at Jimmy Wales's request and soon after left the position at Wikia. This controversy revealed authentic credentials, those traditionally seen as an integral part of defining an "expert," was not central to interpreting an "expert" in Wikipedia. The resulting discussion centred around the value of contributions and emphasised the norm, "focus on the content, not the creator" (discussed further in Chapter 4) (Wikipedia 2014r).

The media coverage of both controversies, along with coverage of new Web 2.0 platforms and Time's infamous choice of *You* as its "Person of the Year" in 2006 all served to drive potential users to the site. In 2007 participation in the project spiked, and between 2005-2007 new editor numbers increased dramatically turning the project from one with a few thousand active contributors to one with over fifty thousand editors (Wikimedia Foundation 2011b).

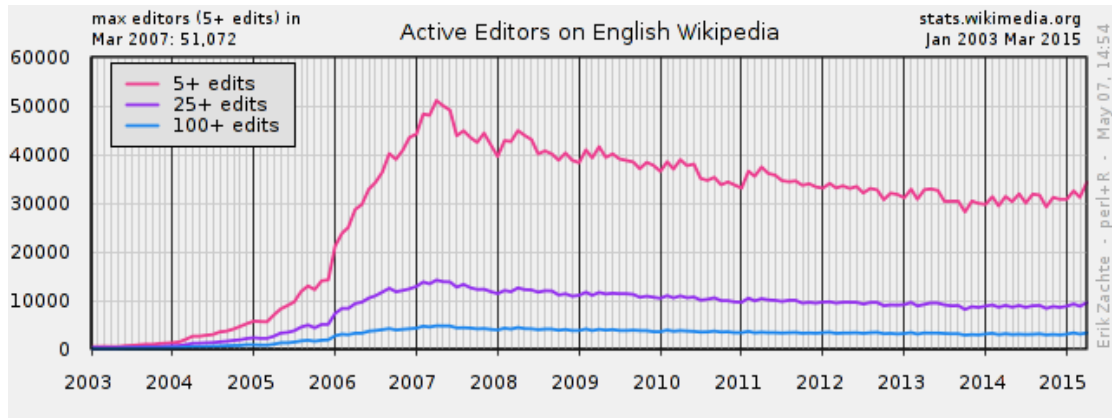


Figure 3.1: Active editor numbers by year (Wikimedia Statistics 2015)

However after this spike, active editors (those users who make more than 5 edits per month) began to decline and in 2011 a comprehensive survey was undertaken of the editing population. The survey was self-selecting so may overly represent the more committed volunteers, as opposed to the general, casual editing population, however it did highlight trends that have been highlighted by other studies of the Wikipedia editorial community (Wikimedia Foundation 2011b). It revealed the typical profile of a Wikipedia editor that is still used today – 18-35, educated, from the northern hemisphere and male. Indeed the survey revealed that less than ten per cent of editors were female. This percentage has seen a slight increase in the last few years through a dedicated effort to address the gender gap (discussed in Chapter 6), however editors are still overwhelmingly male. The editor survey also addressed the perceived crisis in participation that was occurring after the editor spike of 2007 as new and active editor numbers began to decline year by year (Silverman 2013; Wikimedia Foundation 2011b).

3.5 Self-regulation and rule formation in Wikipedia

The decline has been partly attributed to the difficulty in negotiating the rules of the project, resulting in contributions to the encyclopaedia being rejected, either by other users or via automated processes (Halfaker et al. 2012). As Wikipedia evolved from an ad-hoc experiment (which succeeded in part over Nupedia because it was easy and fun), it required some form of regulation and its initial ideals and values began to be materialised in norms, processes, and procedures. As more people joined the platform, these then became standardised as policy, guidelines, code, templates and legal requirements. For in Wikipedia, rules don't just refer to the explicit policies and guidelines that guide the encyclopaedic content production process (of which there are 306) (Wikipedia 2014m). As a sociotechnical system rules exists as norms, algorithms, code, templates, user interfaces, and organisational requirements, all of which contribute to a high degree of regulation.

In the midst of this exceptional self-regulation, users started to create another tool intended to inform and guide behaviour and manifest norms – essays. Essays, like policy and guidelines, are often an instantiation of ideals and values that can “use humour, hyperbole and anecdote to convey serious messages about proper editor behaviour, high-level principles or best practices for editing” (Morgan et al. 2009, 315). On the English Wikipedia in February 2014 there are 2,899 essays written by users – which is 1521 essays written in the main Wikipedia governance space and 1378 essays written in user space (as a subpage of a user page) (Wikipedia 2013a). They include things like *Wikipedia:Grief* that outlines the “five stages of grief which every Wikipedia spammer will go through” (Wikipedia 2015l);

Wikipedia:Don't stuff beans up your nose which advises against telling users what not to do lest they do it; or *Wikipedia:No climbing the Reichstag dressed as Spider-Man* that warns editors – in relation to disputes – to not take things too seriously, and advises people to have a “nice cup of tea and a sit down,” which links to an essay of that name (Wikipedia 2015n). Unlike policies and guidelines, Wikipedia essays are not subject to a formal consensus-based adoption process and have no official authority. However, essays show many similarities to policies and guidelines: they are often collaboratively created, heavily edited, and cited on article talk pages—evidence that they may serve a regulatory function.

Essays are one of a number of tools that shape participation in the encyclopaedia. These tools and the rules they enact in Wikipedia simultaneously allow the creation process to run smoothly (work), while also excluding people from the editorial process (not work). Rules govern everything from the notability of a particular encyclopaedic entry to the correct usage of em and en dashes. This standardisation and codifying of approaches to content creation enables effective regulation of the content creation process. The process of standardisation occurs when the interpretative flexibility of boundary objects disappears and actors come to a common, standard shared understanding via discussion. This shared understanding is then codified into policy – it becomes a standard, described by Bowker and Star (1999, 13) as “any set of agreed-upon rules for the production of (textual or material) objects.” While not at the scale discussed by Bowker and Star, Wikipedia policies are still an effective set of standards that regulate the editorial process. The policies are easily interpreted across boundaries, and can in turn be redeployed into spaces of conflict to assist in generating new

understanding and shared meanings, these spaces thus becoming areas of Stark's generative friction.

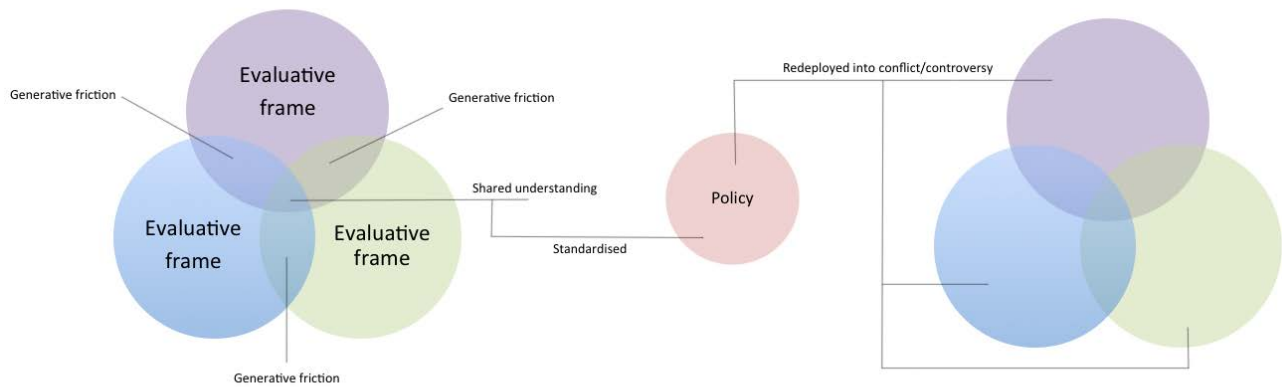


Figure 3.2: A model of rule formation in Wikipedia

In this process of redeployment the policies “[throw] off residual categories” (Star 2010), and in a cycle become boundary objects that are used in controversies discursively to demarcate expert boundaries – for example, “you will find in this instance the policy does not apply”, “this is a clear case where we should follow the policy” or “please read this policy before making statements such as this again.”. Indeed many studies have focused on the role of rules in coordinating collaboration between editors (Butler et al. 2008; Cosley et al. 2005; Kittur et al. 2007; Kriplean et al. 2007; Morgan et al. 2009; Viégas et al. 2007). There is thus a popular perception that the multitude of rules and policies that the Wikipedia community has created in order to coordinate the contributions of its globally distributed volunteers has created a culture that is difficult for new editors to navigate and is hostile to existing editors who deviate from the community’s strictly enforced norms.

Indeed Jemielniak (2014) found conflict is the primary mode of interaction on Wikipedia. However rather than hinder the process of forming meaning and producing an encyclopaedia, this process of debate and discussion actually creates an atmosphere of “generative friction” (Stark 2009). As editors work with each other to achieve consensus, find commonality and a standard that can be agreed upon, Jemielniak also notes that in Wikipedia dissent can actually be productive, driving creativity and innovation.

For while the Wikimedia Foundation provides an overarching governance structure for Wikipedia, the encyclopaedia still relies heavily on its original self-organising form where decisions about the future of the platform were made according to discussion and consensus. The consensus process is one of the most valued processes in the community and embodies the ideals of neutrality, openness and rationality. In theory all actors have an equal voice during the process, but as will be discussed in the following chapters, this is not always the case.

Structurally, the organisational form that enables this discussion is what Stark (Stark 2009, 19) would term a heterarchy:

Heterarchy represents an organizational form of distributed intelligence in which units are laterally accountable according to diverse principles of evaluation. Two key features are at work here. In contrast to the vertical authority of hierarchies, heterarchies are characterized by more crosscutting network structures, reflecting the greater interdependencies of complex collaboration. They are

heterarchical, moreover, because there is no hierarchical ordering of the competing evaluative principles.

Stark sees this process as being integral to the functioning of a heterarchy, in such an organisational form the friction that is produced when competing frames meet can be a source of innovation and creativity for the organisation as new and novel solutions to problems are found. Indeed in Wikipedia as problems have occurred, innovative solutions have been found. For example in the early days of the encyclopaedia, conflict occurred around the validity of article claims. As discussions and frictions escalated due to competing viewpoints and differing versions of truth, there was a need to attribute claims to a source, and in time the norm became to cite reliable sources for the content of articles. This eventually materialised in the project as two of the site's three core content policies – no original research and verifiability – along with the guidelines for identifying reliable sources (Wikipedia 2015m).

Wikipedia didn't start off with a multitude of hierarchical structures. Indeed much of Wikipedia's early innovation and perhaps even success stemmed from the fact that its organisational structure was flat and open with few rules. The wiki technology enabled this structure to emerge as pages can be created by anyone, at any time, with every user free to contribute to the page and project. This may be as simple as an editor creating a page to manage a list on a certain topic, through to the creation of project pages where larger issues related to Wikipedia's governance can be discussed. In this egalitarian space, along with a multitude of article content, editors have also created a plethora of rules and a hierarchical

category system for organising content (Butler et al. 2008; Müller-Birn et al. 2013; Viégas et al. 2007; Kittur et al. 2007). The community have been so successful at this content creation that in July 2014 for every one article page, there were over six of these governance pages (Wikipedia 2014g) with the number of each increasing daily. This is one of the key tensions in the platform, between one of the original pillars of the project – ignore all rules – and the creation and enforcement of both its behavioural and content rules by community members.

Ignore all rules: Janitors and jerks

Early perceptions of Wikipedia and its amateur contributors were that the lack of authority in the project made it a site of misinformation where consensus took the place of fact (McHenry 2004; Lanier 2006; Sanger 2004; Seigenthaler 2005). Jaron Lanier calls this collaboration between amateurs, the “hive mind”, and critiques its role in the knowledge production process as being “too chaotic to be fed back into itself” (Lanier 2006). While Robert McHenry (2004), a former editor of Encyclopaedia Britannica, considers articles to be constantly in a state of flux as they are open to the edits of the “uninformed and semiliterate meddler.”

The early Wikipedia editorial community, most of whom were adept at using the wiki, quickly developed norms in relation to the production of articles and behaviour based on the ideals of openness and egalitarianism and as Jonathon Zittrain (Zittrain 2008, 143) states, Wikipedia has, “developed a system of self government that has many indicia of the rule of law without heavy reliance on outside authority or boundary.” This is because in keeping with open source culture, users were initially encouraged to “ignore all rules” (Wikipedia 2014c),

however the emergent nature of the project, and its rapid expansion, required of the community some form of self-management and a “discipline and commitment to norms” (O’Sullivan 2009, 87). Wikipedia self-regulates the editorial process without any formal expert editorial oversight through the creation and enforcement of the 306 policies and guidelines that were created in response to conflict in the community (Kriplean et al. 2007). As Jemielniak (2014, 59) notes, “Conflict is possibly the most common form of interaction that people take part in or observe on Wikipedia” and in the projects early days edit wars among participants were common. He goes on to say that edit wars escalate quickly and often “winning an argument is simply about staying in the discussion long enough” (Jemielniak 2014, 67). It is here that the established groups have an advantage in the conflict as they are more efficient at using Wikipedia’s norms, values and processes and are already proven at being able to “patiently navigate” the complex system. This patience serves the existing user group well in debates with new actors in the controversy who may, in the end, not have the vested commitment in the platform that existing user groups have to stay in the conflict long enough for their position to win out.

Due to the controversy surrounding early edit wars in Wikipedia before many policies were formed, Wales created the status of administrator (“admin”), and was quick to stress that this was “no big deal” and likened admin duties to those of a janitor (Wikipedia 2014i). An admin is the most common term for those in the community who have responsibilities or technical privileges over and above a normal user (and is used here to refer to both administrators and the less common bureaucrats). Users may request adminship or be nominated, and admin status is granted after a community-run process to establish suitability. Wales’s phrasing of

this position is important in firming Wikipedia's openness as a platform, where users are committed to the egalitarian ideals and structure that discourages top-down intervention. Broadly speaking users fall into the following categories:

1. Unregistered user/IP (visitors who anonymously make an edit)
2. New users (registered account holders with less than ten edits)
3. Autoconfirmed and confirmed users (registered users who have more than ten edits, can include very active editors without administrator status)
4. Administrators (users who have technical privileges)
5. Bureaucrats (users who can grant admin privileges)

However as norms developed in the community, tensions began to develop in the community between admins and other editors. Admins were thought by many to be enforcing the rules too harshly, and not assuming "good faith" (another founding principle) with the large number of new users. Communication on the talk pages was often heated and resulted in many users leaving the project . And while Wikipedia is not a social networking site, it has been found that contributors participate more and are more likely to stay when they are acknowledged by their peers in a friendly and social way, such as being awarded a "Barnstar" – the Wikipedia equivalent of a gold star – for efforts around the site (Restivo & van de Rijt 2012).

Indeed, people skills are as important as technical skills in open communities – sometimes even more so (Raymond 1998), and the behaviour of admins has left many people blaming their lack of soft skills and harsh criticisms of new users' edits as one of the factors contributing to issues with participation. Much has been

written to this effect on popular tech news sites, with rejoinders and comments making particular reference to the culture of these administrators in Wikipedia:

Now a lot of jerks seem to be in control and more well-versed in functionality and protocol than doing good research and writing and fiddling with tedia. And yes, they very much "cherry pick" and the lot of them seem more aggressive about strict interpretation of narrow readings of simple rules, rather than the big picture of what wikipedia [sic] is about. (TakoKnight 2011)

There's an easy reason for this. The admins are, generally speaking, dicks. This wouldn't be a problem if they were in touch with the community, but they aren't. (Anonymous Coward 2011)

In the following years tensions have grown among different editors as to the role of admins, the Wikimedia Foundation, the way the norms and policies are enforced and also the role of the different layers of bureaucracy in the community. This is not to say that the rules in the community are in opposition to its openness, or are the sole cause of higher barriers to entry into the community. Indeed as Zittrain notes, Wikipedia has a remarkable ability to self-regulate without reference to an external authority (Zittrain 2008) and this contributes to its construction as an open egalitarian platform. Similarly Hess and Ostrom (2007 7) found that sustainable community organised around a common resource had a "rich variety of specific rules," although they qualify that this has only been observed in relation to small, homogeneous systems. Wikipedia does have a

plethora of rules, policies and guidelines that govern community behaviour and the production process and while they clearly affect participation in the project, these rules allow the functioning of a free and open encyclopaedia.

Wikipedia's core policies as an expression of ideals

As Bryant et al. (2005) found in their early study on the Wikipedia community, participants moved from engaging in activities concerned with the production of articles to those that concerned the health of the community as a whole. This means that rather than fixing spelling or updating statistics, Wikipedians could turn their efforts toward constructing policies and guidelines that further the project's aims and ideals, and negotiating how these were enforced among contributors. Contributors debated and discussed what was important enough to the community to be written into policy, and those ideals that they valued the most – where worth fighting for – were revealed.

Discussed in depth by Tkacz (2015), Reagle (2010) and José van Dijck (2013), the first iteration of the neutrality policy page reads like a talk page, and looks like it has been ported from elsewhere in the encyclopaedia. It starts with a post by Jimmy Wales that includes the statement that the encyclopaedia should, “present the arguments of the advocates of that point of view, and the arguments of the people who disagree with that point of view.” This is followed by a post echoing similar sentiments by Larry Sanger and linking to Nupedia's non-bias policy. Further down the page a community member posted that they are not comfortable including all viewpoints, giving examples on articles concerning Creationism and pseudoscience, and would prefer to present the mainstream accepted view as “true.” Interestingly, this first page contains suggestions of a possible bias in the

encyclopaedia to a white, male, American-centric version of neutrality, however this claim quickly becomes disputed, even by Larry Sanger (a white American man) who states, “the notion of a neutral point of view that is “neutral in the U.S.” really makes no sense” (Wikipedia 2001). This initial discussion, and early identification of possible bias and its subsequent dismissal, reveals much about the egalitarian ideals of the platform and philosophy of the project. Perhaps “neutral in the U.S.” was incomprehensible to users for whom neutrality is an absolute, especially in light of democratising and utopian promises of a new encyclopaedic form where everyone – not just white, American men – could participate.

Similarly, another early iteration of policy, “no original research” is based on assumptions about what knowledge is, along with ideals that preference written texts over direct experience. Information included in Wikipedia must be verifiable and stemmed from edit wars where people “knew” facts because they had experienced what they were claiming (“I was living in the town at the time and can confirm the fire destroyed all four buildings”). The policy started out as a small seven-line page that coppedasted a Jimmy Wales post from a mailing list which stated valid views should be easy to substantiate with reference works (Wikipedia 2003a). That is, claims made in the encyclopaedia must be “verifiable” – another policy that demonstrates the interconnected nature of the rules and policies in Wikipedia, “Verifiability is one problem with articles on obscure subjects. By concentrating on verifiable subjects, we also concentrate on important subjects” (Wikipedia 2003b). Important – encyclopaedic – subjects are determined in Wikipedia by the concept of “notability.” If a subject meets the notability guidelines, then that subject can be included in the encyclopaedia. The

rule is an effort to shape Wikipedia in the form of an encyclopaedia – not a website that aggregates trivia. And as Benjamin Mako Hill (Garber 2011) found, this shared understanding – that Wikipedia is an encyclopaedia – is one that has largely contributed to Wikipedia’s success.

The formation of rules and policies and their implementation relies on one core policy and process – “consensus.” Interestingly, on the first iteration of the page on consensus, new users are framed as hostile, and the system framed as facilitating participation: “An additional benefit may be that initially hostile new users may realize there is a system set up not with the purpose of blocking them, but with facilitating their edits” (Wikipedia 2004). The page continued to host discussion about what constituted consensus, and how people support and advocate their positions in consensus discussions. Consensus is still held as the ideal outcome when different groups interact in Wikipedia, however the reality of this process means that difficult decisions often default to straw polls. This in turn raises questions about who is participating in the discussions, who decides what format those discussions should take, and who is being excluded from these processes. As argued in this thesis, such small decisions around locations and structure can turn the consensus process from one where everyone is welcome to one where anyone can participate – if users can find the discussion and navigate its norms.

Despite the intricate ecology of rules on Wikipedia, one of its core tenets is to “Ignore all Rules,” which initially read, “If rules make you nervous and depressed, and not desirous of participating in the Wiki, then ignore them and go about your business” (Wikipedia 2002b). The talk page (that currently contains 18

archives) for this iteration is an interesting insight into how a concept first proposed by Larry Sanger as a “humorous interjection” has become codified into a policy and project-wide principle. About this early iteration of the policy Jimmy Wales commented, “A statement, for example, of the Scientology issue, that is satisfactory to both sides, would probably be a great achievement, recognized by all as such. It would probably be left alone. :-)” (Wikipedia 2008). Indeed such an ideal article form would embody all the above rules – a stable, neutral article on a notable subject. However, scientology is currently a locked article with banned editors and permission from the Arbitration Committee (Wikipedia’s highest rule-enforcing body) to sanction disruptive editors as a result of the longest running arbitration case in Wikipedia’s history (Wikipedia 2015c; Jemielniak 2014).

Instantiating ideals in code

In addition to the automated tools that advance the project’s rules day-to-day in the encyclopaedia, larger objects are being developed to further Wikipedia’s mission and ideals in new and innovative ways. Wikipedian Emmanuel Engelhart (User:Kelso) believes that software is central to Wikipedia’s mission and has been working to create an offline browser for those without internet access to read the encyclopaedia. Wikipedia is downloaded as a .zim file and then read through Engelhart’s Kiwix browser. Engelhart argues that access to information is a basic right for everyone, “Water is a common good. You understand why you have to care about water. Wikipedia is the same; it’s a common good. We have to care about Wikipedia” (Sutherland 2014). Demonstrating the awareness that Wikipedians have about the closely connected nature of the community and the technology, Engelhart says:

Tools are not neutral. They have a big impact on our society and software is [becoming] always more central...We live in an industrial and technical world...so how we make software, what are the rules around software, is really important. (Sutherland 2014)

While Kiwix embodies core ideals around access to knowledge, the concept of openness is challenged in Wikipedia by a number of technical tools, such as protecting and semi-protecting pages from being edited by unconfirmed users and blocking IP addresses. However at the same time that these tools prevent access to the encyclopaedia, they are not concrete forms – users may be unblocked and page protection may be lifted as editors compromise and alter editing behaviours, the platform and code is therefore still “open” to change.

So where a wiki was initially the format of choice for its simplicity and ease of use by “anyone,” and it was revolutionising the way content was being created, it still allowed the creation of innumerable rules and technical tools that assist in the day-to-day running of a system that is becoming increasingly complex. The tools create their own rules, and in the process of being formed and running on the media wiki platform, fundamentally changed and continue to change, the nature of the wiki. Indeed user-created code that runs parallel to the MediaWiki core and constitutes much of what we know Wikipedia to be is “easily an order of magnitude larger than the [approximately] 600,000 lines of code that comprise MediaWiki” (Geiger 2014, 2). As R. Stuart Geiger (2014, 2) notes, “This code - some of which fundamentally changes how the wiki operates as a wiki - takes many forms,

including PHP extensions, template scripts, user scripts, standalone tools, browser extensions, and fully automated bots.”

Bots perform a large number of the encyclopaedia’s edits, keeping it free from vandalism and ensuring content is correct and up-to-date. Bots, for example, will attach tags to images without the correct copyright status (tags are like a notice that flags an issue for further attention by the editing community), place messages on user talk pages, move orphan pages and archive discussion pages. For example if a talk page reaches a certain number of bytes, a bot may archive the current discussion to a different location, leaving the talk page clear for new discussion – an action that may make it harder for users to access information about the subject at hand, but easier to follow the current discussion, and this process raises questions about archiving as an actor in Wikipedia’s construction, when new users may not realise the extent and nature of issues already discussed. Bots also perform specific edits across articles such as updating train station articles with usage statistics and updating the conservation status of animals (Wikipedia 2015b).

The bots are written by users, some are automated and some are partially automated and work in tandem with their author. These bots all have user pages (like profiles) and most will have instructions for shutting the bot down should it start tagging, reverting or erasing the wrong thing. Using bots to perform repetitive editing and archiving tasks across millions of articles has enabled editors to spend more time making substantive content changes and contributing to the governance of the project. As Bryant et al (2005) noted, human editors can then focus their attention on higher-order governance matters.

The code is materialised in messages to new users, bots that categorise articles and police vandalism, and suggestions for articles you might like to edit. Bots have user-pages (one has even applied for admin status), and constitute a significant part of the Wikipedia editorial community, while the user submitted code is constantly enacting and enforcing the rules of the platform.

The algorithms of bots can be unpacked from their black boxes and seen as rules that have the force of law, but such a metaphor can de-materialize the infrastructural conditions that make this kind of regulation possible – like talking about the law without talking about the courts or the police. These representations and metaphors are powerful, shaping what we see when we look at Wikipedia as a platform, and have implications for how we understand the nature of authority. (Geiger 2014, 7)

The difference in magnitude between ‘official’ MediaWiki code and ‘unofficial’ user code in Wikipedia again shows how, given the right conditions, layers of technicity are built up creating a structure in what is otherwise an ad-hoc assemblage of volunteers. For although it eschews a traditional expert-led structure, and embodies Stark’s heterarchy. Wikipedia has created its own hierarchies via policies, norms, guidelines and software, and in the process of creating these, has in turn created its own experts, able to deftly navigate the complex sociotechnical system.

3.6 Users in Wikipedia

Like other online communities, Wikipedia affords greater status to those who contribute the most. Edit counts and contributions (which are attached via a link to each username) work toward establishing expert “Wikipedian” boundaries. For some people this might mean being an expert in a topic area, or in enforcing formatting or content standards, while for others it means being an expert in the meta matters, that is governance, policy and the ideology of the organisation. The norm of focusing on the content not the contributor, and separating the two out becomes increasingly hard when an editor is often constructed from their contributions to the community or their role within it as an admin.

It is therefore important for user roles to be carefully examined and identities within the user community teased apart. In this section I will attempt to map the different types of human editors in the community – and how they interact to form a robust volunteer user base that has built the world’s biggest encyclopaedia, a critical mass of volunteers who want to contribute to this ideal of free knowledge, people who subscribe to Wikipedia’s ideology and who feel as if contributing makes a difference (Nov 2007). I have identified four types of user that are relevant to my study, new users (including newly registered accounts and IP editors), casual users (confirmed and IP), active users (adhering to the metric of more than five edits in the latest month) and “metapedians” (registered users and admins who are active in governance spaces on Wikipedia). These identities form boundaries around access (who is able to do what) and provide a useful frame for examining how open the platform is to participation from each user type along with their relationships and connection to each other. In each controversy, “it

would be absurd for the observer to describe entities as formulating their identity and goals in a totally independent manner. They are formed and are adjusted only during action” (Callon 1986, 8). Therefore it is only through action in certain spaces on, and relationships with, the platform via its rules and norms and wiki markup, the Wikimedia Foundation, other users and the media that boundaries materialise and users come to form their identity in the encyclopaedia.

I use these four categories for ease of reference throughout the thesis, however one of the threads that runs through the following case studies is the positioning of new and casual users against active users and metapedians. The boundaries between amateur and expert in the encyclopaedia causes tension and “Inclusivity then becomes a matter of how the boundaries of expertise are drawn” (Luyt 2012). Is the encyclopaedia (a traditionally expert genre) a place for “anyone” who can navigate the system and demonstrate mastery of the norms and rules, or is it a platform accessible by and inviting participation from “everyone” in a realisation of the democratic and utopian vision of the early internet?

The tension between the two user types is evident in other Wikipedias, and in a study of Internet Relay Chat (IRC – one of the primary off-wiki modes of communication for users) use in the Finnish Wikipedia, researchers found users “perceived IRC as a useful and open channel for quick-tempo collaborations and informal interactions, while others saw it as an arena for ‘the elite’ to scheme against ‘the proletariat.’ Overall, IRC was a source of ‘multiplex tensions’” (Lanamäki et al. 2015, 1). The difference in media choice is an interesting tension, and again works toward demarcating boundaries in English Wikipedia where IRC is also used to coordinate on-wiki activity and governance matters. In an open

environment where the norm is to have traceable, transparent discussions about actions on wiki, IRC can be difficult to navigate for new users not familiar with its form, and the timing of discussions can be problematic for a user community that spans multiple time zones. The asynchronous nature of traditional on-wiki conversations keeps the platform open to a more diverse range of users than IRC.

Similarly if a space away from Wikipedia is needed to coordinate action and participation on the platform, social media that also allows for asynchronous communication such as a Facebook group or forum is well-suited to the task. Current norms however preference all communication to take place on-wiki and often frame such social media interactions as “canvassing” (which is seen as an inappropriate way to influence the consensus process). The following case studies demonstrate however, that while social media is often dismissed, it being outside Wikipedia’s imagined boundaries, it is an important actor in the construction of Wikipedia. Indeed Wikipedia’s boundaries are permeable and it is highly interconnected with other platforms. Social media feeds into activities on Wikipedia (regardless of the site’s existing norms) and evidenced in Chapter 6, and is an important catalyst for change in the encyclopaedia as an increasing number of users recognise the importance of how Wikipedia is constructed and perceived by those outside the platform, and how users themselves move among platforms.

Users also move among different communities as they move from being a new user to an active user, or choose at any stage to exit the platform. Indeed it is not uncommon for many active users and metapedians to suffer burnout. Chapter 5 will further expand on the idea of certain types of participation being valued over

others, however it is worth noting here that while new and casual users make up the majority of edits to Wikipedia, the next biggest contributor group to the encyclopaedia is the top 1000 most active editors. These most prolific users are not necessarily engaging in content creation but as active participants, often with the technical affordances of being an admin, they are undertaking wiki-work: cleaning up vandalism, flagging changes, tagging articles, creating templates and participating in governance discussions. This sort of “cleaning up” (like Wales’s janitor metaphor) after new contributions to the encyclopaedia also works to further demarcate group boundaries between new and existing users.

Additionally, like the users in online fandom communities described by Baym & Burnett (2009), these Wikipedians may suffer burnout, retiring from the site and taking what is known in the community as a “wiki-break” (both of which have templates that can be appended to user pages to let others in the community know why a user is no longer active). As users move through different life stages and less or more time can be given to Wikipedia, many users seek to justify their level of activity on their user page. These active community members are marking out their identity as a professional and in an environment when edit counts and participation afford status in the community, specifying breaks on user pages lets others know that they are still active and “Wikipedian.” For contributing to Wikipedia (especially as a metapedian) is hard work, and these statements and technical templates mark out expert boundaries and clearly let others know how hard a user has been working as a Wikipedian. Other users maintain a list of *Missing Wikipedians*, where users who have applied the retired template or left a goodbye message are listed along with their reasons for departing the community.

This demonstrates the value that Wikipedians place on wiki-work and users who contribute heavily to the encyclopaedia.

Although in other situations (such as at Britannica) the work Wikipedians do would be financially remunerated, as discussed in Chapter 4 many Wikipedians continue to engage in encyclopaedia-making due to a sense of responsibility for the world's largest encyclopaedic knowledge repository. They do not *want* to be paid as doing so would be against the ethos of the encyclopaedia and its non-profit status and ideology based on freedom and openness. This is important as initially many editors are making a choice to contribute because they feel they are making a difference (Nov 2007; Baytiyeh & Pfaffman 2010), and assigning value to this volunteer labour is difficult.

The concept of value and values in Wikipedia is closely intertwined and often a source of tension in the volunteer-led platform. Coordinating open ethics, funds and profits is a difficult balancing act for many open endeavours and Wikipedia is no exception. The ability of projects to leverage value via “peer production” requires coordination among all parts of the sociotechnical system (Kelty 2008). It requires a set of innovative practices that encourages mass collaboration on a global scale, while respecting volunteer motivations and upholding values and ideals. Alternately called a “sharing” (Lessig 2008) or “gift” (Benkler 2006) economy, the practices that are based on the open source method of production have roots deep in the early web and beliefs about participation and access to information and resources, beliefs that fit well with encyclopaedic ideals. The ability of open source to bring together these contributions from globally distributed volunteers shows the importance of ideology as a coordinating

mechanism even if the concepts around openness are understood differently by users.

3.7 Conclusion

Wikipedia, while recognised as an encyclopaedia, is much more than its articles – it is a complex assemblage of code, rules, technical actors, policies, bots, a governing foundation and communities that are coordinated by an ideology relating to the creation of and access to knowledge. The initial openness of the platform and its technology created conditions for mass voluntary participation on a global scale. This openness and the technical affordances of the wiki also created the conditions for a complex set of rules to develop and be enforced that affect participation in the encyclopaedia.

This chapter sketched out a history of Wikipedia in light of the encyclopaedia as a genre and its emergence from the open movement. It showed how ideals have been used and interpreted throughout this history and how the openness enabled by the wiki technology contributed to Wikipedia's eventual dominance over its predecessor Nupedia. Wikipedia has been shaped by moments of controversy native to the platform that resulted in new rules being formed. However, while these rules enable the functioning of the editorial process they also enact ideals about what an encyclopaedia is and frame access and participation in a digital environment. This chapter demonstrated how this open ideology acts as both a coordinating force in the encyclopaedia and at the same time creates conditions that afford the creation and enforcement of a complex rule system. It is this formation of the platform and the resulting ambiguity between its ideology and

how ideals are materialised and enacted that the discord between the concepts of a liberal “anyone” and an inclusive “everyone” can be seen.

The chapter also discusses how friction and interpretation are used to create a shared understanding in boundary spaces that can then become a standard of the system and used to mediate similar conflicts, or regulate behaviour. While these standards and rules create barriers to the community that are difficult for new users to navigate, they also in turn create additional boundary objects (like policies) and spaces (like talk pages) where users can work toward consensus and continue activity in the encyclopaedia despite holding conflicting or competing positions in a controversy.

This finding is applied in the following chapters 4, 5, & 6 to further examine how users undertake boundary-work to shape participation in the encyclopaedia from different user groups (paid editors, new users and women respectively) and how in demarcating and articulating boundaries around encyclopaedia-making the concepts of “anyone” as an ideal user and “everyone” as a democratic ideal are further refined.

4 CONTROVERSY ONE: PAID EDITING

Today, we're making an important change to our Terms of Use. This change will clarify and strengthen the prohibition against concealing paid editing on all Wikimedia projects.

...

As explained in October of 2013, we believe that undisclosed paid advocacy editing is a black hat practice that can threaten the trust of Wikimedia's volunteers and readers. We have serious concerns about the way that such editing affects the neutrality and reliability of Wikipedia.

The change to the Terms of Use will address these concerns in a variety of ways. First, it will help educate and explain to good-faith editors how they may continue to edit in the spirit of the movement and mission, through simple disclosure of their affiliation. Second, it will empower the community to address the issue of paid editing in an informed way by helping identify edits that should receive additional scrutiny. Finally, it will provide an additional tool to the community and Foundation to enforce existing rules about conflicts of interest and paid editing. (Brigham 2014)

The Wikimedia Foundation's 2014 change to its Terms of Use was the result of extensive discussion among the community along with wider media coverage of the involvement of paid editors in Wikipedia. It reflects a shift in attitudes toward commercial involvement in the encyclopaedia as users work to define different forms of participation and seek to map these forms against the values and ideals of an open encyclopaedia.

The somewhat formal acknowledgement of paid editors by the community, the Foundation and its board is a nod to what some see as the inevitability of commercial actors being involved in the encyclopaedic production process. The change requires anyone who "receives or expects to receive compensation" for their contributions to make a clear connection between their contributions to Wikimedia sites and their affiliation and possible conflicts of interest. It comes after more than 320,000 words of discussion directly regarding the proposed amendment and numerous other discussions held around Wikipedia that discussed paid editing (Wikimedia Foundation 2014b).

This chapter examines how the volunteer community has interpreted paid editing in the past and how editors have come to define paid commercial involvement in the encyclopaedia. It looks at how changing practices affect structural change in the platform via an alteration in its terms of use and how users demarcate boundaries between professional and amateur, and volunteer and paid users. The chapter is structured with an analysis of the historical relationship between Wikipedia and commercialism, through to an analysis of the media discourses that have surrounded covert corporate editing of the encyclopaedia, to a description of

the activities of covert paid editors, and finally an analysis of three community votes on proposed new rules to address paid editing.

The controversy around paid editing is useful for identifying the different communities that contribute to the encyclopaedia and how those different communities align themselves with regard to paid editing practices in the encyclopaedia. Indeed this controversy allows not only an unpacking of the different communities, but also helps in revealing new actors in the encyclopaedia, specifically the Public Relations (PR) sector that has traditionally had a strained involvement with Wikipedia. The controversy reveals boundaries between volunteer contributors and paid editors and in articulating this boundary, the platform's values concerning commercialism are cemented, and its role as a neutral non-profit in the wider web ecology is shown to be important to users. However strengthening this boundary between commercial actors and volunteer editors should not be at the expense of its overarching ideal of openness, and analysis of the discussions concerning paid editing revealed that the platform's existing self-governing rule set is seen as sufficient for establishing boundaries for appropriate non-commercial editing. The analysis found users did not think an additional policy was needed to further exclude participation from paid editors in the encyclopaedia, and that talk pages serve as an effective boundary object that can be used by different actors to coordinate this type of contribution. The chapter then places this finding in the context of decreasing participation in Wikipedia and how competing concepts of openness affect inclusivity and coordinate contributions from a variety of users. Indeed the analysis found it was more important for some users that the platform remain open to everyone over and above whether or not that editor is paid.

4.1 One community against paid editing?

Events in the platform's history, such as the Spanish Fork, suggest that Wikipedia has long been opposed to commercial involvement and values its place as a neutral non-profit. As Wikimedia Foundation spokesperson Jay Walsh notes in relation to paid editing in the community, 'there's a historical resistance towards it from early days within the project' (Mullin 2014). In order to examine what and how things are changing, we must first look back at the ideals in question – freedom, neutrality, and commercialism – and how they have been conflated with openness in imaginings of Wikipedia in utopian discourses of peer production.

The paid editing controversy highlights how the editorial community has come to understand paid involvement in the encyclopaedia. It also shows how ideals around openness and access are negotiated in relation to commercial activities and the concept of neutrality, one of Wikipedia's core editing policies, and how these ideals and negotiations materialised as a change to the website's Terms of Use. It demonstrates how the paid editing controversy created a generative friction that ultimately resulted in the Terms of Use change, and contributed to one understanding of open in the community – openness of participation.

The tension around commercialisation in projects that have ideals concerned with the greater social good is a historical feature of the encyclopaedia, as debates about property and copyright have played out since the early 18th century (Yeo 2001; Loveland & Reagle 2013). In contemporary accounts of digital media, commercialism, freedom and openness often get conflated in favour of celebratory accounts of collaboration, peer production and the gift economy. However, it is important to recognise that there are different logics at work in

each of these discourses and this chapter reveals how ideals around the collaborative production of knowledge online are changing and how within Wikipedia there has been a shuffling of the community's values.

The changed Terms of Use (ToU) explicitly state that anyone editing the encyclopaedia who expects in some way to be remunerated for that editing, must declare their affiliations and any potential conflicts (Wikimedia Foundation 2014a). In order to tell the story of this ToU change it is also necessary to tell the story of the Wiki-PR controversy and similar controversies in the encyclopaedia's history. While the Wiki-PR case discussed in this chapter kickstarted the tensions, and is generally seen as covert "black-hat" editing that contravenes the site's policies, it served to highlight larger tensions around commercialism and the presence of paid professionals in the encyclopaedia. These tensions don't just exist in the user base, as media coverage of Wiki-PRs involvement in the encyclopaedia demonstrates, readers are also concerned with the impacts of paid professionals in the largely volunteer editing base. The revelations about Wiki-PR therefore serve as a useful grounding point for examining paid editing and how it is framed by different actors in the community in light of participation in the editing community.

The presence of paid advocates in Wikipedia – those editors who gain financial benefits from editing Wikipedia articles on another party's behalf – was highlighted in 2013 and drew a public response from the Wikimedia Foundation, then Executive Director Sue Gardner and co-founder Jimmy Wales (who has always been a vocal opponent of PR involvement in article space in the encyclopaedia) (Ocaasi 2012; Roth 2013; Gardner 2013). However, the

community response to this presence has been divided and reflects a separation of the values of openness and freedom and a shift away from the ideals of earlier contributors to the encyclopaedia. Indeed, as Wikipedia is reconfiguring the values, this analysis reveals important truths about how the boundaries between the commercial and the non-profit in the context of peer production are sometimes fuzzy, overlapping and far from clearly defined. As Zittrain (2008, 139) notes in *The Future Of The Internet And How To Stop It*, “Wikipedia’s content has effects far beyond the site’s own community of user-editors” and how it responds to the changing nature of contributors has implications for wider discussions about openness in the web (in the same text Zittrain also observed “Wikipedia’s character will no doubt evolve as, say, companies discover its existence and begin editing (and policing) entries that mention or describe them” (Zittrain 2008 96)). This signals the importance of the following debate about paid editors in Wikipedia to larger issues regarding commercialism on the internet.

4.2 The controversy: The case of Wiki-PR

Date: Sun, 23 Sep 2012 22:03:17 +0100

Subject: SiteTruth... on Wikipedia?

To: [email address redacted]

Hi SiteTruth Team,

Shouldn't SiteTruth have a full-length, professional page on Wikipedia? Wiki-PR.com creates full-length, professional Wikipedia pages. We have software tools to manage your page in real-time.

Would you like more information? Please reply by email or provide your contact number. It will be worthwhile. A full-length, professionally written Wikipedia page will drive sales and inform your clients about what you do best.

Your competitors are getting on Wikipedia. Shouldn't you be on Wikipedia, too?

Best,

Thanks, Daniel

Wiki-PR.com (Wikipedia 2012)

A consulting business, Wiki-PR is behind one of the biggest covert editing efforts in Wikipedia's history. Banned by the community after a community-led investigation and discovery of its activities, Wiki-PR claimed to have 12,000 clients and employ Wikipedia administrators as part of its operations to produce promotional articles (Owens 2013). Rather than going through the traditional channels and protocols that Wikipedia has established for editors with a conflict of interest (posting to the talk-page, requesting an article for creation), Wiki-PR used experienced editors familiar with the policies of the site and able to negotiate the rules and norms to ensure that the articles survived the creation process. Employees created 323 fake accounts, called sock puppets, to create and contribute to pages about clients. This large-scale astroturfing – where entries are artificially created and filled with marketing content – resulted in several hundred articles on Wikipedia that were largely promotional in nature, and subsequently removed following the investigation (Owens 2013).

However the legacy from such activity remains, not only in the widespread press accounts of Wiki-PR's actions, but in how Wikipedia has positioned itself in response to the revelations of the extent of the sockpuppeting activity. At an institutional level, the WMF expressed concern that its brand and reputation as a non-profit site of independent knowledge had been damaged by Wiki-PR's activities:

The Wikimedia community of volunteer writers, editors, photographers, and other contributors has built Wikipedia into the world's most popular encyclopaedia, with a reputation for transparency, objectivity, and lack of bias. When outside publicity firms and their agents conceal or misrepresent their identity by creating or allowing false, unauthorized or misleading user accounts, Wikipedia's reputation is harmed. (Roth 2013)

The traditional "bright line" stance (where PR practitioners must not edit directly in article space) signals a gap in English language Wikipedia between norms based on ideals around commercial involvement and actual practices. The boundary is becoming blurred as practices cross spaces and force editors to articulate both the ideals of the encyclopaedia as they see them, and the possible future directions editing activity in Wikipedia could take. However before any possible futures could be discussed, actors needed to define paid editing and its position in Wikipedia's landscape of volunteers, paid editors and public relations professionals.

Trying to deal with two things, paid editing and paid advocacy, within the same proposal is confusing and conflates the two somewhat, and does not appreciate the special dangers of paid advocacy over unpaid advocacy. I have no problem with someone editing an article as part of a teaching position or technical job. Indeed, that area does not need further complications. However, against paid advocacy, this policy is too weak a statement.... (Wikipedia 2013j)

Following the investigation and the ‘outing’ and banning of the offending Wiki-PR accounts, the community discussed the possibility of developing policies to specifically address the presence of paid advocates in the encyclopaedia.

Historically, the involvement from such groups in the encyclopaedia has been met with resistance and the constant invoking of the “bright line” – a term used by Jimmy Wales in regard to PR involvement in the encyclopaedia – that is, there should be a bright line between PR contributions and editing in article space. This explicit naming of a boundary between editor types is challenged in the analysed discussions as users sought not so much to establish boundaries as maintain boundary objects and spaces where collaboration could occur. Boundary objects like talk pages allowed for cooperation and also for a level of uncertainty and flexibility that embody ideals around openness, access and participation from “everyone.”

Consultancies

As the Spanish Fork demonstrated, there is a historic resistance to anyone profiting from the work of volunteers in constructing an encyclopaedia. Whether that be the platform itself in offering advertising (which former Executive Director Sue Gardner has always left on the table as a funding option, should the alternative be to see the demise of the platform) or other editors who make a living doing the same (or indeed lesser) activities as the committed volunteer editors. This newest manifestation of commercial involvement, the PR editor, actually has a longer history than the recent controversy concerning Wiki-PR. There have been a number of consultancies that have been accused of fraudulently editing Wikipedia such as Wiki Experts and MyWikiBiz. These examples demonstrate the ongoing negotiation that occurs in Wikipedia in relation to establishing boundaries around acceptable editing practices, including the idea of professional editors and how such practices frame the value of volunteers.

After the community banned Wiki-PR and its associated socks, it was quickly followed by a vote and ultimate decision to ban similar consultancy Wiki Experts. Wiki Experts, like Wiki-PR, touts their expertise to small businesses that otherwise may have difficulty negotiating the myriad of rules and policies that govern the Wikipedia editorial process. While this ban did not generate any significant mainstream coverage, Wiki Experts is often invoked in on-wiki discussions about the damaging nature of paid editing activities and its founder Alex Konanykhin has publicly called for a boycott of Wikipedia's fundraising efforts so that Wikipedia is forced to use an advertising-based funding stream (Hoover 2011).

MyWikiBiz is a website and consultancy that was formed in 2006. The site currently offers a wiki directory for participating firms as well as a consulting service for Wikipedia entries. Initially offering a paid editing service, MyWikiBiz quickly fell out of favour with Jimmy Wales and the Wikipedia community for its commercial editing practices. Wales saw the editing as “absolutely unacceptable” and site owner Gregory Kohs was blocked from editing (Bergstein 2007). In his discussion of MyWikiBiz in *The Future of The Internet*, Zittrain (Zittrain 2008) notes that some community members were open to accommodating edits from a commercial company, demonstrating that the ethos to focus on the edits, not the editor, is not a new one. Indeed this is the blurry line negotiated by paid editors in a variety of roles from openly paid contributor (for example as a self-declared communications professional) to covert promotional marketer.

Interestingly, due to the change in Wikimedia’s Terms of Use, MyWikiBiz has altered its consulting business model, and is now actively spruiking its editing services again. In this new model designed to escape the extra scrutiny given to entries by editors with a declared conflict of interest, all contributions to the encyclopaedia are “personal courtesies” at the end of the consulting period. The ability of such businesses to alter business models (or at least creatively word caveats to their services) in response to changes in Wikipedia demonstrates the ongoing struggles Wikipedia has with maintaining boundaries with paid advocacy edits and commercial practices.

The Dark Arts

While the above consultancies target small-to-medium businesses, Wikipedia also has an interesting relationship with the larger PR sector. The industry has at

various times tried to engage the Wikipedia community through initiatives such as the on- and off-wiki group Corporate Representatives for Ethical Wikipedia Engagement (CREWE) and a comprehensive best practice guide developed by the Chartered Institute for Public Relations (CIPR) in the UK. However PR academic Marcia DiStaso notes that while the guidelines for ethical engagement are clear, often the processes are slow and laborious leading many PR practitioners to edit against community norms directly in article space (DiStaso 2012).

This covert engagement with clients' Wikipedia entries as part of a larger brand management or social media strategy was termed the "dark arts" by one high profile company. In December 2011, The Independent newspaper broke the story of, Bell Pottinger Private (Bell Pottinger), the English PR firm with ties to conservative governments that boasted of its ability to "sort" Wikipedia in relation to clients with less-than-ideal histories. In the secretly recorded interview, journalists posed as representatives from the Uzbekistan government. Uzbekistan has a poor track record in regards to human rights and child labour. A senior Bell Pottinger executive said that for a fee of upward of £1 million, the Uzbek government's reputation could be managed, and referred to the past whitewashing of countries such as Sri Lanka (Newman & Wright 2011). After the story broke, Jimmy Wales went to speak to the firm about ethical engagement with the encyclopaedia, and while he stated that he found employees to be "contrite and apologetic," company founder Lord Bell would not admit to any wrongdoing on the company's part. Wales, a consistently strong and vocal opponent of paid advocacy and PR involvement in article space called Lord Bell's position "disgusting and dangerous for his clients" (Ocaasi 2012).

The next year in 2012, Wikipedia sought to emulate the success of its first “Wikipedia town”, Monmouthpedia, with a second campaign for the small UK territory, Gibraltar. Like Monmouthpedia, the goal of Gibraltarpedia was to get QR codes on places of interest around the town that then linked to the corresponding Wikipedia article. The goal was twofold, to have tourists be able to easily access information on points of interest in their own language, while also improving the coverage of Gibraltar in Wikipedia. While the project was arguably a worthy one, it came undone when it was revealed that a key player in the campaign, Roger Bamkin – who had advocated for the inclusion of Gibraltar-related content on Wikipedia’s main page – was being paid consultancy fees by the Gibraltar Tourist Board to provide the QR codes. While not directly a pay-for-edits scenario, the fallout was enough to make Bamkin step down from his trusteeship with Wikimedia UK and limit the uploading of any content related to Gibraltar in Wikipedia’s front page (Blue 2012).

Such actions have prompted site co-founder Wales to reiterate calls for a “Bright Line,” (Ocaasi 2012) where those with a conflict of interest never edit directly in article space. However this approach may not always deliver the clean divide that Wales demands as evidenced by media interest in the editorial processes of the British Petroleum (BP) article on English Wikipedia.

When BP employee Arturo Silva participated in discussion on the talk page of the BP article, he did so in accordance with Wikipedia’s policies on editing articles where a conflict of interest may be present (Wikipedia 2014l). Silva made his affiliation with BP clearly known in his username *Arturo at BP* and he never directly edited BP’s entry. Issues with his involvement arose when he contributed

text on the talk pages that was subsequently inserted unaltered into the article by other editors. While these editors maintained that the text provided by Silva was neutral and verifiable, other contributors challenged the practice, saying such text could never be neutral, and such contributions impact Wikipedia's quality as a collaborative, non-commercial encyclopaedia. The debates have raised questions about marketing professionals' presence in Wikipedia, however the press around Silva's actions shows that Wikipedians still have a commitment to a non-commercial, volunteer-led encyclopaedia and that "Those who nonetheless attempt to use Wikipedia to glorify themselves or their organizations risk being embarrassed with 'outing'" (Loveland & Reagle 2013, 10). The resistance to a commercial presence in Wikipedia also highlights the value assigned to free knowledge by contributors, and an awareness of the risk associated with the "McDonaldization of knowledge" (Burke 2013, 487). Any attempt to encroach on free, open and neutral information, by PR professionals or even the site's founders has traditionally been met with hostility by the community who question the ability of Wikipedia to remain a site of fair and objective information when commercial interests become part of the equation.

While these stories have been portrayed in mainstream media discourses as evidence of the corruptibility of the encyclopaedia, it is interesting that in all but the Bell Pottinger controversy, the advocacy editing was investigated and revealed by the community. This goes some way to showing the importance of ethical editing to Wikipedia's volunteers and the importance that Wikipedians give to upholding the encyclopaedia's core editing policy of neutrality, as well as the ability of the encyclopaedia to self-police.

4.3 A neutral point of view

Neutrality establishes what statements are and aren't acceptable in the encyclopaedia, it is a core policy and a feature of an ideal article. It is also linked to Wikipedia's non-profit business model (van Dijck 2013), and as an organisation free from the commercial pressures associated with advertising the encyclopaedia is perceived as 'free' to create neutral and objective knowledge. Neutrality however preferences a certain type of participation in the encyclopaedia – an objective, rational, detached and impartial approach to creating content. This position has been criticised by some users as inhibiting greater participation from a greater variety of editors, who are more likely to start editing and remain committed to the subject if it is something they are interested in and perhaps even passionate about. The neutrality principle also relies on assumptions about the rationality and the types of sources that are acceptable in the encyclopaedia – again conditions that might work to establish barriers to entry for users who do not hold such assumptions about knowledge and content creation.

Of Wikipedia's five pillars neutrality is arguably the most venerated (Greenstein & Zhu 2012; van Dijck 2013). It is the ideal to which editors aspire, a truly fair and representative article. While the possibility of this may be challenged by those editors who consider knowledge a social construction (Matei & Dobrescu 2010), it is still upheld as a core policy by most Wikipedia editors. And this ideal to produce truly neutral, objective information is challenged by the presence of paid advocates within the editorial community.

Advocacy by paid editors, in Wikipedia, is the antithesis of neutrality. The promotion of one position over another is seen as against the ideals of free and objective representative information. It would follow therefore that the community (which has been so good at constructing rules and norms in the past to regulate behaviour (Halfaker et al. 2012) would want to create a policy to prevent such contributions. However the three proposals and associated votes to form such a policy all failed to achieve the support of the community. This is despite the Wikimedia Foundation (WMF) sending a cease and desist letter to Wiki-PR (Roth 2013) and speaking out against the activity.

Such a move by the WMF, presumably not only in response to some sections of the editorial community, but also in response to the threat to their brand, shows that how Wikipedia is perceived (as a hub of neutral information) to groups outside of the editorial community is equally as important as how it is constructed by the community. In this discourse in the mainstream press, paid editing is being constructed as an issue that undermines the integrity of the encyclopaedia and is against its core operating principles of freedom and openness. Such discourses shape participation by undermining the authority of Wikipedia as a neutral non-profit that people are voluntarily willing to invest time and effort into creating. This echoes the position of the Wikimedia Foundation in the controversy, as it is understandably concerned with protecting not only the Wikipedia brand, but also the efforts of its volunteers and thus demarcating a boundary around the types of activity acceptable in a non-profit platform. This controversy becomes all the more interesting because some of the volunteers themselves don't appear to share the same concerns as the Foundation and are more concerned with maintaining flexible boundaries that allow for greater participation.

4.4 Peer production ideals in reality

Popular discourses (Benkler 2006; Bruns 2008; Leadbeater 2008; Tapscott & Williams 2006; Shirky 2008) around peer production, collaboration, prosumption and produsage normally position Wikipedia as a separate entity from traditional market forces and portray its users as contributing due to a commitment to free and open knowledge as part of the gift economy. Situating Wikipedia as such “fits neatly with the long-standing rhetoric about the democratizing potential of the internet, and with the more recent enthusiasm for user-generated content (UGC) [and] amateur expertise” (Gillespie 2010 352). These narratives also suggest that one of the key aspects of peer production and co-creation is collaboration, where amateurs and/or volunteers work with traditionally commercial content producers in a mutually beneficial relationship. Indeed as Nathaniel Tkacz notes about these discourses, “Collaboration is literally everywhere and can be attached to almost anything, immediately giving it a positive value” that is “beyond that of simply co-labouring” (Tkacz 2010, 41–42). Tkacz (2010) also notes that there is a gap between popular and romanticised accounts of collaboration with how platforms such as Wikipedia actually operate in an ongoing attempt to enact ideals (Kittur et al. 2007; Matei & Dobrescu 2010; Halfaker et al. 2011; Laniado & Tasso 2011). Tarleton Gillespie notes of these platforms:

Like the television networks and trade publishers before them, they are increasingly facing questions about their responsibilities: to their users, to key constituencies who depend on the public discourse they host, and to broader notions of the public interest. (Gillespie 2010, 348)

From its founding ideals Wikipedia has developed in a political context where ideals and principles scaffold the construction process and this “non-profit, nonmarket business model that Wikipedia has chosen is inimically interwoven with the volunteer-based peer-production system the platform so successfully implemented” (van Dijck 2013, 148). Commercialism in this environment is consequently a controversial subject.

Like other platforms it is also appearing to face a time in its history when it has the potential to be appropriated by corporate interests. As Milberry (2008, 327) notes, “Today various actors compete for dominance on the web, as the commercialisation of cyberspace continues apace.” This tension between the commercial and the free in the platform is an interesting, but not unique problem. Like other platforms, Wikipedia is negotiating the balance between the social (its ideals) and the commercial (the reality of operating as a valuable website).

Burgess and Green (2009, 90) noted this phenomenon in relation to YouTube where even as a commercial organisation, the involvement of corporate players was seen as a move away from the ““real,” original YouTube [that] was driven primarily by purely social or non-market motivations.”

This is echoed in narratives that present a romantic view of Wikipedia based on peer production, on a system somehow apart from the commercial market, when in reality this is not the case (Tkacz 2010). Websites are highly interconnected and this connected nature means that Wikipedia inevitably includes commercial actors. Indeed, sustainability in this environment is linked to a platform’s ability to integrate content across multiple places and spaces on the web – for example Wikipedia’s Facebook entries (Park 2010) and translation project with Google

(Galvez 2010; van Dijck 2013). While Wikipedia does not receive any funds for these collaborations directly it does list many digital media companies among its donors. The highly interconnected nature of these relationships shape Wikipedia as an information provider and content generator, where the volunteer labour of many contributors provides the content for pages that are published on domains other than Wikipedia.

Additionally, being conflated with other online platforms, being something other than an encyclopaedia, may reveal why Wikipedia is seen as open slather for so many marketing professionals. In using the term 'platform', which Gillespie (2010) points out is a politically charged term, we can see how it can be appropriated as a marketing 'platform,' or conflated with other 'platforms' that offer up marketing opportunities (such as YouTube, Facebook, Twitter), or indeed how Wikipedia may be packaged as part of a larger online media campaign. The difference is Wikipedia, for many of its contributors and readers outside the PR sphere, is a platform for advocating the value of, and providing, free and open knowledge. This is the fine line that Wikipedia straddles between an encyclopaedia and a platform, between an institution and a community. Where an encyclopaedia has an established tradition, a platform is still being negotiated. Whereas an institution is comprised of rules, a community is a more ad hoc assemblage where members can come and go freely. It is in this context that Wikipedia is trying to negotiate the values associated with peer production and the creation of a volunteer-led online encyclopaedia, and what commercial involvement means for its ability to recruit and retain volunteers.

4.5 Mapping the debates

In order to map the debates, I conducted a thematic analysis of the three main votes on paid editing conducted in the community in November 2013. These discussions formed one response to the Wiki-PR revelations and are a discrete object through which to analyse immediate user feeling in relation to a well-publicised event that challenges the encyclopaedia's ideals. It is a theoretical sample, chosen to illuminate a specific response to a specific controversy rather than be a representative sample of the entire Wikipedia editorial community.

As mentioned above, there was a definite institutional response from Jimmy Wales, Sue Gardner and the WMF in opposition to paid advocacy editing, reflecting the assumption, based on past actions that the community is against such involvement. However in favouring an open approach to coding the data using a grounded approach, a more nuanced response from the community emerged from the conversations, one that did not necessarily always fall in line with the immediate institutional reaction.

In describing these debates, the study reveals the tensions that compromise paid advocacy editing and how Wikipedia's founding principles are interpreted by those who edit the encyclopaedia a little over a decade later. As Geert Lovink (2011, 1) points out, "The participatory crowds suddenly find themselves in a situation full of tension and conflict," and these situations can reveal much about how platforms and collaborative projects are evolving.

Three Proposals

The three proposals analysed here are “No paid advocacy” (NPA), “Paid editing policy proposal” (PEPP) and “Conflict of interest limit” (COIL) (Wikipedia 2013i; Wikipedia 2013j; Wikipedia 2013h), and I am specifically using the talk pages of each proposal page for the analysis. The three discussions and votes were carried out on English language Wikipedia in November 2013 in response to the Wiki-PR controversy. Overall, 573 posts were analysed in the study. The first stage consisted of an initial round of coding where each response was coded as a support, oppose or comment along with short description of the post. In a second close reading both the posts and the descriptor and a list of key words was formed. In the third stage the key words were refined to a set of categories, and then finally each post was assigned relevant category tags. In total there were 21 categories to emerge from the discussion, ten that opposed the formation of a policy, nine that supported a new policy and two that were neutral (for example where votes either supported or opposed the policy, but called for a clarification of the policy wording).

All three discussions were linked by a note on each page stating that, “In November 2013, there were three main discussions and votes on paid editing” along with a link to the other two discussions (Wikipedia 2013i). A relatively large number of participants took part, with 300 individual contributors to the discussions and proposals regarding paid editing on Wikipedia. Among the three conversations NPA was the largest vote and involved 256 individual participants contributing 408 posts, PEPP had 86 participants contributing 242 posts and COIL was the smallest discussion with 43 participants contributing 74 posts. 22%

of users contributed across these different discussion spaces, 16% who participated in two of the conversations about the proposals and only 6% contributed across all three discussions. Additionally in the collaborative tradition of the few doing the most, a small number of users contributed heavily to the discussions. In NPA the ten most frequent commenters contributed 16.9% of the posts, while in PEPP and COIL, the top ten contributed 49.2% and 51.4% of all posts respectively (although this was often just short replies to votes, rather than involved discussions among users). This does raise the possibility of an echo chamber among actors in the controversy, however in triangulating this with participant observation and an analysis of popular media, different actors (such as the PR industry) were identified. Indeed the analysis of the discussion highlighted how some metapedians undertake boundary work to position themselves in response to the controversy, by being active contributors to the debate and regulating discussion often by just qualifying other people's votes or paraphrasing their responses. Existing volunteers value their current policies and procedures and also have faith that in enforcing these rules and norms, the project's principles of openness and neutrality will be upheld.

'We are at the barricades'

The first, and most obvious result of the analysis is that all three proposals failed. Despite much debate and discussion across a variety of spaces both on-wiki and off, and the swift formation of the policy proposals, all three failed to garner enough support via the commenting and consensus process to effectively ban paid advocacy editors by way of a formal written policy. It became apparent in analysing the discussions that "free" does not necessarily correlate with "free

from commercial interests” and that remaining open to contributions from all editors, paid, volunteer or somewhere in between, is more important, especially in light of declining editor numbers than creating more regulatory mechanisms to assist in the production of quality, neutral content. Therefore one of the major themes to emerge from the analysis was that editors felt existing policies in Wikipedia already cover the issues raised by paid advocacy editing, the two most cited being neutrality and notability. Neutrality is expressed as an impartial point of view where articles are written from a fair and representative position (Wikipedia 2014n). Notability guidelines outline the criteria under which a topic is considered significant enough to have an article in the encyclopaedia (Wikipedia 2014o). The most common response from users to the proposals reasoned that the application of these existing policies would weed out the edits made by someone with a conflict of interest, and an additional policy is not necessary. Some users also recognised a difference between the motive and the edit quality, arguing that by applying existing policy low quality edits designed to advocate or promote would be weeded out.

Further, advocacy of any sort as a motive doesn't really address edit quality. Only application of existing Wikipedia guidelines does that. (Wikipedia 2013b)

One of the issues here is our incredibly low notability standards....Sorry, but I think we need to clean up our own act before we create policies that will be used primarily to gain advantage against opponents in ideologically-based editing. --Riskier (Wikipedia 2013b)

The alternative view from supporters of the proposed policies, is that an explicit, new rule is needed. One that specifically bans paid advocacy editing so that a message is sent to editors that this type of commercial activity is not welcome in the encyclopaedia. Supporters maintain that traditional non-profit organisations are required to have policies on conflicts of interest and Wikipedia should be no different.

Wikipedia needs a clear, written policy on financial COI [conflict of interest], like every other major non-profit. We owe it to ourselves, and to the public that trusts us, to get this done. (Wikipedia 2013b)

I don't want to explain to my grandkids (if I ever have some) that I stood by and watched while this great experiment of ours was inundated by a tsunami of commercialism. We are at the barricades, let us not back down. You have to decide if I am crying WOLF or, is the wolf at the door, here, now. --Carptrash (Wikipedia 2013b)

While some participants outlined their support of such a policy because paid editing is against the ideals of Wikipedia, another group of editors opposed such a policy saying that preventing paid editors violates Wikipedia's core premise – that it is the encyclopaedia that anyone can edit. Users expressed the sentiment that the policy would not eliminate paid editing, but rather work to hide it and was in direct opposition to the Wikipedia slogan of being the free encyclopaedia *anyone* can edit.

If it is principles that you want I would start with, 'If it ain't broke don't fix it', followed by not eroding the two basic principles of 'Attack content not editors' and 'The encyclopedia that anyone can edit'. (Wikipedia 2013b)

This quote raises another interesting point, and one put forth by a number of editors who discussed the norm of focusing on the quality of edits as opposed to the type of editor making contributions. This reason was often given in conjunction with an oppose vote to the formation of the proposed policy, also citing existing policy as being sufficient to address the issue of paid editing.

We have policies and guidelines for how articles should be written and developed. We have built up the project to focus on the content not the contributors. --SilkTork
(Wikipedia 2013b)

This was a recurring theme among users, that a fair and accurate encyclopaedia article can be achieved by addressing the quality of the edits, not the people contributing the content. There was also the view among editors that such a policy would be unenforceable and create extra work for already over-burdened volunteers who would be required to police it.

Unenforceable. Waste of time and resources. Creates more problems than it solves. It is impossible to eliminate paid editing, so we might as well accept it and try to regulate it as best we can. (Wikipedia 2013b)

Highlighting the gap between institutional and community response only one editor referenced Wikipedia's reputation in the discussions, which the Wikimedia

Foundation cited as a reason to cease and desist in its letter to Wiki-PR. Also, only one comment called for institutional involvement in this issue, suggesting that overall the community saw paid editing as an issue it could manage itself.

Another challenge to forming an explicit policy against paid editing is that the community is still not clear about what constitutes paid editing. It can be taken to mean anything from a museum employee updating information about an artefact in their collection, or a funded graduate student contributing in their area of expertise to paid professionals who are editing for a third party to advocate and promote a particular point of view.

Also, no one anywhere on this project has ever clearly defined the differences between ‘paid editing’ and ‘paid advocacy’, and until definitions exist then discussions probably cannot proceed. The working definition is that ‘paid advocacy’ is ‘paid editing’ which does not comply with Wikipedia community guidelines. All discussions on this topic make no sense to anyone outside this movement because advocacy in the Wiktionary sense of the term has nothing to do with its use in this small community on Wikipedia. --BlueRasberry (Wikipedia 2013b)

What constitutes a conflict of interest, and indeed what threat editors with conflicts of interest pose to the encyclopaedia, is still very much up for discussion and interpretation in the community. It demonstrates a shuffling of values among different editors as to the place of commercial players in the Wikipedia ecology.

Interestingly where commercial involvement was once viewed by the community as being in direct opposition to Wikipedia's core values (and this rhetoric is repeated at an institutional level) and should be prevented, some community members now accept the presence of paid professionals and are resigned to their presence in the encyclopaedia.

Dishonest paid editors will do it anyway, so why punish
the honest ones? Or drive them to dishonesty?

(Wikipedia 2013b)

Indeed some users expressed the necessity of developing ways to work with paid editors. Both to ensure that editing remained open and "out in the open." The values more important to the community than whether or not an editor is being paid relate to the encyclopaedia's existing standards of notability, verifiability and most importantly neutrality. Participants in the votes expressed the need to differentiate between the different types of paid editing and maintained that as long as the editorial pillars of Wikipedia are held up, the issue of whether or not someone has a commercial interest in editing Wikipedia is secondary to that editor holding up these core values.

From the PR Firms

As Callon et al. note, examining controversies allows new actors to be brought to light:

The sudden appearance of new actors...corresponds to
more or less radical reconfigurations of the social
landscape. In the first scenario it may be a case of new

actors who are not really new. Previously kept in the wings, they take advantage of the controversy to enter the scene in a legitimate role. (Callon et al. 2009, 28–29)

The paid editing controversy and consequent debates have allowed a previously covert or shunned group of actors to enter into the debate and the conversation in a “legitimate role.” PR professionals have been framed in Wikipedia’s history as black hat editors who need to be subject to strict supervision and are the subject of Jimmy Wales’s “Bright Line” rule. The PR professionals have been restricted by community norms to editing talk pages (never directly in article space) and are viewed with suspicion as advocates whose work is the antithesis to Wikipedia’s neutrality policy. The paid editing controversy has allowed PR practitioners to emerge as legitimate actors by issuing a collective and professional response to the controversy. In this way, they have inserted themselves into the conversations and reconfigured not only their position, but the editing landscape. The Wiki-PR controversy has allowed PR practitioners to collectively organise and come out and say essentially “We are the good guys, we are willing to play by Wikipedia’s rules... we are *not* Wiki-PR.” They drew explicit boundaries around the work they do, and their identities as professional, ethical editors.

Based on the media scrutiny and the enormous amount of community discussion generated around a subject whose definition is still in flux, in June 2014 a group of communications professionals (including representatives from high profile companies like Burson-Marsteller and Porter Novelli), Wikipedians and academics came together to produce an essay on ethical engagement with the

encyclopaedia. There has been a movement for some time that aims to engage with Wikipedia in an ethical manner, realising the importance of the platform to the sector. The group CREWE (Corporate Representatives for Ethical Wikipedia Engagement) – who were involved in the development of this latest statement – have created a presence and a group both within Wikipedia and outside through social media platforms such as Twitter and Facebook. In this debate about a PR presence social media is positioned as a more welcoming off-wiki space for engaging with issues around the encyclopaedia that some users may be quite hostile toward either initially or otherwise.

This is also a game-changer for Wikipedia as the collective issuing of the statement from the PR sector was done without the involvement of the WMF. Indeed while the working party included others from outside the sector including long-time respected academic and Wikipedian Andrew Lih, the statement was issued without explicit endorsement from the Wikimedia Foundation. This could perhaps have been a strategic move to afford the statement a legitimacy as it came from the community rather than the WMF.

In releasing the statement Wikipedian William Beutler from Beutler Ink wrote on the talk page:

This statement represents more than five months of effort by myself and the other individuals listed on this page. I think we're all very interested to see how it is received—anxious, but also hopeful. If indeed its reception is positive, I'm sure this is only the beginning. We welcome any and all comments here, as well as

questions about either this statement or the February meeting that preceded it. --WWB (Wikipedia 2014f)

This effort, the result of a discussion that took place off-wiki in Washington DC received a lot of press, however it was noted by some Wikipedians on the statement's talk page, that indeed this was not the first effort of PR parties to attempt to formalise ethical engagement with Wikipedia. Indeed CREWE has provided a platform and sounding board for corporates and communications professionals to express their support for an ethical engagement since 2012. It was also noted that in the UK a successful brokering between Wikipedia and the PR sector had occurred and the end result was the best practice guide published by the Chartered Institute for Public Relations in the UK. However the statement was an important act in the paid editing controversy, not only to further existing efforts, but to demarcate a boundary around ethical communications professionals as a legitimate group in Wikipedia. The statement reads:

On behalf of our firms, we recognize Wikipedia's unique and important role as a public knowledge resource. We also acknowledge that the prior actions of some in our industry have led to a challenging relationship with the community of Wikipedia editors.

Our firms believe that it is in the best interest of our industry, and Wikipedia users at large, that Wikipedia fulfill its mission of developing an accurate and objective online encyclopaedia. Therefore, it is wise for

communications professionals to follow Wikipedia policies as part of ethical engagement practices.

We therefore publicly state and commit, on behalf of our respective firms, to the best of our ability, to abide by the following principles:

To seek to better understand the fundamental principles guiding Wikipedia and other Wikimedia projects.

To act in accordance with Wikipedia's policies and guidelines, particularly those related to "conflict of interest."

To abide by the Wikimedia Foundation's Terms of Use.

To the extent we become aware of potential violations of Wikipedia policies by our respective firms, to investigate the matter and seek corrective action, as appropriate and consistent with our policies.

Beyond our own firms, to take steps to publicize our views and counsel our clients and peers to conduct themselves accordingly.

We also seek opportunities for a productive and transparent dialogue with Wikipedia editors, inasmuch as we can provide accurate, up-to-date, and verifiable information that helps Wikipedia better achieve its goals.

A significant improvement in relations between our two communities may not occur quickly or easily, but it is our intention to do what we can to create a long-term positive change and contribute toward Wikipedia's continued success. (Wikipedia 2014p)

This statement also signals an increase in professionalisation in the encyclopaedia – not only because of the involvement of paid professionals, but through the increasing formalisation of the relationship between these actors and volunteer editors. Professionalisation therefore exists at a number of levels within Wikipedia. The self-regulating mechanisms employed by the community in the editorial process are organised and executed in a more professional way as policies have been developed and refined. Similarly, as the encyclopaedia has grown so has the WMF in order to support the massive volunteer community. Many of the roles fulfil legal and technical requirements, however others involve greater interaction with the community and relate more to enacting the project's ideals of creating the sum of *all* human knowledge. Many Wikimedia Foundation staff contribute to discussions around controversial issues in both a professional and personal capacity. In order to differentiate roles, they use a username that clearly states their affiliation (usually with a WMF appended). Additionally as some active community members have become paid employees, the lines between paid, unpaid, volunteer, social and institutional have become blurred. Negotiating these boundaries, through the use of boundary objects like talk pages allows the Foundation and the community to communicate, however these interactions often contribute to the controversy and reveal the tensions that exist among different editing groups in Wikipedia.

The paid editing controversy and how the issue is constructed and interpreted by these actors reveals a lot not only about commercialism but also about how this community and Foundation relationship is structured. In Wikipedia, the relationship between the community and its governing organisation can often be fraught. Changing the terms of use required input from the WMF, the community and also needed to be ratified by the Board. This involvement from increasingly professional positions (paid WMF employee, volunteer Board member) into community editing space is seen by some as an intrusion and overstepping demarcated boundaries between “community” and “foundation.” In this discourse, editors who may side with the foundation are positioned as sycophants by opposing actors. Similarly as rules are developed and implemented by the community to regulate and improve the content production process, a tension has emerged among editors between the project’s open roots and the perceived professionalisation of the encyclopaedia via these processes. As one Wikipedian notes in a comment quoted on the Wikimedia blog, “On an emotional level I want my Wikipedia from 2004 back” (Bayer 2013).

The presence of these different social groups, of those advocating for increased participation, especially in regard to participation and those opposed to any form of professionalisation or involvement from the Wikimedia Foundation problematises the one community narrative along with recognising the diverse roles of Wikipedia editors.

4.6 Conclusion

The change to Wikipedia's Terms of Use in response to the paid editing controversy works to make the boundaries around paid editing more flexible. By acknowledging the different types of participation and codifying this through the Terms of Use, the platform remains accessible. Where the "Bright Line" worked to create a boundary, the changed ToU acknowledge the tensions that exist around such participation and the struggle to maintain the informational and quality needs of the encyclopaedia with a desire for a neutral and volunteer-led platform.

In tracing the change to the terms of use in response to paid editing and using this controversy, new actors in the form of PR practitioners have emerged, actors who are often not included in definitions of the editorial community of Wikipedia, which is so often portrayed as being volunteer hobbyists. Indeed these actors have also come into contact with other actors such as academics and new coalitions and arrangements have been formed. As the free encyclopaedia that anyone can edit, "Wikipedia is the flagship of peer production and the most celebrated open content project" (Tkacz 2010), and this ideal is valued by most Wikipedia contributors over and above remaining free from commercial activity. The reality that Wikipedia is no longer (if indeed it ever was) free from commercial involvement, is one that many editors are resigned to. Rather than take an ideological stance against commercialism like the Spanish Fork, most editors are willing to find ways to manage it based on existing ideals and interpretations of neutrality and openness.

While debates continue to play out in the English language Wikipedia about paid editing, in other language versions, working arrangements have been reached with

those editors who are paid to write for the encyclopaedia. In the German language encyclopaedia (which is the third largest version behind English and Dutch) companies can edit through a verified account (Wikipedia 2014j). Similarly advocates for paid editing from Wikimedia France welcome the input of corporate editors as they see it as improving articles that would otherwise languish by keeping information relevant and up-to-date (Wikimedia Foundation 2013).

It is therefore possible for different types of editors to work together and talk pages function as efficient boundary objects to coordinate this type of collaboration from volunteers and paid editors, and in fact work as an effective barrier, preventing paid contributions to actual article content. By adhering to the norms of declaring interests and signposting to possible conflicts of interests, and only posting to talk pages, paid editors can contribute to the construction of articles and the encyclopaedia through an interaction with volunteers on the talk page. In this boundary space volunteers and paid editors negotiate and coordinate action according to Wikipedia's values and rules.

The following chapter further explores how different concepts of openness are contested in Wikipedia. It examines how boundaries are formed between different types of user and how rules, and in particular technology, work to enable and constrain certain types of participation through an analysis of the failed introduction of a new editing interface.

5 CONTROVERSY TWO: THE FAILED INTRODUCTION OF A NEW EDITING INTERFACE

VisualEditor was rolled out as the default editing interface on English Wikipedia on July 1, 2013. VisualEditor is a “what-you-see-is-what-you-get” (WYSIWYG) rich text editor designed to replace the original wiki markup interface. Three months after its launch, the interface was rolled back into an opt-in product.

Most of you are familiar with the Visual Editor problem. Despite an overwhelming consensus that the tool should be opt-in (see WP:VisualEditor/Default State RFC, which had the highest response rate of any Wikipedia RFC [Request for Comment] that I am aware of) WMF has insisted on keeping the editor opt-out, and issued a response that basically dismissed the community's concerns at Wikipedia talk:VisualEditor/Default State RFC#Wikimedia response.

WMF cooperation isn't actually required to implement the consensus at the RFC, though. It's fully within any admin's power to replace MediaWiki:common.js with User:Kww/common3.js. That would have the effect of requiring an opt-in to use VE (using the existing preference), and would remove access to VE from IP

editors, just as the RFC required. Please don't do so just yet, as it needs another test round due a recent edit.

Before I proceed to implement community consensus, I invite comment and code review. --Kww(talk) 17:08, 22 September 2013 (UTC)

Kww's common3.js patch went live for about an hour on 23 September 2013. The Wikimedia Foundation capitulated almost immediately after the code was enabled and reverted VisualEditor to opt-in mode on English Wikipedia. The written response to the community included the caveat that it was a “mistake” on the community's part to remove VisualEditor as the default interface, however reverting to the old default interface was necessary to not only fix the code that had been enabled but to subdue the controversy and debate that had occurred in response to the change in interface.

This chapter analyses the events surrounding the introduction of VisualEditor (VE) as the default interface and like the paid editing controversy in the preceding chapter, this controversy reflects how the ideals and values of an open community operate in reality. Indeed these values shape the boundary-work that occurs (acting as an efficient substitute for rules) among the different users. The analysis demonstrates how users employ rhetoric associated with these ideals to perform boundary work and establish editing communities. Tensions among these different users, and between the perceived editing community and the Wikimedia Foundation, underline how the usability of the encyclopaedia for its content creators is tied to assumptions about knowledge, an encyclopaedia, the community and the role of the WMF.

The controversy around the new interface also embodies many of the anxieties felt around change in sociotechnical structures. Analysing the VisualEditor launch is important because it highlights the relationship between the governing institution – the WMF – and the user community. Additionally as the controversy is investigated new actors are revealed and it reveals the complexities around the notion of a homogeneous user community, especially the rhetoric in Wikipedia of *an* editing community and of being a Wikipedian or Wikimedian. The change to the graphical user interface (GUI) for editing articles in Wikipedia is thus not only a technical change to the site, it is also a profoundly cultural shift that reflects wider ideologies about accessibility and knowledge creation.

The analysis that follows reveals that while the debates do play out as tropes about user ability and platform culture, it also highlights the importance of keeping a handmade aesthetic style that is tied not only to the platform's roots in the DIY culture, but its future ability to remain open to contributions from *anyone* by appearing to be hackable and crafted. These debates about the wiki aesthetic style become more complex as an interface that is technically more closed, becomes important for the platform remaining more open to a wider range of potential users. In this process boundaries around participation and access are renegotiated and redrawn as users enact competing interpretations of openness.

5.1 The value of an interface

The role of the interface has an interesting history in determining the interpretative flexibility of a platform. If, as earlier research has suggested, Wikipedia has proven sustainable as compared to other encyclopaedic online

knowledge creation projects because it *is* an encyclopaedia (Hill 2013; Garber 2011), then the interface plays an important role in Wikipedia, not only in terms of usability but also in terms of firming Wikipedia as an encyclopaedia. *This* is what an encyclopaedia looks like in 2014. For the people who create Wikipedia, the aesthetic style and culture of the wiki are crucially important to interpreting what an encyclopaedia is in 2014.

The introduction of the Visual Editor interface was therefore more than an aesthetic move to change the look and feel of Wikipedia which has been criticised for looking dated (Garber 2012). The interface is a door between the human and the machine, between the social and the technical. Introducing a WYSIWYG editor to a wiki signals a cultural shift, especially when that interface is rolled out as the default editor. José van Dijck notes:

Visible user interfaces commonly contain technical features (e.g., buttons, scroll bars, stars, icons) as well as regulatory features (e.g., the rule that a personal profile is required before entering the site), and these features actively steer connections between users and content....interfaces are commonly characterized by *defaults*: settings automatically assigned to a software application to channel user behaviour in a certain way. Defaults are not just technical but also ideological manoeuvrings; if changing a default takes effort, users are more likely to conform to the site's decision architecture. Presets are thus conscious efforts to

cajole users into a certain routine. (van Dijck 2013, 31–32).

For VisualEditor (VE) that routine entails enabling more casual and new users to make contributions to the encyclopaedia through easier access to editing tasks. It is designed to be an easier editing interface for new users to navigate than the existing wiki markup interface and reflects the WYSIWYG nature of many other platform interfaces that are evolving to make contributing content to their site easier. It is designed to be usable.

However, in Wikipedia usability is a debated subject. It is value-laden as users negotiated what it means and for whom it is intended. Usable, but to whom? Some existing users acknowledge that in VE's introduction a "huge technical barrier" had been flattened, while others lamented the effect such a technical change would have on redrawing boundaries in the editing community.

... Even assuming lots of good faith, despite the WMF's best intentions, we will probably lose our core community pretty soon, and WMF does not seem to be interested in us any more. Been there, seen that. Paid editors are about to take over, I assume, while Wikimedia organisations are looking for a new community who likes these Facebook and Google kind of gadgets that are taking a lot of time and money to develop. --Aschmidt (Wikipedia 2013k)

The Foundation is therefore seen as having a role in constructing Wikipedia and contributing to the formation of new user groups with different identities that like

“Facebook and Google kind of gadgets,” and this increased role in a user-led platform is a source of tension. While there is a certain acknowledgement of limited user rights in commercial platforms, where change may be imposed in a top-down manner like Facebook’s news feed changes (Newman 2011), due to Wikipedia’s heterarchical structure and evolution as a user-created encyclopaedia, users have a vested interest in how the platform evolves, and an expectation that they will be consulted about major changes.

And it's pretty poor that more community involvement –
and efforts to attract community involvement - did not
take place. (Wikipedia 2013d)

Consequently users were quite vocal about the change to Wikipedia’s editing interface. Van Dijck notes that the responses to such change can vary:

Most commonly, these responses are spontaneous comments of users reacting to platform changes that affect their online experience. Pleased users tend to comply with platform-imposed alterations, leaving few remarks, but critical responses take many forms.

Manually changing a default setting could be regarded as the mildest form of defiance, just like filling out false profiling information. By actively tinkering with applications or hacking the site, users modify their technical environment as a form of social protest. Users’ ultimate leverage is to quit the site altogether or join a competing platform. Each single user exploit is one of

defiance. The confrontation between implicit usage and explicit use embodies part of a negotiation process between platform owners and also bares disputed norms and values. Technology shapes sociality as much as sociality shapes technology; we can partly trace this process through user reactions. (van Dijck 2013, 33–34)

Indeed, the obvious backlash from existing users about a product designed to make editing easier in order to attract new users was apparent to the WMF:

... one of the predictable, wonderful things about this community is that when experienced editors encounter even a small disruption, they make sure that you know about it. (WMF) (Wikipedia 2013k)

... But there are also a few persistent people whose comments here and elsewhere don't look like "constructive criticism", and instead look a lot like the normal, temporary reaction against any disruptive change at any website that users care about. Neither Wikipedia nor VisualEditor are unique in this regard. Major changes are disruptive to the people who were best served by the old system. ... (Wikipedia 2013k)

Existing users worked quickly and worked loudly to establish their position as a privileged editing group in the community. They engaged in a protective form of boundary-work, instituting themselves as an editing elite that preferred the existing

wiki editor and rejecting control of the technical interface by the Wikimedia Foundation.

The discussion analysed in this chapter ranged from 2012 until August 2014 during which time VE was in alpha mode, rolled out in beta, rolled back in beta and currently sits in opt-in beta mode as indicated in the chapter's opening quotes. I selected these conversations on the VE project talk page to analyse because they concentrate a lot of user concerns, both social and technical in one place. In total the conversation was 123,324 words contributed by 282 users with the vast majority of discussion taking place between July and September 2013 when VE was the default editor. I conducted a grounded analysis of the conversation, which revealed three interesting aspects of the controversy that frame the discussion and analysis that follows. First, of the three case studies that constitute these chapters, this conversation had a significantly larger input from the WMF. Second, while the reporting of bugs was the most frequent code applied to posts, these reports were often accompanied by commentary relating to the interface change, and therefore it cannot be claimed bugs alone forced the reversion of VisualEditor to opt-in status. Third, this event received the least press coverage of the three controversies, however it was still enough to frame the community in wider discourse as one headline put it, "Revolting Peasants" (Orlowski 2013a). However, while this was the most insular of the controversies as the following analysis reveals, it has the most in common with significant technological change in other user communities.

Interface changes in history

Interfaces have long been important to the history of human-computer interaction – indeed they can be classed as a gateway between people and machines.

Interfaces are the way that people and the hardware interact and form a sociotechnical system and *how* people and computers interact has been fundamental to thinking about these machines – before they even existed. The interface is the space that allows a person to tinker, to craft, to alter and to create, and therein it has a political history in regard to access, gatekeeping, *who* is allowed to craft, and *what* users are afforded. It is, in itself, a boundary object that allows for interpretation and importantly translation across boundaries and between sites of knowledge creation.

The debates around early GUIs and their role and purpose in the user experience is one that has threads through debates around the modern interfaces of a variety of platforms. One notable example is the move to a rich text editor (as opposed to hand coding) for blogging. As Jill Walker Rettberg (2014) observes, interfaces are often tied up with ideologies about technology. She notes “Blogger’s slogan in 2000, ‘Push-button publishing for the people’, takes another tack on the matter – not shared intimacy, as with personal diaries online, but opening up publishing to regular people” (Walker Rettberg 2014, 12). Such an opening up of “the community” by a technical mechanism reveals anxieties among users as these boundaries of participation are renegotiated.

Similarly, in thinking about the debates and boundary-work that occurred around the introduction of VisualEditor in Wikipedia, it is helpful to keep in mind that interfaces from the very beginning were meant to make things *easier* for users.

Interfaces are designed to facilitate work in an environment that may otherwise be complex and require a degree of prior knowledge and skills that are more than the average user is expected to have. In his report to the Stanford Research Institute (SRI) in 1962 on possible ways that human intelligence may be augmented by machines, Douglas Engelbart who demonstrated the first mouse and cursor interface noted that:

Increased capability in this respect is taken to mean a mixture of the following: more-rapid comprehension, better comprehension, the possibility of gaining a useful degree of comprehension in a situation that previously was too complex, speedier solutions, better solutions, and the possibility of finding solutions to problems that before seemed insoluble. (Engelbart 1962, 1)

Engelbart debuted his GUI in “the mother of all demos” at SRI in 1968 (Reimer 2005)⁴. He developed it after musing on Vannevar Bush’s (1945) essay “As we may think” and Bush’s idea of a “memex.” Engelbart pursued Bush’s idea of a human controlled machine that would bring together people and the “sum of our knowledge” (Bush 1945). Interestingly and prophetically, Bush did note the capacity of the memex to include “Wholly new forms of encyclopedias ... ready made with a mesh of associative trails running through them” (Bush 1945). The internet, the personal computer and Wikipedia are therefore all tied up with a longstanding desire for individuals to be able to access vast – or more specifically,

⁴ As well as Engelbart’s interface, Ivan Sutherland has also been credited with designing one of the – if not the – first interfaces, Sketchpad (in 1963) which is regarded as the forerunner of the CAD technology used today.

“the sum” – of human knowledge. After receiving his PhD, Englebart received funding and a team of researchers at the SRI to pursue his “wild ideas,” and in 1962 published the aforementioned “Augmenting Human Intellect” where he furthered Bush’s ideas. However his was not the only team working on developing such a machine as the PLATO system was being developed by the University of Illinois. PLATO used touch screen interfaces as opposed to the SRI team’s cursor and mouse system (Streeter 2011).

Bush’s vision of “new forms” of encyclopaedias and Englebart’s vision of “speedier” and “better” solutions to problems are both premised on the idea that increased access to knowledge will better the human condition. Streeter argues that this is a “rather dry” view based on conceited Enlightenment ideals about knowledge and he poses the question: “Are the problems of the world really ones of inadequate intellect, or are they more about, say, social structure, or values, or access to resources?” (2011, 39). Wikipedia lies at the intersection of these two positions – on the one hand, it aims to create and make accessible knowledge of an encyclopaedic calibre and on the other, it wants to diversify who is contributing and creating this knowledge. Therefore while Wikipedia can be seen as an embodiment of these ideals regarding the accumulation and sum of all knowledge, it also upsets traditional structures of knowledge production and curation, by expanding boundaries and allowing in theory, anyone to edit.

The new Web 2.0 platforms and practices that upset traditional processes are also often described as driving the need for new business models to accommodate the creative consumer/user/citizen. Prior even to the advent of Web 2.0, Engelbart’s demonstration hinted at possibilities for work practices in the future. Streeter

(2011) notes in his practical demonstration Engelbart offered computer users not just the ability to redefine work but also an element of *play*. The ability to play and to tinker was a “galvanizing moment” for many computer programming pioneers (including Whole Earth movement founder and DIY pioneer Stewart Brand who operated a camera at the demonstration) (Streeter 2011, 41). Play and tinkering through an interface would go on to be critical elements of the personal computer’s realisation, both in its early construction and evolution and its eventual commercial market success as a consumer product.

As a “galvanizing moment,” Engelbart’s system attracted much attention and in its desire to adapt to what it perceived would be a paperless future, Xerox funded the Palo Alto Research Centre (PARC) to produce Engelbart’s system complete with GUI and mouse. It succeeded in 1973 with the launch of the Alto. Alto’s GUI was still fairly crude, the first modern interface as we know it, Smalltalk was later developed at PARC by Alan Kay.

Of the development of Smalltalk, in PARC’s days as a haven for researchers protected from commercial pressures, Kay says:

Early Smalltalk was the first complete realization of these new points of view as parented by its many predecessors in hardware, language and user interface design. It became the exemplar of the new computing, in part, because we were actually trying for a qualitative shift in belief structures—a new Kuhnian paradigm in the same spirit as the invention of the printing press-and

thus took highly extreme positions which almost forced these new styles to be invented. (Kay 1996)

In talking about the progress of the GUI since Smalltalk, Kay says:

There is the desire of a consumer society to have no learning curves. This tends to result in very dumbed-down products that are easy to get started on, but are generally worthless and/or debilitating. We can contrast this with technologies that do have learning curves, but pay off well and allow users to become experts (for example, musical instruments, writing, bicycles, etc. and to a lesser extent automobiles).

....

There is the general desire of people to be change adverse — “people love change except for the change part” — this includes the QWERTY and no-learning-curve ideas. (Greelish 2013)

Resistance to change was explicitly voiced by a number of existing Wikipedians who engaged in protective boundary-work to safeguard their current practices. Where some community members acknowledged that Wikipedia in 2013 is not the same thing as Wikipedia in 2001 and needed to adapt to changes in its environment by redrawing boundaries around participation and access, many openly acknowledged their opposition to change. Even though there is this resistance, many Wikipedians seem remarkably self-aware of their position in the debate, and used humour to frame this – telling other users to “get off my lawn.”

No doubt most of us who have been editing the same way for years would like to keep doing it that way without having some unnecessary hurdle placed in the way. (Wikipedia 2013c)

This sort of comment worked to establish boundaries around a core editing group that was based on length of time editing the platform. Time was a simple way actors on the controversy established their authority in the debate. It sometimes fell back to an “old users” versus “new users” trope, but mostly the old interface was framed as being more efficient for old users who were “used to” the wiki markup editor.

Indeed wiki markup is assigned a lot of value by some existing members of the community as a gatekeeper. Some editors see learning markup as a rite of passage for new users, and mastery of the technology has a long history in usability. Donald Norman (1999) sees mastery over technology as important for early adopters of a technology while convenience is more important for later (and the vast majority of adopters).

... I also don't believe in making it easier for neophytes to edit Wikipedia without the need to learn Wiki Markup Language; all it is likely to do is allow articles to be messed up more efficiently than ever before by people who don't know what they're doing. (Wikipedia 2013e)

Some Wikipedians worked hard to establish boundaries to protect the type of work they do in the encyclopaedia. Work that can only be done with requisite

skills and knowledge of wikimarkup. This idea of technical mastery and the status afforded to users as they master emerging technologies also has a history in relation to the evolution of the interface. Eben Moglen, an early programming language designer and now free software advocate made observations about the interfaces that were being developed at PARC:

What I saw in the Xerox PARC technology was the caveman interface, you point and you grunt. A massive winding down, regressing away from language, in order to address the technological nervousness of the user.

Users wanted to be infantilized, to return to a pre-linguistic condition in the using of computers, and the Xerox PARC technology's primary advantage was that it allowed users to address computers in a pre-linguistic way. This was to my mind a terribly socially retrograde thing to do. (Worthington & Moglen 2000)

Talking in 2000, Moglen was thinking about the possibilities of free and open source software and the desire of users to be able to tinker. He analogised it to young people tinkering with automobile engines in the past and accordingly people would now want to be able to access and play with their machines (the interviewer Worthington responded by asking Moglen how many people actually knew how to tinker with engines?). Moglen says of the culture of tinkering, "We get, in our movement, accustomed to the idea that what people think is neat, or needed, they'll do" (Worthington & Moglen 2000). Just as hacks and fixes to VE were undertaken by members of the Wikipedia community, or when what they

thought was needed for the sustainability of the project was completely disabling the default editor.

VisualEditor is definitely the future, so I'm glad it's happening. But it still has a way to go if we want people to find editing easier. I actually work as a technical writer/UI designer at a software company, so I'd be happy to help out trying to fix this if need be.

(Wikipedia 2013c)

Yes; this is a hack added in by enwiki editors :/.

Normally it shouldn't display if there are notices (and for non-admins, it doesn't) but users decided they wanted some way to surface to every admin "hey! you can add page notices". Quite annoying at my end too, but not something the WMF did. (WMF) (Wikipedia 2013c)

Point. Frankly I suspect someone will build a gadget, even if we don't. (WMF) (Wikipedia 2013c)

... WMF is relying on the community to help with VE as an integral part of this process - Linus's Law. This is particularly important given the complexity of our project, our user base, and the relatively small number of staff. Google has over 7,000 engineers who have profiles on LinkedIn alone. I think we have just a bit over 170 employees in all departments. Pretty massive

difference. :) Beyond the invaluable help of the community in locating and fixing bugs, it's also been extremely helpful having them suggest enhancements and changes to the way VE works. But the WMF recognizes, of course, that not everyone wants to take part of this, and use of VE is optional. (WMF)

(Wikipedia 2013k)

Kay's original Smalltalk built on what the user already knows. Just as Hill (2013) found that Wikipedia has succeeded because it largely resembles a traditional encyclopaedia, Kay's clunky metaphor of a desktop in the Smalltalk GUI succeeds due to the same reasons – it resonates with people and is familiar. It took existing knowledge and built on top of that. Just as using a computer with a command line interface didn't propagate, while a visual interaction environment of overlaying windows, like pieces of paper on an actual desk, did (Johnson 1997).

However Smalltalk, and other advances in interface technology remained the domain of programmers in PARC and similar facilities. It wasn't until Steve Jobs made his infamous visit to the PARC facilities in 1979 (Gladwell 2011) and saw the GUI and adapted it to the Apple Lisa that a graphical, visual interface began to take steps to reach a broader user audience. This interaction between the everyday user and the machine was arguably, according to Englebart and perhaps even Bush, was what had been intended all along: an ability to redraw boundaries so that the amateur may become an expert. While Lisa failed in the consumer market, Apple's next iteration, the Macintosh famously took computing and the GUI to the home user.

Mac with its playful desktop items was “The Computer for the Rest of Us” (Peckham 2011), not just technical experts. Maybe it is because visual elements in interface design have often been associated with playfulness, when encyclopaedia-making is serious business, that VisualEditor had so many detractors among existing editors. In defining protective boundary-work, Gieryn (1995) notes that it aims to keep politics out of practices. Opening up participation in the encyclopaedia via direct intervention from the Wikimedia Foundation is seen by some in the community as a political move – and this is against the ethos of Wikipedia as a post-political open space (discussed further in the next chapter). Indeed there are complex politics around the notion of “anyone” and “everyone” in online platforms and this is the central argument of this thesis. Boundary-work by existing users frames participation in Wikipedia as complex work that requires a degree of mastery and commitment that is over and above a “fun” online hobby. Perhaps then in this context of the markup editor acting as a gatekeeper VisualEditor may be framed as “The Wikipedia Editor for the Rest of Us.”

The ability of individuals to make contributions and have agency is an important ideal for many contributors and early computer users. In a pre-release review of Windows in 1985, reviewer Will Fastie notes, that while he prefers Windows over competitor GUIs, he still prefers DOS to Windows:

But how good is Windows as a user interface? That's a hard question to answer. How about this question: does Will Fastie use Windows? Answer: Yes. But I don't yer [sic] start it automatically--I'm still a bit tied to the command line interface. Time will tell. (Fastie 1985, 114)

Another review of the Apple Macintosh in *Creative Computing* in 1984 observes why some disliked the visual interface the Mac provided its users:

Parochialists wonder what the problem is with modes.

Sure, they require real effort to understand, and nothing about them is in the least bit intuitive. But effort is what separates the wheat from the chaff, right? The men from the boys. The smarties from the dummies. If you can't learn about modes, then maybe computers aren't for you.

Understand?

Certainly some users would prefer to be perceived as micro-Merlins. Perhaps the more cryptic a command code, the better. This category of user perceives the eventuality of real democratization of computer power with something akin to melancholia.

Imagine how depressed the very first auto owners must have been when the Model T started popping up everywhere. It became harder to feel superior.

(Anderson 1984, 12)

Indeed mastery of the wiki markup editor was used to create a boundary around existing editors who had invested the time and effort in learning its conventions. The new VisualEditor that aimed to open up and democratise access to Wikipedia probably did leave some users with a sense of melancholia for their “Wikipedia of 2004.”

5.2 The change from markup to WYSIWYG

The six talk page archives analysed in this chapter cover the period during which VisualEditor was launched as an alpha product in 2012 with the ability for volunteers to opt in and report back, and its site-wide launch as an opt-out beta product 6 months later in July 2013, through to its re-instatement as an opt-in interface in September 2013 and subsequent discussion of its progress to August 2014.

Again, this was not a debate that was confined to the user community. Outside actors recognised the importance of a fundamental change to the way people accessed and edited the encyclopaedia and the Wikipedia article about VisualEditor contains a section entitled “Reception” that outlines the user and media response to the rollout:

According to The Daily Dot, Wikimedia Foundation's pursuit of more users may be at the risk of alienating the existing editors. Some experienced editors have expressed concerns about the roll out and bugs, with the German Wikipedia community voting overwhelmingly against making the VisualEditor the new default, and expressing a preference for making it an "opt-in" feature instead. Despite these complaints, the Wikimedia Foundation continued with the rollout. According to The Register "Our brief exploration suggests it certainly removes any need to so much as remember what kind of parenthesis belongs where." According to The

Economist's L.M., it is "the most significant change in Wikipedia's short history." Softpedia ran an article titled "Wikipedia's New VisualEditor Is the Best Update in Years and You Can Make It Better". Some opponents say that users may feel belittled by the implication that "certain people" are confused by WikiText and therefore need the VisualEditor. (Wikipedia 2014e)

The rollout of Visual Editor was initially criticised by editors predominantly for its bugs, and lack of proper notification to users of the intent to change the default editing interface.

...Yet, low-and-behold, it appears that:

- (a) a buggy piece of software
- (b) affecting core functionality
- (c) has been rolled out across all users
- (d) with an unadvertised opt-out buried in user preferences
- (e) without the community being notified properly.

WTF!?

(Wikipedia 2013d)

... I don't really think people have a problem with the VisualEditor itself (besides the bugs), I think the problem is the way it was presented and then

implemented (at least that's what I have a problem with). ... (Wikipedia 2013e)

The WMF acknowledged the difficulties encountered in rolling out VE however countered with the argument that beta testing before rollout was difficult due to Wikipedia being a “highly editable environment” that afforded any number of possible user actions. Users though did note the importance of having a community that felt consulted and invested in the roll-out.

...we appreciate this hasn't been the smoothest software deployment and do want to improve. (WMF)
(Wikipedia 2013d)

Because there are a vast number of permutations of user actions. We had a lot of beta testing - starting in December 2012, the VE was opt-in here. At one point we had 1,000 users using it. But that doesn't account for every possible use case in a highly editable environment. (WMF) (Wikipedia 2013k)

Agree that I felt somewhat force-fed on this thing. --
cyclopa (Wikipedia 2013k)

... I'm not making excuses, because absolutely we wish things had run differently, but c'mon... (WMF) (talk)

03:54, 11 July 2013 (UTC) (Wikipedia 2013k)

Another user group acknowledged the changing nature of Wikipedia, its size, the layers of bureaucracy, the expectation of civility among users and the reliance on

technicalities to prevent major change in the platform. This group also challenged the presence of boundaries around experienced Wikipedians, calling them “tech types” and positioning them at odds with the rest of the community and also the general public.

The recognition of a changing Wikipedia is not a recent revelation, a proposal for a WYSIWYG editor was first put forward in 2009 with the aim of possibly “expand[ing] the demographic of the user base” (Wikimedia 2009). Based on this proposal the suggestion was to make a WYSIWYG editor the default editor for Wikipedia. After this, in 2010, the Wikimedia Foundation made available the results of a former contributors survey that showed of the more than 1200 respondents, half left for personal reasons, while the other half left for “community” or “complexity” reasons in equal measure. That is, editors felt that Wikipedia was too hard to use and navigate, while those who cited community reasons experienced frustrations with other editors and having contributions removed or reverted. In terms of usability, the complexity findings are the most interesting, as respondents cited having to become up to speed with information too quickly, and “wanted interface improvements to make activities easier to use/learn” (Wikimedia 2011).

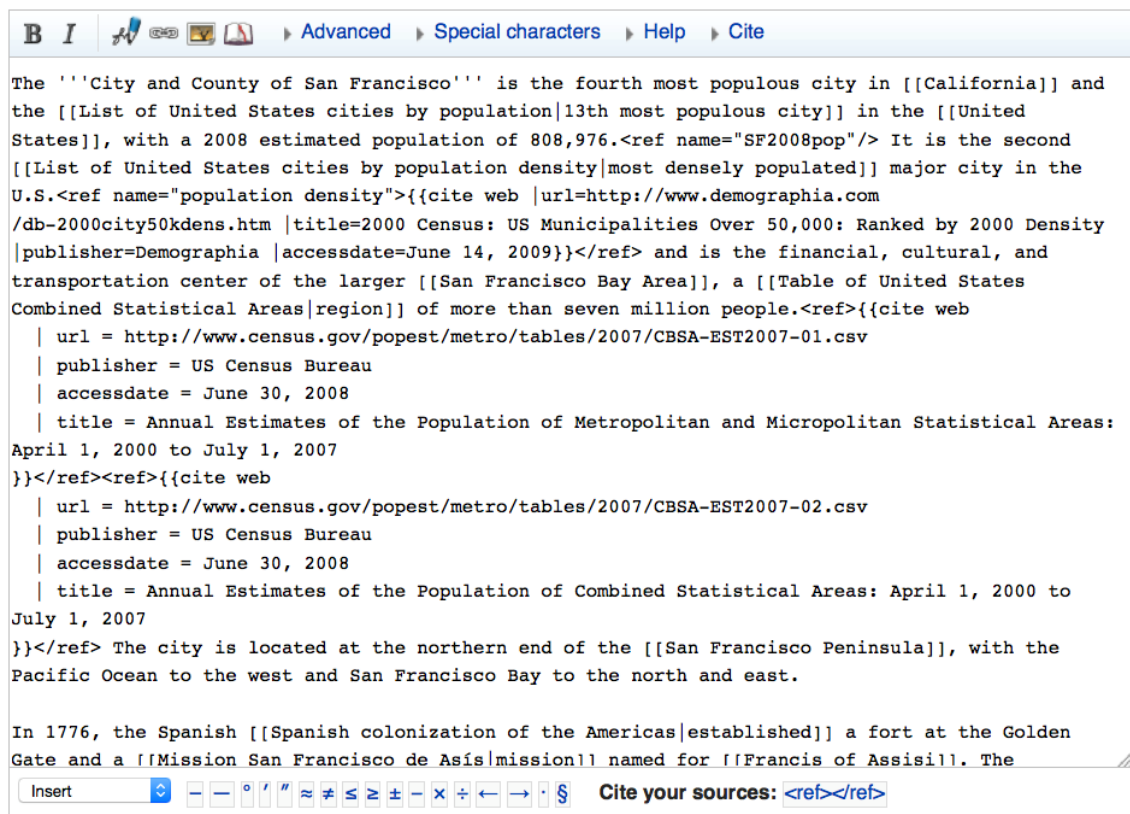


Figure 5.1: Wiki markup for the San Francisco article (circa 2009).

In conjunction with research firm Bolt|Peters (which was subsequently acquired by Facebook in 2012), the Wikimedia Foundation did live user testing with 12 people who had never edited before and three people who had made less than 25 contributions (Wikipedia Usability Initiative 2010). Researchers tested participants who were asked to make certain changes to a Wikipedia page such as the article San Francisco (Figure 5.1) and the switch from the wiki article page to its wiki markup source was a barrier for many of the novice users.

“In many websites, or many places, you kind of see the screen just the way you see it in the article, but here it looks like they have converted that and now it’s like plain text.”

“Oh look at all that! What the hell is it?”

“It’s kind of hard to read in this format cos it has all of this... I don’t know, I don’t know how to call it.”

(Bolt|Peters 2009, 00:35)

Participants expressed apprehension about the changes they were actually making. While Wikipedia expressly invites users to “be bold” and make changes, when switching to the markup editing interface, this invitation becomes less clear.

“I’m not that familiar with the coding, I don’t even know when I’m putting it in, if I’m hitting the quotes, am I making a quote or a Wikipedia code for something that would give it... so again I’m just not totally on board with how to do it.”

“But on a blog usually, when you look at it, it looks like the real page.”

“It’d be nice to have a GUI so you can see the cuts while you’re doing it, so you can see your results as you’re going. Like have it done so that the software, you just edit it and the software just automatically translates it into the common formula, normal colours for links and whatnot and you can see it as you’re going because now you know, you’re making these changes and you don’t know.” (Bolt|Peters 2009, 02:35)

The wiki markup therefore acts as a gatekeeper and barrier to entry for many new users. While it is possible to perform higher order tasks in the encyclopaedia like creating or altering templates and infoboxes, it is not immediately apparent how to do this. Indeed as an editor I have used wiki markup by copying and pasting the source code from similarly styled sections. And anecdotally, this is not an uncommon approach.

...We're used to copying whatever was done before,

from wikicode to templates to whole processes...

(Wikipedia 2013k)

... But using markup as that speedbump is clearly

filtering out people we want: experts like [the user] in

the thread above... (WMF) (Wikipedia 2013c)

Undertaking higher order technical tasks in the encyclopaedia then requires a certain familiarity with markup. And as the wiki evolved, so too has its role in the larger Wikipedia socio-technical system and in decision making and functions beyond editing article text. In this capacity the wiki provides “the parameters in which subsequent functions of the decision-making systems and the organizations in which they are embedded are carried out” (Napoli 2014, 345). Initially the open format of the wiki supported open processes, however as the technology evolved so too did its decision making systems.

As discussed in earlier chapters, the heterarchical style of the wiki, the egalitarian anyone-can-edit approach to constructing the encyclopaedia has resulted in not only a large amount of governance pages, but increasingly complex article pages also. Take for example the article in English Wikipedia, “Life expectancy.” Upon

its creation in January 2002 it sat at 1,137 bytes and looked like this (Wikipedia 2002a):

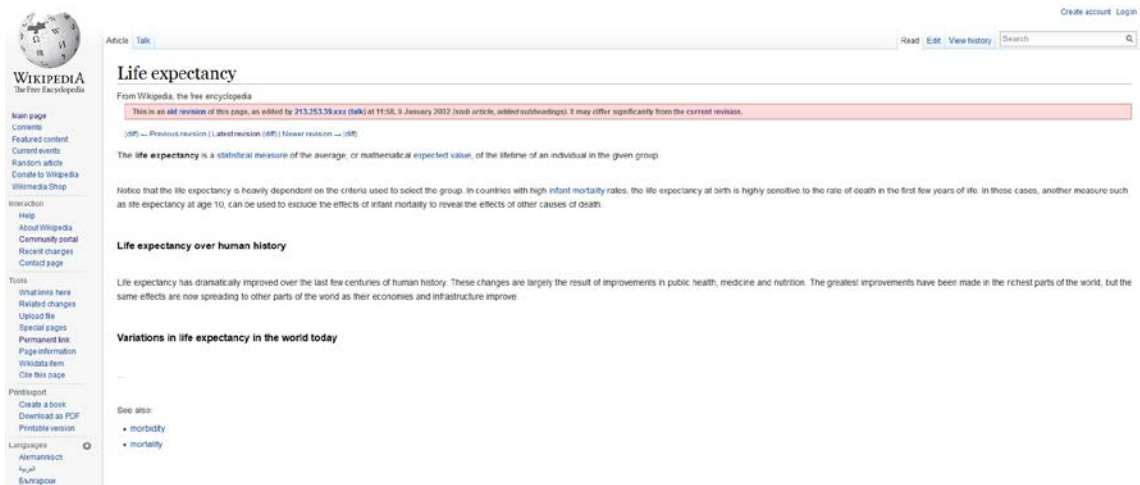


Figure 5.2: Life expectancy article in 2002 on English Wikipedia.

The wiki markup (in its entirety) looked like this:

```
The "'life expectancy'" is a [[statistical measure]] of the average, or mathematical
[[expected value]], of the lifetime of an individual in the given group.

Notice that the life expectancy is heavily dependent on the criteria used to select the
group. In countries with high [[infant mortality]] rates, the life expectancy at birth is
highly sensitive to the rate of death in the first few years of life. In these cases, another
measure such as life expectancy at age 10, can be used to exclude the effects of infant
mortality to reveal the effects of other causes of death.

<h3>Life expectancy over human history</h3>

Life expectancy has dramatically improved over the last few centuries of human
history. These changes are largely the result of improvements in public health,
medicine and nutrition. The greatest improvements have been made in the richest parts
of the world, but the same effects are now spreading to other parts of the world as their
economies and infrastructure improve

<h3>Variations in life expectancy in the world today</h3>

...

See also:

* [[morbidity]]
* [[mortality]]
```

Figure 5.3: Wiki markup for the Life expectancy article in 2002

After twelve years, in October 2014 (50,831 bytes) (Wikipedia 2014d) the article is roughly 6,000 words with six graphics, seven templates, three mathematical equations and markup that includes the following:

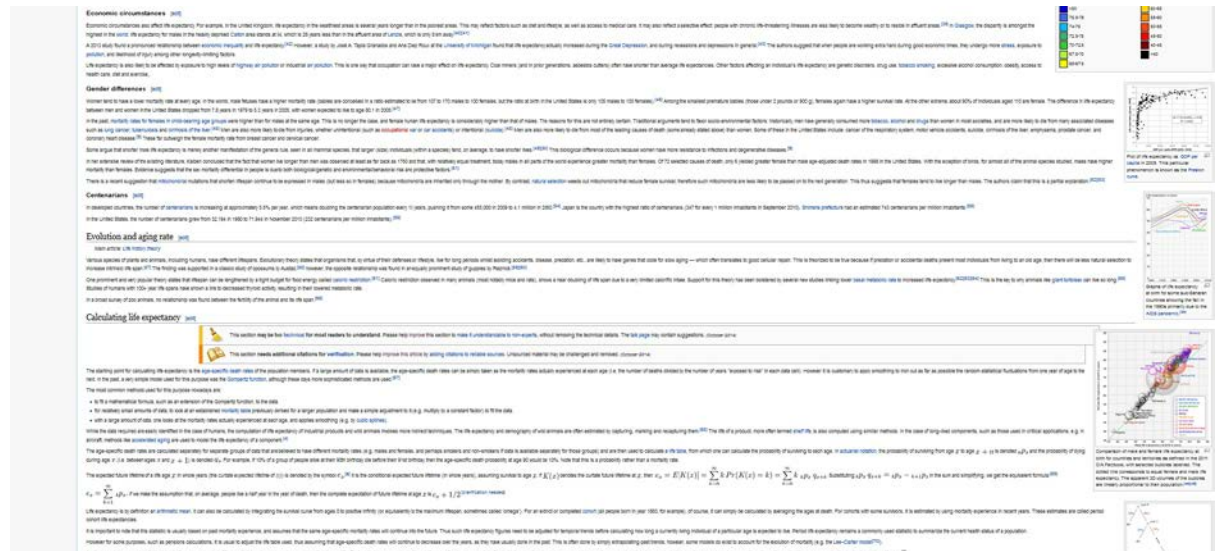


Figure 5.4: Part of the Life expectancy article on English Wikipedia in 2014.

===Life expectancy variation over time===

The following information is derived from "[[Encyclopædia Britannica]]", 1961 and other sources, some with a questionable accuracy. Unless otherwise stated, it represents estimates of the life expectancies of the [[world population]] as a whole. In many instances, life expectancy varied considerably according to class and gender.

Life expectancy at birth takes account of [[infant mortality]], but not pre-natal mortality.

}}| class="wikitable"

|-

! Era !! Life expectancy at birth
(years) !! Life expectancy at older age

|-

| [[Upper Paleolithic]] || style="text-align:center;" | 32 || Based on the data from recent hunter-gatherer populations, it is estimated that at age 15, life expectancy was an additional 39 years (total age 54).<ref name=kaplanetal2000>{{ Cite journal |year=2000 |author=Hillard Kaplan, Kim Hill, Jane Lancaster, and A. Magdalena Hurtado |title=A Theory of Human Life History Evolution: Diet, Intelligence and Longevity |journal=Evolutionary Anthropology |volume=9 |issue=4 |pages=156–185 |doi=10.1002/1520-6505(2000)9:4<156::AID-EVAN5>3.0.CO;2-7 |url=http://www.unm.edu/~hkaplan/KaplanHillLancasterHurtado_2000_LHEvolution.pdf |accessdate=September 12, 2010 |postscript=.}}</ref>

Figure 5.5: Excerpt of wiki markup for the Life expectancy article on English Wikipedia in 2014.

Bolt|Peters noted “The ease of editing around wiki markup drastically decreased as the complexity of the article increased—most notably when articles started with large infoboxes, templates, and other syntax-heavy elements” (Wikipedia Usability Initiative 2010). Even users who are familiar with and like using markup have noted the need for change due the increasing size and complexity of the encyclopaedia.

The software needs to get simpler to use because the
articles have gotten far, far more complex. (WMF)
(Wikipedia 2013c)

While this theme was mentioned in the discussions, it was the media coverage that framed Wikipedia as a complex platform that required an easier way to engage with content. Media articles considered how a WYSIWYG editor would impact upon editing trends at Wikipedia. *The Next Web* blog enthuses, “If you’ve ever used WordPress, you’ll note there’s a ‘visual’ and ‘text’ editing mode – the former essentially means you don’t ever have to touch HTML, so anyone with basic computing skills can blog and self-publish. Thus, a visual editor will revolutionize Wikipedia” (Sawers 2013). Amid some of the hyperbolic press coverage (Curtis 2013; Garber 2012; L.M. 2011; Sampson 2013b; Sawers 2013; Sharp 2013; Sharwood 2013; Tsukayama 2012), there was a discussion of the extent to which Wikipedia had *changed*. *The Telegraph* wrote:

In the past, editing Wikipedia has required people to
learn some wiki markup – the syntax and keywords
used by the MediaWiki software to format a page.

While this was considered acceptable in 2001, today it

drives away some contributors. Now VisualEditor allows users to edit and become members of the community, even if they are not wiki markup experts.

(Curtis 2013)

Interestingly, while media discourses were overall positive about Wikipedia's editing interface change, the reader comments attached to the online press pieces often reflected talk page themes including the adequacy and appropriateness of wiki markup for authoring an encyclopaedia. In Megan Garber's (2012) piece in *The Atlantic* that pondered the merits of Wikipedia's aesthetics, the comments section dismissed her article and reflected the sentiments displayed on the Visual Editor talk page – that is, Wikipedia's GUI is fine for an encyclopaedia and the editing interface also functions as a filter for desired user types (admittedly Garber called Wikipedia ugly).

The response to the launch was also covered in various outlets (Orlowski 2013a; Orlowski 2013b; Sampson 2013a) including the Daily Mail, that dubiously linked the introduction of the new editor with a decline in editor numbers and increase in “spoof” articles that left experienced editors disillusioned (Sharp 2013). The press coverage of the failed launch predominantly played out as old users resistant to change in opposition to the progressive organisation hoping to encourage new editors and input to the encyclopaedia. The analysis of the discussion however revealed divides in the editing community between user groups that problematises the organisation versus community narrative played out in the press. The differing groups positioned themselves in the debate as either for or against the interface change, with those advocating for change positioning themselves as progressive

users who also spoke on behalf of new users for whom the change and increase in usability was intended. These users spanned the boundaries between the Wikimedia Foundation and the users, often acknowledging the work that the foundation had undertaken to enact one of the biggest and most fundamental changes to the platform in years.

The edit tab

This story of usability and of change in Wikipedia is also the story of the Edit tab. It is this object at the top of an article page that makes Wikipedia what it is. It invites readers to become editors. Mapping out the controversy around the tab is another way of teasing out the politics of the platform in terms of usability and access. It is therefore useful to walk-through the differences between the traditional wiki markup interface and the new VisualEditor.

Prior to the launch of VisualEditor, users who chose to edit an article by clicking on the edit tab (see Figure 5.6), were taken to an editing box containing the article written in wiki markup which they could then edit (see Fig 5.7). Upon the release of VisualEditor, users who followed this same action of clicking the edit tab were now taken to a WYSIWYG editor (see Figure 5.8).

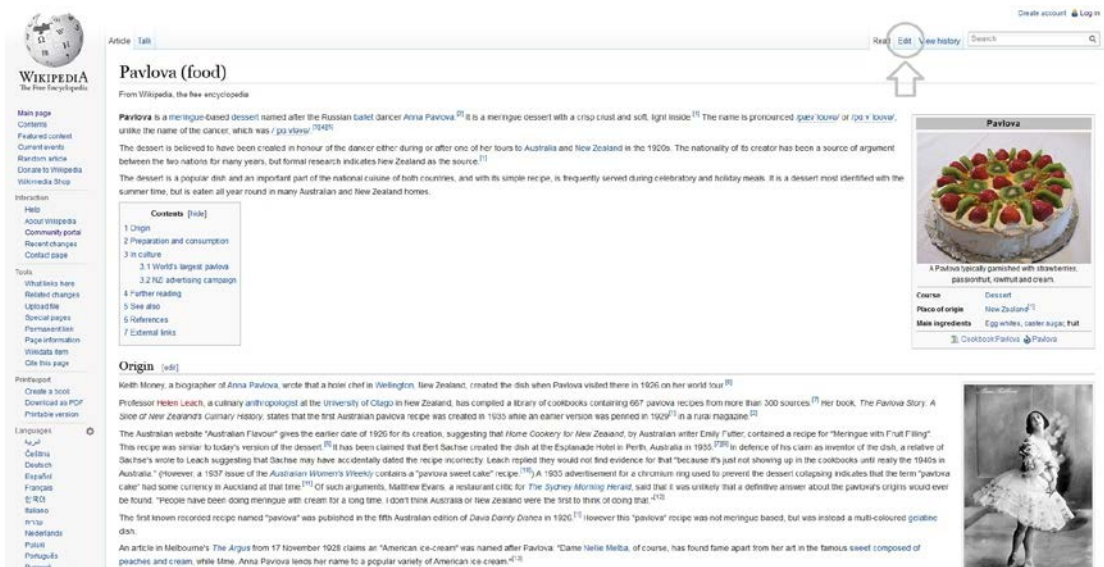


Figure 5.6: Edit tab on the Pavlova (food) article.

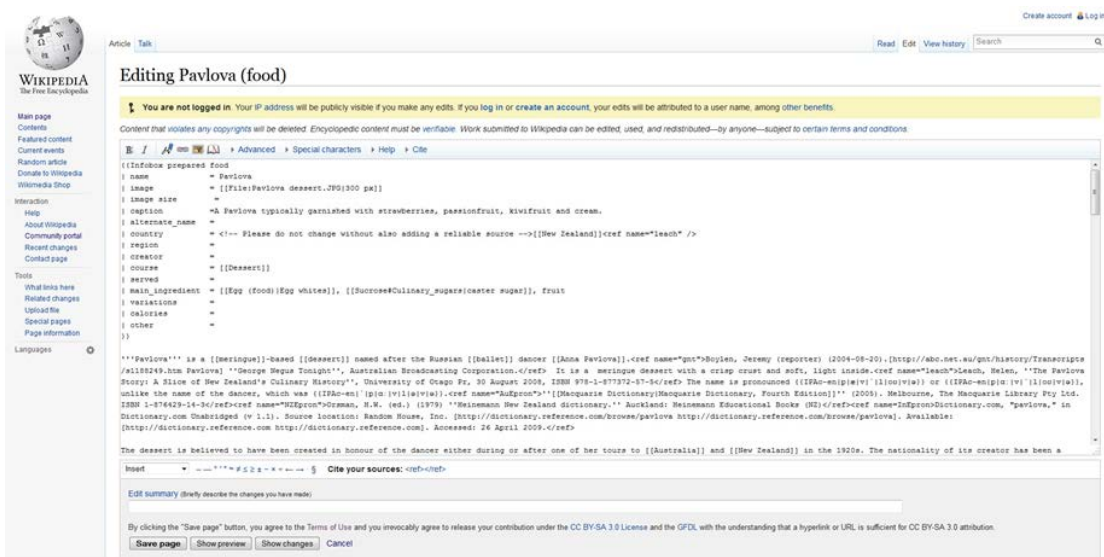


Figure 5.7: Markup editor interface.

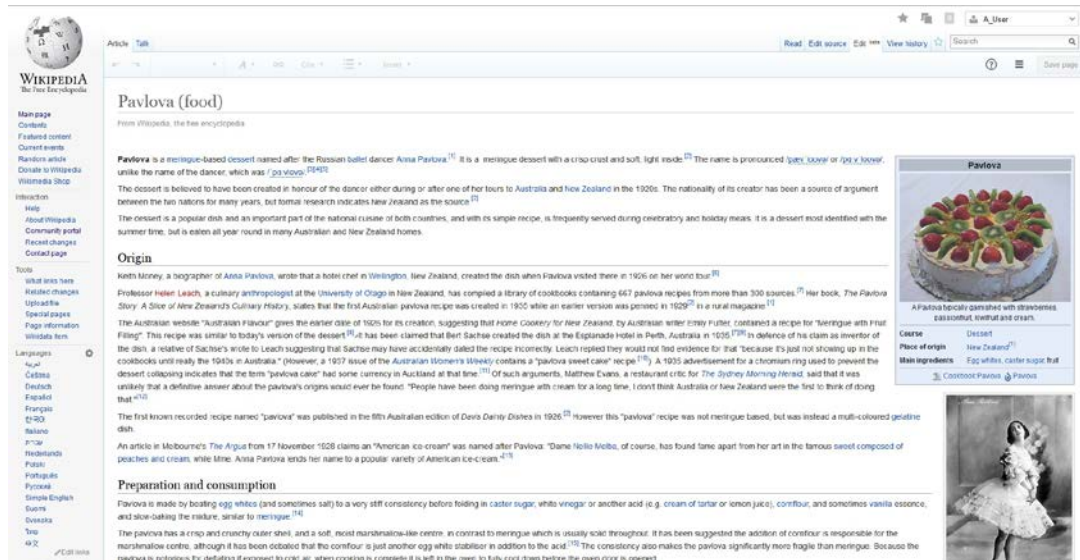


Figure 5.8: VisualEditor interface.

Not wanting to use the new default editor, many existing editors wanted the ability to disable Visual Editor.

As a conservative editor, who simply wants to keep his layout and modus operandi undisturbed and therefore refuses almost all technical novelties forced upon him, I ask: 1) Is there a possibility of opt-out in advance? 2) Will the opt-out work across projects with one action (i.e. one mouseclick "killing the beast" instantaneously everywhere)? ... --Miaow Miaow (Wikipedia 2013c)

I too would like the ability to opt out, I find the new visual editor to be disruptive to many older editors ability to edit productively. (Wikipedia 2013c)

For some users, the introduction of a WYSIWYG editor was such an affront that they not only wanted the option to set the existing markup editor as their default

interface, they also wanted the option to edit in visual mode to disappear completely.

I don't suppose there's a way to just make the links to the new editor go away? I want my edit buttons to bring up the old editor, and not have to adapt to the change.

Yes, I'm being a curmudgeon - I will admit that.

(Wikipedia 2013c)

Debate also occurred around the newly created tabs for editing options: “Edit” (which loaded VE) and “Edit source” (which loaded the markup editor). Here the discussion occurred around the preference given to the Visual Editor editing tab, with some users feeling that relegating markup to “Edit source” (rather than simply “edit”) created a perceived second class of markup editors. These technical decisions appeared to some users as a redrawing of the boundaries in Wikipedia in which casual editors were given preference over active, registered users.

For other more experienced users, the issue wasn't one of preferencing user types, but one of access to the most appropriate interface for the tasks they were trying to complete. The wiki markup editor was the only interface they wanted because it has the functionality for the higher order tasks they undertake. Usability for these editors means the ability to use the software and alter the code and they demarcated their position in the debate through highlighting their expertise in markup. Their boundary-work employed a rhetoric of openness, where openness was constructed in terms of access to the source code and technology, not access to the platform and the ability to create content. Usability therefore becomes contested as different groups advocate for their preferred access.

5.3 Usability

As a technology matures, its user base moves from being early-adopters to a broader representation of the general public with different skills, abilities and needs in terms of using the technology. These debates often play out as controversies between existing (the old) users and the new users. Wikipedia is no different and as it has matured as a platform and a technology, questions have been raised about its usability and what barriers to entry the technology – in its existing form using wiki markup – may provide to new users. For Wikipedia this debate is interesting because it plays out at a strategic level with the Foundation attempting to recruit more users to ensure its sustainability, and also at a user-level about the nature of the platform as a wiki – and what this means to users' (new and old) ability to *use* and edit it. While many platforms follow Donald Norman's (1999) view of the invisible computer – that is, to make the technology disappear so as to make it easier to use, Wikipedia differs in as much as it bridges a cultural divide between maintaining its open ideology and competing for users time with closed technologies that are becoming increasingly more intuitive. However proponents of Wikipedia's current dominant markup editing interface claim that it is in fact easier to use and edit the encyclopaedia using the existing wiki markup.

Some of us power-users actually like looking at code,
on top of being "used to" it! There would be pitchforks
at dawn, if it were disabled.... (Wikipedia 2013c)

Wiki markup gives users a greater degree of control over editing tasks and a greater range of tasks that is not afforded by VisualEditor as it lets users drill

down to software tasks that alter the structure of Wikiepdia. Some users expressed an appreciation for this control, and others still maintained they would always reject a WYSIWYG editor in favour of a source code editor in any situation.

This mastery over the technology is reflected in Norman's observations of early users of a particular technology who "love a challenge, who want to be on the leading edge" (Norman 1999, 34). Norman observes that early adopters of a technology invest because the benefits of the technology outweigh the costs, however as the technology matures new users seek "efficiency, reliability, low cost and convenience" (Norman 1999, 31). As the findings of Wikipedia's own research team suggests, more users would be inclined to edit if it were an easier and simpler process (Wikipedia Usability Initiative 2010). Navigating wiki markup is confusing to many users who have become conditioned to WYSIWYG content editors across a variety of platforms. However it is precisely this point, Wikipedia is different from commercial platforms like Facebook and YouTube, which advocates of wiki markup say is crucial for keeping Wikipedia an open platform.

These particular debates in Wikipedia also reflect larger societal concerns with control and access on the internet. How much control are we willing to give up in order to easily do what we want? In other cases, on a platform like Facebook, this may be about giving up control of some of our personal information to a corporation – who then use our data – in order to easily connect with our friends and maintain social relationships. For a platform like YouTube, it may be surrendering privacy around our viewing habits in order to have the freedom to

create and distribute content outside of the traditional corporate media system, and watch what we want, when we want, for free.

In this vein, the controversy surrounding the launch of Visual Editor in July 2013 followed a similar pattern to debates surrounding changes to the usability of other platforms. Reflecting pro-am debates around new media generally, existing users (the professionals who have mastered the technology) see an increase in usability as allowing new users (the amateurs who now have easy access to the tools) to wreak havoc, creating low quality content and generally contributing to the degradation of the platform.

In this debate there is also an important distinction to make between Norman's (1999) "invisibility" and Zittrain's (2008) "generativity." Whereas Norman sees invisibility as allowing easier use of a technology through interfaces or controls essentially disappearing, Zittrain notes it is also important that a platform retains its generativity, and inscribing affordances in its design may limit its generative output. This is a feeling echoed by Wikipedians who feel that VisualEditor limits a user's editing to certain actions. VE does, for example, make fixing a typo, or adding a sentence easier. However if a user wished to go further and say, create a new template to be applied to articles (which is a higher order task regarding content curation), this is in fact not possible using the Visual Editor and can only be done using wiki mark up.

I believe it is like any visual tool. Nice for beginners.

You may start from there. But when it gets to real work, you open a text editor. (Wikipedia 2013g)

The bugs aren't the problem for me. The simple inefficiency is. VE is for novice users. Many experienced users will always prefer simpler + more powerful. (Wikipedia 2013g)

When it comes to user interfaces, there tends to be an inverse relationship between intuitiveness and power. Once you've become accustomed to using the powerful features of an interface, switching to an intuitive version becomes all loss and no gain. --Cryptic C62 (Wikipedia 2013g)

Jean Burgess (2012) refers to Zittrain's concerns about "open" and "closed" devices and the decreased generativity that results from more usable, but ultimately more closed technologies.

In microcosm, these concerns represent ongoing struggles and complex articulations between the ethics and values of "hackability" (founded in but extending beyond self-nominated hacker movements) and "usability" (which is equally founded in democratic, but far more market- and consumer-driven, principles). These two sets of values can be understood as occupying opposite points on a continuum: *hackability* is a state under which a given technology is open-ended, manipulable and affords complex experimentation with an accompanying level of difficulty and expertise, and

at the other end is extreme *usability* – where a technology affords easy access to a pre-determined set of simple operations, often via intuitive, “friendly” interfaces. (Burgess 2012, 30)

Advocates of the hackable nature of the wiki argue that the existing markup interface is indeed more usable as it has a greater degree of user agency. As Lessig (1999) points out, how the code is written at the technical layer structures the architecture of the space and the subsequent interaction in that space. The wiki architecture embodies ideals of individuals being able to contribute discretely, while allowing for collaboration on a mass scale. Steven Johnson (1997) notes how closely architecture is tied to the social imagination, how what we design portrays our values – just as villages may be designed around cathedrals, Greek cities around the agora, modern satellite towns around shopping centres and motorways. Similarly, forms like GUIs and wikis reflect our values in relation to the activities we are engaged with digitally. How easy is it to access the code that enables us to alter the structure? How do we create in this new space? What do interfaces in this context afford? As Johnson notes, “each design decision echoes and amplifies a set of values, an assumption about the larger society that frames it” (Johnson 1997, 44). For Wikipedia these design decisions echo openness (anyone can click the edit tab) and freedom (and add what they want) along with guiding users to certain routines.

Indeed it can direct users and prompt desired behaviours, and as one experienced editor noted, the VisualEditor made it easier to adhere to Wikipedia’s style guidelines. On the other hand one user created boundaries of expertise by noting

there is already a significant workload for Wikipedians changing hyphens to en dashes and they feared VisualEditor would make this particular issue and others like it more frequent. Users in Wikipedia are clearly invested in crafting a quality encyclopaedia and take pride in the accuracy of even the most minute encyclopaedic detail. For these users, VisualEditor is about how easily it allows new users to follow these style guidelines. The importance for VE to be a quality product therefore doesn't just play out at a strategic level in terms of Wikipedia's accessibility to new users, but how it affords users the ability to follow norms and complete the small tasks involved in crafting a quality encyclopaedia.

Interestingly, the wiki was touted as a technology for non-programmers (for amateurs), as markup was substantially easier to learn than code. And as one user noted the technical aptitude of the community and its willingness to participate in the software development process should not be assumed: "I'm an editor not a programmer" (Wikipedia 2013c).

...We are not here to test software, we are here to write
an encyclopaedia.... (Wikipedia 2013d)

And indeed in the early stages of Wikipedia's evolution, this was the case. Wikitext was a simple user-friendly format for creating knowledge as shown in the life expectancy example above. However the language is not static, it has evolved so that many users now have the ability to create complex (by earlier standards) architectures within the encyclopaedia. The markup has evolved to become so complex that there are indeed experts among the "amateur" users who are adept at working with the code to create the many features of Wikipedia. As

mentioned this code that runs the features is around six million lines to the 600,000 of the MediaWiki core platform (Geiger 2014).

While in 2014, Wikipedia's main page (see Appendix C for examples from its history) is still a relatively simple page in terms of design, and maintains its distinct MediaWiki aesthetic, it is obvious that the code has evolved to allow the creation of substantially more visual elements on the page and the skills required to write the code for the main page would require a greater degree of mastery of the code than is required to produce its turn of the century equivalents.

Interfaces therefore aren't static (despite Wikipedia's 2007 aesthetic style), they are tweaked and tinkered with. They direct user actions, but user actions direct future iterations of the technical code. In response to requests to not only hide Visual Editor, but to disable it completely so that it didn't even load in the background, the WMF suggested, being a wiki community, that someone would work a hack that could hide/disable VE for those who wanted nothing to do with it.

...and invariably some user will come up with a gadget to hide the VE editing link entirely. (WMF) (Wikipedia 2013c)

The value of an editor

As edits are tagged VE, there was also discussion of the mastery of wikimarkup required to contribute to the processes that really matter to the encyclopaedia (e.g. creating templates and infoboxes, tagging articles and adding banners and flags, hidden messages, adding citations, etc.) versus editing or adding the article text.

Activities in Wikipedia are value-laden and if as Zittrain says, we need a “particular technical locus” to “help us evaluate what values the system embodies – and what it truly affords” (Zittrain 2008, 79), then the wiki is an excellent example for examining the values and ideals of Wikipedia.

The open nature of the wiki reflects the ideals of Wikipedia in relation to free and open knowledge. But it is not just the ability to openly change a wiki that makes it open, its software, MediaWiki is open source software that is contributed to by a community of users. It is made according to open ideals, the idea that something exists that can be changed, that can be built upon. So while it may not be a market-driven logic, there is still a logic of growth in the open movement. Indeed openness enables progression and as Lessig (1999, 103) points out, “This openness was responsible for much of the early Net’s growth.”

Lessig (1999) also reminds us that code is mutable, and how it changes depends on the code writers. It is interesting then to think of the role that the code writers at the WMF have had on the evolution of the VisualEditor, and how this process is vastly different from the community hacks that have improved the wiki markup editor over the years. For VisualEditor developers did not organically emerge from the community in response to a perceived need for a more user-friendly editing interface. These code writers were (and indeed still are) employed by the Wikimedia Foundation to construct a product that helps fulfil a strategic goal by enabling a greater diversity of editors to contribute to the encyclopaedia.

These employed developers are designing and creating for increased usability and proscribed actions. The user is prompted to complete tasks afforded by the GUI. In VE these tasks are more to do with fixing content and adding references, than

hacking the structure of the encyclopaedia or generating new things such as infoboxes or templates that change the look and feel of the encyclopaedia.

VisualEditor is designed according to values around access and participation. The alteration of the interface is necessarily making it more closed to tinkering in order to make it easier for a greater diversity of new users to make a contribution. As Alexander Galloway observes, “Operability engenders inoperability” (2009, 931). Galloway (2009, 936) understands the interface as a “gateway that opens up and allows passage to some place beyond.” It is the place where different nodes of the system interact, where “flesh meets metal.” It is in this boundary space of the interface, where parts of the sociotechnical system overlap, that he sees an “an ‘agitation’ or generative friction between different formats” (Galloway 2009, 936).

However in this generative relationship the interface is not neutral. It emerges due to the need to communicate between those two different formats, between people and machines. It emerges from conflicting communication styles, and it is in this way that the interface is generative as it allows for communication to take place. VisualEditor has therefore emerged due to a recognition of the fundamental incompatibility of wiki markup and a large percentage of potential new users, its development is the embodiment of ideals around access and opening up the encyclopaedia to a greater diversity of contributions from a greater diversity of editors.

Just as Macintosh brought the GUI to the home user, Burgess (2012) argues the values of usability in digital media have again been redefined by Apple’s design, marketing and business models as embodied by the iPhone and dubs this shift the

“iPhone moment.” The ensuing debate about the iPhone in various media discourses reflected larger concerns about the nature of technology and digital futures (Burgess 2012). The relationship between what Burgess describes as the critical modernist ideal (rational mastery) and postmodern populism (popular access) reflects the relationship between the ideals in question in Wikipedia regarding the technology to create high-quality encyclopaedia articles (i.e., only people with a certain level of expertise and intelligence can write the articles and create knowledge). Therefore increasingly usable technologies are perceived to be “dumbed down” so that even “your mom” (or “the rest of us”) can use them (Burgess 2012), and their value (especially to Wikipedia) is seen as less than that of a technology that requires mastery.

As discussed, Wikipedia evolved from the early F/LOSS and DIY movements and Burgess notes that user agency is “embedded in the hacker ethic” of these movements (Burgess 2012, 32). For many editors the shift to a more “user-friendly” interface threatened this agency and therefore the ideals of the project.

Whereas for the hackers, transparency meant visibility and openness at all levels of hardware and code so that users might learn and fully master the computer, “user-friendly” interface design principles redefined transparency to mean the invisibility of *all* technological layers, leaving only the GUI so that there was nothing standing between the will of the user and the task for which he or she wished to use the computer. (Burgess 2012, 33)

The tensions between early adopters/hackers/experts and the late adopters/mainstream users/amateurs in Wikipedia are echoed in similar technological histories. Burgess (2012) notes that Apple included GarageBand as part of its iLife suite for home computers and the resulting debate between the professionals and the amateurs, the aficionados and the hobbyists followed a familiar trajectory. Apple worked user fixes and workarounds into the product, and communities of Garage Band users sprung up in response to the limitations of the applications that experts had bemoaned. Just as the majority of MediaWiki code that runs Wikipedia comes from user-created scripts that add functionality, users are extremely innovative in creating their own solutions to perceived problems with the technology (including scripts that can completely alter the content creating interface). Burgess also notes that therefore, “Even the most simplified usability doesn’t necessarily mean “dumbing down”: it can open up opportunities for greater participation, including critical participation, learning and the development of cultural, not only technical, mastery” (Burgess 2012, 38) as users will ultimately shape the technology to fit their needs (even if that means at one stage disabling it). Therefore even an interface that appears more closed still offers opportunities for genuine creativity. In Wikipedia however its appearance is seen by some to be linked closely with its invitation to participate in the platform.

The Wiki Aesthetic Style

Debates around aesthetics and usability are normally in relation to how easily an interface disappears and allows the users to complete tasks, however in Wikipedia’s case there is an argument to be made for keeping Wikipedia’s

trademark text-heavy, wiki aesthetic style. Another theme to emerge from the analysis, and one that has been echoed by former Executive Director Sue Gardner is the role of this aesthetic. Its bare bones approach and lack of any discernible attempt at creating a rich user interface gives the wiki a “handmade” aesthetic style and one that encourages input. This aesthetic style blurs the boundaries between reader and editor. It also signals that the work going on in Wikipedia is Serious Business. Contributors are more concerned with the accuracy of information and creating high quality articles than they are with creating a different user interface (Garber 2012) or a page that represents a normal HTML page.

... So what are we editing here? A wiki, or a HTML web page? The point about wikis is that they separate content and presentation (far more than even HTML 4.01 ever did). (Wikipedia 2013e)

From the discussion some users see any change in Wikipedia as affecting all wikis – that switching to a WYSIWYG editor will “degrade” all wikis. To these users maintaining a wiki markup editing interface holds up not only an aesthetic ideal of DIY and making, but also a political ideal about the nature of the web and how it has been imbued with these ideals in its architecture. Some users also see having the wiki subsumed by an Apple-esque editing interface as meaning the values associated with Wikipedia as a democratic technology are eroded and replaced by the values of a capitalist and corporate conglomerate.

These interface politics extend to the wiki as an ideal egalitarian and heterarchical space. This space relies on the assumption that consensus is based on common

concerns as well as a public sphere that ignores systemic inequalities in order to provide a platform for deliberative debate that preferences rational discourse (and also contributes to Wikipedia's systemic bias and gender gap that is discussed in the following chapter). The wiki undeniably opened up participation in encyclopaedic knowledge production to a "bunch of nobodies," and it provides an architecture for debate around this production to happen. However it preferences certain types of people participating in these discussions until consensus is reached and therefore while one of the more democratic technologies, still shapes participation. It is a highly hackable space that invites contributions from anyone who cares to make them, however in and of itself it immediately excludes those not comfortable with its markup, visual style or norms or conventions which aren't explicit.

5.4 The value of users

As evident from the discourses about the VisualEditor launch, the controversy is often discussed as an us vs. them debate, community vs. foundation, existing editors vs. new editors where boundaries are drawn around expertise and commitment to the ethos of the project. However in a closer reading of the community discussion it becomes clear that not all existing editors are against Visual Editor, nor are all the people who were opposing its default status doing so for the same reasons. Wikipedia is not, nor does it make any claim to be, a democracy. It is a collective effort comprising a lot of individual "nobodies." While Wikipedia is most often discussed as collective action, it is equally important in considering the encyclopaedia's sustainability to look at the individual and atomistic contributions of the thousands of unconnected distributed

users. On the one hand are power-users who contribute vast amounts of time and effort to the encyclopaedia, and on the other there are the thousands of valuable contributions from casual users. In this particular controversy around VisualEditor, are debates around which type of user is more valuable. Both types of user are integral and essential to its success, and part of this also depends on a fraction of the casual users “levelling up” to power user status to take up the slack left by power users who burn out.

The controversy around VE is that some users see the software as preferencing one type of user over another, rather than seeing it as one response to part of the user life cycle where the wiki may not be appropriate. The key sticking point is the default state, and it is the politics around this default that are at the heart of the controversy and friction among users.

In order to examine who is affected by the switch from the markup to the WYSIWYG editor as the default interface, it is necessary to look at who is actually using it.

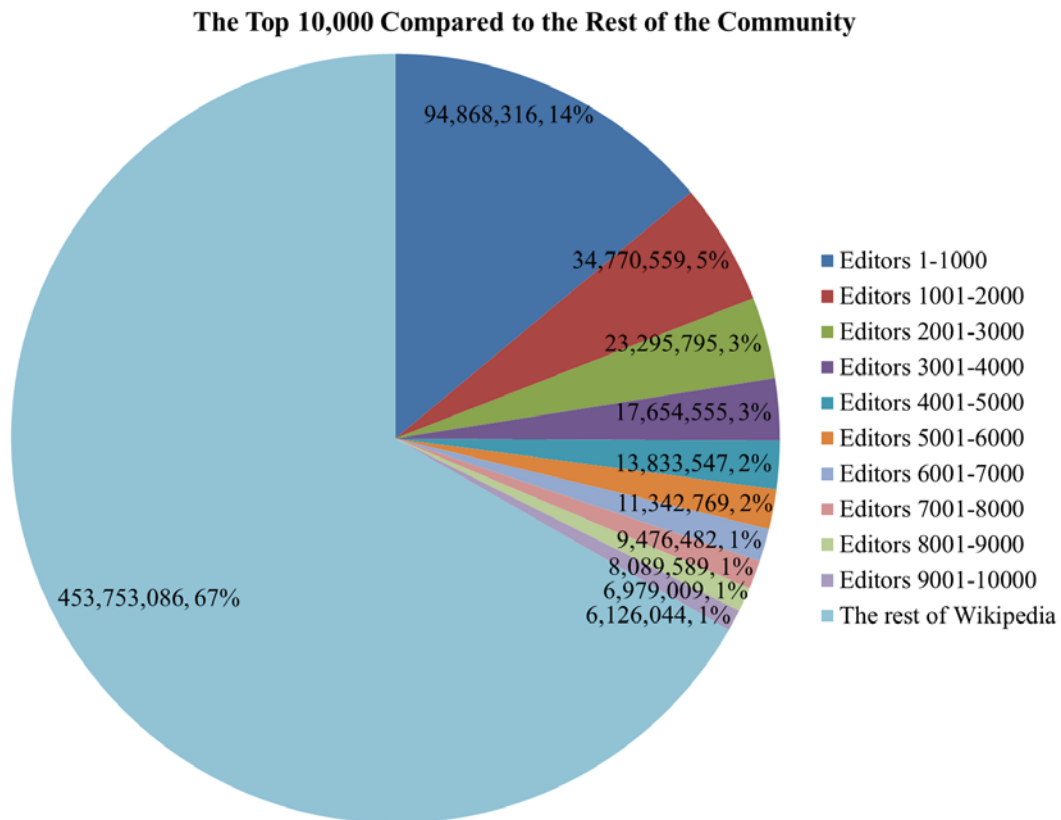


Figure 5.9: *Top Wikipedians compared to the rest of the community, 8 January 2014.*⁵ (Ktr 101 2014).

The least active users still account for the majority of contributions to Wikipedia and this pie chart busts the myth that it is the few most active contributing the most. It is important to keep in mind when looking at this chart, that there is no description of the types of activities that the edits constitute. It would be a safe assumption that some of the edits from “The rest of Wikipedia” are vandalism or well-intentioned edits that did not stick. Aaron Swartz explored this further in his

⁵ Editors are listed by edit count, that is Editors 1-1000 are the thousand most active users, 1001-2000 are the next most active thousand, and so on. A complete list of the most active Wikipedians can be found at http://en.wikipedia.org/wiki/Wikipedia:List_of_Wikipedians_by_number_of_edits.

Raw Thought blog in 2006, before the participation spike in 2007. Swartz analysed the claim that the few do the most and found that while the top contributors do have the most edit counts, occasional users were contributing more content (as in significant amounts of text to articles) (Swartz 2006).

However neither of these counts go far enough as to consider the *value* of the edits being contributed. In an environment that has the norm “judge the content not the contributor,” the value of an editor is actually tied very closely to their edits and content contributions to the encyclopaedia as shown in the previous chapter. This is thrown into sharper relief, when aside from the “rest of Wikipedia,” the second most frequent contributor group is indeed the top 1,000 editors. The picture that emerged from Swartz’s 2006 analysis is that occasional editors will contribute the content, while power-users will then spend many edits formatting, rearranging and cleaning up the content to fit the encyclopaedia (Bryant et al. 2005; Kittur et al. 2007; Panciera et al. 2009; Priedhorsky et al. 2007; Swartz 2006). This still however separates users into casual (new) and power (old) users. In between these two oft researched groups, there is a smaller and very important section of users. It is these boundary editors that are required to “level up” to a more active user status. And doing so is not merely a matter of increasing an edit count (although it certainly helps), but negotiating social norms of the editing community and the complex sociotechnical system that is Wikipedia.

As the platform matures and ages, as it *has* matured and aged, power users may tire of the politics and retire, get burned out by the amount of work expected of holding such a status in the community or may no longer edit due to life events

and outside commitments. It would be short-sighted to nurture the existing editor base at the expense of the new, just as it would be to alienate the existing users who contribute such a large amount to the encyclopaedia.

From the discussion of VisualEditor it is apparent different users have different needs, and the platform needs to accommodate users at all stages of involvement. Indeed YouTube has responded to the changes and diversity among its users by offering channels and avenues for professional media producers to distribute content alongside amateur creators, Facebook offers pages for companies, organisations and groups, and Twitter has verified accounts. As van Dijck (2011) notes, platforms like Twitter are often contested as to who and *what* they are actually for. The sustainability of a large platform depends in part on its ability to be flexible and interpreted and appropriated by the users for their needs, and to respond to these uses.

In Wikipedia it is now not only about new users, but also about the type of new user that a new interface would attract. Some users expressed doubts as to the calibre of editor that the new interface would invite – if a new user can't even learn wiki mark up, what could they possibly offer to an encyclopaedia? As one editor noted, anyone who could not correct a typo using the wiki markup editor should not actually be editing an encyclopaedia (Wikipedia 2013k). This type of protective boundary-work again shows the value that Wikipedia editors attach to expertise and how these ideals are tied up with concepts of an encyclopaedia.

In opposition to this position however, another editor expressed disgust at the idea that ability to use markup correlated with intelligence. This user found VE a much more pleasant editing experience, not only because it was easier, but because it

saved time without having to “go back and forth” and check edits between the editor and the final page version.

These are important distinctions to make when talking about the participation of a greater diversity of editors in the encyclopaedia. Indeed some editors highlighted the irony of experienced editors discussing their feelings about an interface designed for new users, and gave voice to a group normally excluded from such discussions.

Biased population that is taking part in this survey
(experienced editors) makes this question pointless. Of
course it is not useful for us, we don't need it. Ask the
newbies, and see what they think. I bet their answers
would be a bit different. Sigh. --Piotrus (Wikipedia
2013k)

... The option that more people want to use (a statistic
not represented in a survey of wikipedia's savvy enough
to use an RFC) should be the default. Unlike most
people here, the general public is not familiar with
wikitext and (demonstrably from wikipedia's decreasing
editor numbers and survey results) does not have the
inclination to learn it and that is causing a problem. It is
not acceptable to simply throw out the body of
knowledge provided by such a large swath of the public
(by hiding away the VE in unfamiliar options where
they might not realize it even exists) just because they

are not as comfortable with technical things like markup languages, and because you (people familiar with wikipedia, who will already know about wikitext and that VE can be opted out-of) can't be bothered to go into options. (Wikipedia 2013k)

Despite the fact that I'm not entirely happy with the way this has been deployed (frankly, it went far too early, before it was ready), I think we also need to acknowledge that putting together a Visual Editor is both the single most important technical thing that can be done to attract and retain new editors, and also one of the most difficult software engineering challenges possible. Building something as functional as what we have on top of the years of adhocism and legacy code that makes up Mediawiki and the English Wikipedia is an extremely impressive feat. –Lankiveil (Wikipedia 2013k)

Analysing the Visual Editor cannot be confined to its development, but must be extended to its roll out to the editorial community. Indeed its introduction, not its technical construction is what many existing editors were discussing in the feedback about Visual Editor. As Norman (1999, vii) notes, “The problem is that whether it be the phonograph or the computer, the technology is the easy part to change. The difficult aspects are social, organisational and cultural.”

Editors took issue with how they were notified (or not) about the change to the default interface, and as Wikipedia is an open community there is an expectation of transparency among users and with the Foundation. The consensus model scales out to an expectation of community consultation among users.

About whether we were notified or not, which seems to be a recurring theme in this thread: Yes, there were notices at the tops of pages saying that a Visual Editor was going to be rolled out one of these days, and that we could test it now if we want. That's quite a different matter from coming to Wikipedia to do some editing, clicking "edit", and being surprised by a very unfamiliar window. There was also no advance information, and still no labeling or information, to let us know that "edit source", whatever that might mean, provides a way to use the familiar format; I suspect most of us found that out by trial and error. (Wikipedia 2013d)

But what if it is ridiculous behavior? This "editor" has been rolled out in a highly disruptive way and is clearly bad for Wikipedia. The few that are "in charge of it" are truly behaving in a "ridiculous way" but if you want policy instead, their actions are clearly opposite of WP:CONSENSUS. When editors oppose consensus on Wikipedia to the extent that they have here, they get blocked. That hasn't happened here, and it looks like it

won't. And that is ridiculous behavior. But if you want to propose another word, please do so. I'm emotionally charged at how people are being treated here and I'm not the best person to choose words right now. (Wikipedia 2013d)

However in the case of VE (a WMF product, as opposed to a community innovation) consensus does not apply.

If you read the consensus policy you'll see it explicitly excludes technical changes. I agree we could have done better with the rollout; I don't agree that my statement - which is that we need to handle notifications in a way that balances making the option available to the community and making sure the VisualEditor isn't completely undermined - is ridiculous. (WMF) (Wikipedia 2013d)

In the ensuing discussion around VE's rollout, it is apparent that it is more than a technical change to the platform; it is indeed a cultural shift and a social change for users.

...the main reason for its rejection was that the community did not feel it was fundamentally ready to make such a huge leap in changing its core philosophy. And this, I think, is part of the reason that there are so many disagreements about changes: they're not just about the editing interface. They're about the

socialization of new editors, and interpersonal communications, and core organizational philosophies like usability and verifiability... --Riskier (Wikipedia 2013f)

For existing users it is important that new software and new products enable community members to easily follow Wikipedia's norms and policies. And for some, the ideal editor is "anyone" who understands the norms and rules. They engage in not only content generation (if indeed they engage in it at all) and focus on the processes and procedures of the encyclopaedia, becoming involved in the meta side of the encyclopaedia, the governance, the talk pages – regulating the encyclopaedia. This type of editor would indeed prefer to edit using wiki markup as a sign of his or her mastery, and one user argued that it is what holds a "community of professional editors" together (Wikipedia 2013d).

Whereas a VisualEditor user may or may not evolve into a committed Wikipedian, some existing users expressed concerns that users who contribute without knowing wiki markup could easily become a second user class. This group of editors would not have the requisite skills to engage in any complex higher-order tasks, and therefore could not be fully contributing members of the community. This position shows how the concept of one editing community is a persistent one, and assumes all users to have the same goals and ideals in regards to participation in Wikipedia.

Indeed the value of different user types was much debated in the aftermath of the VE rollout as "one edit wonders" were positioned in opposition to committed Wikipedians. It is also interesting to consider how value is created in a non-profit

platform like Wikipedia. Users don't add value to the organisation economically, by buying a product or increasing opportunities for advertising revenue, users add value to it by investing time and personal effort. Is it therefore seen as diminishing the value of the organisation if that time and effort is concurrently reduced?

The discourse among editors also worked toward demarcating boundaries around professional (power-user) and amateur (anyone else). This idea of user classes, and of differences among the user base doesn't align well with the egalitarian and heterarchical structure of the wiki. From the outset Jimmy Wales likened admin status to janitorial duties and this rhetoric is echoed throughout the project, informed by the ideal that anyone can edit. One user commented that it was "disconcerting" to see how the concept of power-users was being deployed in the community.

The battle over the default editing interface, and the passionate commentary from users, shows that users view themselves as stakeholders in the project and expect as creators of the content to have a certain amount of agency in any progress the encyclopaedia makes. Where the Wikimedia Foundation has responsibility for achieving strategic goals, meeting funding requirements and upholding the ideals of the project, this progress can become a fraught process. As van Dijck notes, "user agency [in platforms] is a negotiated and embattled concept, and the power of users to control their actions is an important stake" (van Dijck 2013, 33). The tensions around the way the foundation introduced the software, its bugs, readiness for release and default status all contributed to Visual Editor's roll back to beta mode and an opt-in product.

... What we have here is a small team of developers desperately trying to fix in real time on a live product a large number of bugs. Many eyes, in this case, does not make bugs shallow - it just makes a lot of anger and a very long list of problems. (Wikipedia 2013k)

The Visual Editor launch controversy again highlights how the editorial community of Wikipedia is diverse and not always aligned and how boundaries are blurred, shifted and rearticulated. Some of the users who supported the foundation's attempt to roll out the product also referred to an "old guard" in Wikipedia that was vocal in its opposition to the change. These supportive users undertake boundary-work to differentiate themselves from the existing users and position themselves as experienced, but progressive users who are willing to work with the Foundation to advance the encyclopaedia and realise the limitations of the existing interface in enabling participation from "everyone."

5.5 Problematising "community"

Or is it only going to be switched on for articles and user pages? If not, isn't that going to be a problem? I've tried out VisualEditor and I like it - it feels much more user-friendly than wikimarkup, and I can barely believe it's taken Wikipedia so long to adopt something like this. If used everywhere, it should make Wikipedia more accessible for newbies. But if it's only going to be used on articles but not talk pages, that seems like it will

make Wikipedia more complicated for newbies by requiring them to understand two different systems. If the current thinking is 'talk pages aren't meant for newbies, and they don't need to know how to edit them', I can only say that I disagree. (Wikipedia 2013c)

Certain sections of the community were not happy with the response from the Foundation to their concerns about Visual Editor and making it opt-in as per the community Request for Comment (RfC). Andrew Lih likened this to a “hand grenade” being thrown into the debate, and in the Wikipedia Weekly webisode, Lih and fellow hosts debated the value of VisualEditor and its relevance to power-users. Co-host Emily Temple-Wood noted that indeed there is a lot of value in having something that’s “an easy entry point” into editing Wikipedia (Lih 2013). In the round up of the episode on Wikipedia, the hosts point to the notion of *a* community:

We need to have a serious discussion about what it means to have "community consensus" vs. WMF's actions. Can anyone wrap their arms around what "the community" means anymore? People who have the special knowledge and time to seek out RFCs tucked into corners of Wikipedia? Ones who go to Wikimania and are involved with chapters? Newbie editors who don't even know what Village Pump is, much less the many sub-pages where discussions take place? (Wikipedia 2013l)

The problem of “the community” is one that was raised during the controversy, and serves to highlight that as Wikipedia is changing, so too are the editing groups that create it.

... When you say "community RFC with more than 500 editors participating", you are implicitly defining "the community" as being only those people who are willing and able to express an opinion at an RFC. That's not really "the community"; that's something much closer to "the metapedians"—people like you and me, but not people who show up for an occasional edit and have never made an edit outside of the main namespace... Are people like you and me the only editors whose opinions should be counted? (WMF) (Wikipedia 2013f)

The idea of “an” egalitarian community – which is a popular notion in Wikipedia is hard to align with the realities of Wikipedia’s evolution and current problems around editor recruitment and retention. Similarly, research by Flore Barcellini et al. questioned the ability of open source communities to truly involve the community in major decision making in light of an “idealistic picture” of user involvement in open projects (Barcellini et al. 2009, 559). They identified a division between the users and the project administrators similar to the tensions between some users and the foundation identified here. Butler and Wang(2012) also noted the shifting boundaries of content communities as users reinterpreted and renegotiated the community’s focus. They found that, “existing members see any content boundary reshaping message as diluting the identity of a community”

(Butler & Wang 2012, 1005). Indeed some existing Wikipedia editors see VisualEditor as increasing the likelihood of Wikipedia being subject to low quality edits that fundamentally change the nature of the encyclopaedia and therefore resist any attempts at renegotiating boundaries around participation and access in the project.

Conversely, there is a groups of editors who recognise the changing nature of Wikipedia and seek to speak on behalf of these users, who would unlikely have a voice on the governance pages of Wikipedia, others still advocate on behalf of the Wikimedia Foundation, recognising the difficulties in affecting major technical changes in a digital platform. The presence of these different social groups among the editor base again problematises the romantic notion of collaboration among users in one Wikipedian editorial community.

5.6 Conclusion

In its Five-Year Targets to 2015 the Wikimedia Foundation lists healthy diversity as a goal of the organisation (Wikimedia Foundation 2010). The Foundation is actively trying to design and implement a better editing experience for new users, and notes the limitations of wikimarkup for Wikipedia's current form, and the tensions that exists between the wiki's openness and affordances to experienced users (who they also note use cut and paste to create higher order features and are probably only tapping into a small percentage of the wiki's full functionality due to lack of professional technical training- users are after all, still amateurs).

Nor do these changes in Wikimedia's user experience
exist in a vacuum: While Wikimedia has become a more

difficult environment to join, the rest of the web has become more open, inviting, and encouraging by using a variety of techniques to reward participation. (Not all these techniques apply to Wikimedia's mission, but they nevertheless may attract people who would have contributed to Wikimedia 10 years ago but now spend their time on social media.) (Wikimedia Foundation 2010)

Just as in the controversy surrounding paid editing, the importance of values and ideals in Wikipedia's construction needs to be central in the discussion of technological development. In being a wiki Wikipedia has value, not just as a knowledge resource, but as the archetype of a particular cultural and sociotechnical form. The relationship here between value and values is central to its success as a collaboratively authored encyclopaedia. In its ideal form it is open, it is accessible, it is free. However articulating those values is often a source of controversy, especially regarding the nature of open and the future direction of the encyclopaedia. Not least of all between the user community and the Wikimedia Foundation. It is not enough either to simply talk about this controversy as pitting the Foundation against users. Nor is it enough to talk about the values of Wikipedia as belonging to the "editorial community," because in the analysis of the discussion it is evident, that while it may be easy to talk about "the" Wikipedia editing community, and indeed while members of the community may refer to themselves as one community, values often differ among members of the community and indeed there are many communities that exist in the user base of

Wikipedia – including editors who do not identify themselves as a member of any particular community at all.

Recent research from the WMF also suggests that the fears expressed by some editors about the quality of edits and editors enabled by the VisualEditor technology are unfounded. The small experiment assigned newly registered users either VisualEditor or the existing markup interface as a default editor and found no significant difference in new users' productivity or survival and a slight decrease in the burden on existing Wikipedians (Wikimedia 2015).

This chapter discussed how the interface of Wikipedia is an enactment of ideals and in selecting a default interface, users and the Foundation are preferencing a certain type of access and participation. By engaging in protective boundary-work, where expertise is articulated, these existing users see the quality of the encyclopaedia as being threatened by new users and the political goals of the Wikimedia Foundation. These user groups coordinated to reverse a technical decision, that according to the rules of the site they had no authority over.

The politics around the decision to return to the default markup editor also problematises the notion of a single editing community and reveals the ongoing negotiations between sections of the user community and the Foundation. It also revealed that change is hard in a platform where the discussion space is located where those for whom the change is intended rarely have a voice. It also highlighted the tension around an encyclopaedia anyone can edit (if they want to learn the mark up), and an encyclopaedia everyone can edit (when the wiki markup barrier is eliminated).

In the ultimate decision to turn VisualEditor back to opt-in and demote it from default status, reveals much about where the power resides in the relationship between the Wikimedia Foundation and sections of the community. Although the community was objecting to buggy and slow software, many other issues were raised in the debates about the place for a rich text editor in Wikipedia. Indeed the controversy revealed issues that face both Wikipedia editors and the Wikimedia Foundation as new software for discussion and workflow (Flow) and another for viewing media (MediaViewer) are released site wide. Reflecting on the launch of VisualEditor also finds that when users feel they are not involved or consulted in major decisions, changes relating to these decisions are less likely to stick. In light of Hess & Ostrom's (2007) design principles for sustainable institutions, it follows that to encourage success with major changes to the platform, the community needs to be consulted and invested in this process of change. This will be further examined in the following chapter in light of efforts to address the platform's gender gap.

6 CONTROVERSY THREE: THE GENDER GAP

"I didn't solve it. We didn't solve it. The Wikimedia Foundation didn't solve it. The solution won't come from the Wikimedia Foundation." – Sue Gardner, Hong Kong 2013 (Huang 2013)

Of the three case studies discussed in this thesis, the gender gap is the issue that has received the most attention from both the Foundation and the media, yet it is arguably the least resolved. This controversy has been chosen as a case study precisely because it highlights the uncertainties around access in Wikipedia and how reconciling ideals with participation in an open environment is hard.

This chapter continues and expands upon the analysis conducted in previous chapters to foreground the role of the media in constructing Wikipedia and the potential that such coverage offers for change in the encyclopaedia. It examines the boundaries that exist between user groups, users and readers, and Wikipedia and other media platforms. It argues that the boundary work conducted by one group to form the identity of a non-gendered “Wikipedian” works to exclude women from the editing process. The establishing of a Wikipedian identity further promotes the ideal that “anyone” as opposed to “everyone” can edit through promoting liberal (agency, merit-based) Wikipedian traits and framing the user community as one that values free speech and opposes the censorship that is implied by actively favouring one voice (the feminine) over another. Any attempts therefore at establishing a strategy for engaging more women are seen as being against the egalitarian nature of the community. However other groups present in conversations around the gender gap highlight the need to actively address the gap,

arguing that the community, and importantly the quality of the encyclopaedia, suffers when women aren't involved in the editorial process.

The chapter also argues that unlike past responses that frame solutions to the problems of the gender gap as having to come from the community, approaches moving forward should acknowledge the role of the media and social media in constructing Wikipedia and creating the conditions for change. Indeed media coverage allows for a translation across boundaries between editors and readers and sheds light on the editorial processes and biases of Wikipedia. In this process both Wikipedians and readers come to understand the importance of gender, and addressing the gender gap for the encyclopaedia.

6.1 Wikipedia categories as standards

This chapter, while bringing together an analysis of various gender-related controversies in Wikipedia, focuses its thematic discourse analysis on a conversation about the formation of a women-specific subcategory in Wikipedia's category system. This controversy was chosen over other events for what it reveals about everyday actions and conversations about gender in Wikipedia. Star & Bowker recognise the importance of such conversations that are the "site of the development and maintenance of technical standards as a site of political decisions and struggle" (Bowker & Star 1999, 49). Bowker and Star note, "Standards and classifications, however dry and formal on the surfaces are suffused with traces of political and social work" (Bowker & Star 1999, 49). Building on the notion that discussion on talk pages in Wikipedia creates policies that are in turn used as boundary objects before eventually becoming standards,

we can see how those things that signify Wikipedia's openness as a platform (discussion spaces, self-regulation) have also created conditions for the development of its infrastructure. In this development, not only its values, but also the platform's systemic bias is instantiated in its infrastructure. According to Bowker and Star, this type of bias can be either the "quiet victories of infrastructure builders inscribing their politics into the systems, [while others] are almost accidental – systems that become so complex that no one person and no organisation can administer good policy" (Bowker & Star 1999, 50). Wikipedia, as a platform and a community sits at the border of these two positions, a (mostly) unintentional inscribing of politics into an unintentionally complex system.

6.2 Gender and Technology

The role of gender in the construction of technology is a well-researched area of scholarship (Reagle 2013), however female participation still lags behind males in both proprietary software development, F/LOSS and open projects (although not in social media use) despite the gap being a recognised problem for several years (Nafus 2011; Nafus et al. 2006; Pew Research Internet Project 2014).

Dawn Nafus (2011) sees a the discord between the rhetoric in the world of F/LOSS that is, like Wikipedia, a space where anyone can contribute and the actual involvement of women in these spaces.

Indeed these open spaces and technological platforms were signalled by Donna Haraway in *A Cyborg Manifesto* (Haraway 1991) as having the potential to reconfigure women's participation in society. Without the boundaries of traditional institutions, the new borders between machines and people were fuzzy

and open to interpretation. The friction between the two could be generative, and it could reconfigure new practices where women had increased power and agency. Judy Wajcman (2010, 145) notes the difference between this discourse and the reality of women's participation in sociotechnical systems:

Notwithstanding the recurring rhetoric about women's opportunities in the new knowledge economy, men continue to dominate technical work.....These sexual divisions in the labour market are proving intransigent and mean that women are largely excluded from the processes of technical design that shape the world we live in.

Both Wajcman (2010) and Nafus (2011) point to a longer historical tradition of women being excluded from this design process and written out of history as many early operators, programmers and inventors were women. The importance of women's place as designers and users of technology is not only recognised by the Wikimedia Foundation in their efforts to address the gender gap, but also by a host of relatively new organisations that seek to understand and promote women's role in the development of technology and open culture such as the The Ada Initiative (named for Ada Lovelace who wrote the first computer program) and the Anita Borg Institute for Women and Technology (named for computer scientist and advocate Anita Borg). These organisations and others like them have emerged in response to the persistent lack of women in technical fields and open culture, and a desire to redraw boundaries in digital participation. As Gieryn (1995, 423–424) notes:

Feminism advances the boundary problem in STS by exposing the gendered configurations of science (and the scientific configurations of women) and by showing the practical utility of such boundary-work for excluding or marginalizing women's place in the scientific enterprise. Feminism is also a robust specimen of boundary-work in practice, a project seeking emancipation in part through reconfigurations of science and politics, culture and nature, object and subject, male and female.

Wikipedia has been influenced in part, by the dearth of women and those identifying as women in the community as, “the marginalisation of women from the technological community has a profound influence on the design, technical content and use of artefacts” (Wajcman 2010, 149). The gender gap in Wikipedia is therefore perpetuated not only through its infrastructure, but how the rules and standards that have been formed by the community are enforced.

Over the last two decades, feminist writing within the field of STS has theorised the relationship between gender and technology as one of mutual shaping. A shared idea in this tradition is that technological innovation is itself shaped by the social circumstances within which it takes place. (Wajcman 2010, 148–149)

For many Wikipedians and wider open culture participants gender is an artificial construct in a world where equality has been achieved through the openness of

access to platforms and technology. In this world (in Wikipedia) the contributions not the contributor are judged (Chapter 4) in a meritocratic fashion that is tied up with notions about the post-political nature of the space. In terms of F/LOSS Nafus notes, “The liberal notion of gender as irrelevant works nicely in a context where technical skill ought to be evident in the work itself” (Nafus 2011, 677). Indeed in early research on IRCs, Susan C. Herring found “this “rhetoric of harassment” invokes libertarian principles of freedom of expression, constructing women’s resistance as “censorship” – a strategy that ultimately succeeds, I propose, because of the ideological dominance of (male-gendered) libertarian norms of interaction on the Internet” (Herring 1999, 152). This then is probably one of the better examples of the implications of an encyclopaedia that “anyone” can edit as opposed to one in which “everyone” can participate. In holding onto liberal ideals around the concept of “anyone,” Wikipedians are systematically closing off participation via norms and standards developed in the name of openness.

‘Open’ is believed to mean that technology circulates on its own accord, set free to have its own impacts on the world. In order to open the doors to ‘anyone,’ the possibility that there are social loops creating knowledge and passing it along – the very mechanism that both excludes women and could serve to include them – threatens the basis on which it is possible to claim that the door is open. (Nafus 2011, 681)

Gender on Wikipedia is often framed as a political construct, and according to the norms of the community, politicking in the encyclopaedia is *bad*. Indeed one commenter on the Wikipedia criticism forum Wikipediocracy called the group attempting to tackle the implications of the gender gap (the Gender Gap Task Force), a “political pressure group” (Wikipediocracy 2014). So while for the majority of users it is acknowledged that there is a gender gap (although some editors are still calling for more up to date figures from the Foundation), debate still exists and persists around whether or not the gender gap is actually a problem (similar to the “can anybody prove that there is a need to recruit and retain new editors?” sentiments in Chapter 4).

The gap is most often explored and understood from within the community, using data from within the platform. One notable exception is a study that examines how existing skills in regard to internet use affects participation (or indeed non-participation) in Wikipedia. Using a sample that included people who had never contributed to Wikipedia, Hargittai & Shaw found that Wikipedia’s gender gap is “exacerbated by a similarly significant Internet skills gap” (Hargittai & Shaw 2014, 37). This gender gap in relation to technology generally has created a discord between technological change and the narratives surrounding women’s participation. Where technology is evolving, women’s participation remains frustratingly minimal according to the statistics. This “stability” argument maintains that while technologies change and progress, women’s involvement in the design and use of new forms of technology has stabilised (Corneliussen 2011) creating an enduring gap. While the gap is no doubt persistent, such an argument about the irresolvable nature of the problem obscures the fact that boundaries in technology use are moving and being redrawn by women today. Corneliussen

(2011, 167) argues that researchers should embrace diverse identities among women in relation to technologies and also messy identities, whether “cyborgs or monsters.” In focussing on the lack of progress around participation numbers, researchers risk losing sight of how use is changing, and how boundaries around women’s involvement in technology design and use are shifting and becoming blurred, and what this may reveal about future forms of participation.

Indeed, when Sue Gardner blogged about the gender gap and reasons women don’t participate in Wikipedia (Gardner 2011) a Twitter storm erupted that called attention to the fact that indeed some women *do* edit Wikipedia, and that an equally valuable narrative would be their experiences of participation. As even among women who are active in the encyclopaedia there is debate about what constitutes the gender gap and the responses that should be taken to address it. Many women editors feel their voices aren’t heard as the females who have mastered the norms and rules of the site and are successfully working with other editors to construct the encyclopaedia (Wadewitz 2013). Some women enjoying editing within the existing platform, while others actively try to change the infrastructure.

However as noted by Bowker & Star (1999), changing infrastructures is complex and difficult. The attempt by one user to establish a women-only space on Wikipedia was met with opposition because such a space would violate the notion and ideal of what Wikipedia is as a post-political space and the user has since “retired due to sexual harassment” (Wikipedia 2015d). In Wikipedia openness is therefore proscribing a set of conditions for participation, where gender is framed by some users as not relevant in a digital environment where ‘anyone’ is free to

edit and attempts to encourage participation from a particular group is against the ethos of the project. Nafus notes then, “claims of openness must be interrogated not just for the kinds of collaborations and new combinations they enable, but also in terms of what they proscribe” (Nafus 2011, 681). For Wikipedia’s discussion spaces are organised around a concept of openness that preferences rational discourse, and often in the conflict that occurs in these spaces the argument is won by who can speak the loudest and longest (Jemielniak 2014). As with open source software (that also has its own significant gender gap), change and decisions are made by people putting forth and advocating their point of view and although in theory anyone is free to participate in these spaces, it is apparent that everyone does not.

As with science, the very language of technology, its symbolism, is masculine. It is not simply a question of acquiring skills, because these skills are embedded in a culture of masculinity that is largely coterminous with the culture of technology. Both at school and in the workplace this culture is incompatible with femininity. Therefore, to enter this world, to learn its language, women have first to forsake their femininity. (Wajcman 1991, 19)

In Wikipedia this often results in standards that are constructed using male as the default condition.

I’ve just noticed that we have an article on Female body shape (created in 2006 as Voluptuous), but Male body

shape redirects to Body shape. Male is the default once again. (Wikipedia 2015h)

This is explicitly manifested in Wikipedia in the controversy regarding the categorisation of American novelists, where the actions of community members left the category of American novelists entirely populated by men.

6.3 Categorygate

Categories

In order to discuss the events that compromise the Categorygate controversy, I will first provide a brief overview of the category system in Wikipedia and how the platform approaches knowledge organisation. Categories in Wikipedia are used as a classification system similar to traditional hierarchical structures used to sort and order knowledge. Wikipedians discourage the existence of large all-encompassing categories and historically have sought to drill down and place articles in topic specific categories. In contrast to the folksonomies of other platforms, the category system in Wikipedia is a complex directory where categories are associative and can have multiple parents. Wikipedians place importance on having things not only correctly categorised, but correctly *specified* in increasingly detailed categories (for example Fictional Americans of Norwegian descent, Indigenous Australian women academics, 1824 establishments in Scotland).

Thornton and MacDonald (2012) studied the early discussions of categorisation in Wikipedia to discover how categorisation was used to assist in collaboration between editors. They found “The editors who contributed to the design of the

category system shared a vision of this feature that it would allow users to more quickly understand the context of any individual article by making relationships between articles visible” (Thornton & McDonald 2012, 221). They also note while traditional knowledge structures follow one type of identified hierarchy, Wikipedia categories appear to follow multiple hierarchies that could cause confusion and conflict among editors. They found some editors feel that Wikipedia’s category system is hierarchical, when in reality most links are associative and this in turn causes confusion (Thornton & McDonald 2012). Indeed, in the discussion analysed in this chapter, there was an emphasis on the parent-child, category-subcategory relationship hierarchy and a degree of confusion around association and what was termed the “intersectionality” of categories (where items are categorised in multiple categories).

Thornton and MacDonald also identified one of the major themes to emerge from early discussion among users, was that editors were considering the needs of readers and how they would be using the encyclopaedia to find information. They note “The act of tagging, or labelling, an item as a member of some category of things or concepts has profound implications for the way we see or understand that item” (Thornton & McDonald 2012, 226). Similarly as articles are placed and arranged in Wikipedia, it organises the space and Lessig notes, “Spaces have values. They express these values through the practices or lives that they enable or disable. Differently constituted spaces enable and disable differently” (Lessig 1999, 64). The category system therefore has a role in enacting the ideals and values of the project, and the following case study demonstrates the politics behind the organisation and categorisation of knowledge. Indeed the boundaries drawn in Wikipedia through the process of classification and arrangements of

articles and governance pages into categories affects how users access Wikipedia – both as a user and a reader, and therefore categories are important objects for translation between editors and readers, as both navigate the encyclopaedia.

The controversy

In April 2013, when American novelist Amanda Filipacchi was browsing Wikipedia she noticed that her article had been moved from the category American Novelists, to the subcategory, American Women Novelists (Filipacchi 2013). The creation of a subcategory for American Women Novelists and the assignment of the female authors to this new category therefore rendered the parent category filled exclusively with male authors. Filipacchi wrote an op-ed for the New York Times about it, and how she felt that the removal of women novelists from the main category was evidence of sexism within Wikipedia.

Some lucky female novelists, mostly the ones who are further down in the alphabet, haven't been gotten to yet and are still in the big category "American Novelists." Some are in both categories. But probably not for long. I also noticed that Edwidge Danticat was plucked from "Haitian Novelists" and dumped into "Haitian Women Novelists." So it seems, at least, that women from different countries are treated the same. It's just too bad they're not treated the same as men. (Filipacchi 2013)

The op-ed quickly went viral on social media and other off-wiki spaces as Filipacchi shared her experience with fellow authors and the subsequent

conversation about the event was tagged “Categorygate”. The significance of this event, while small in terms of bytes on Wikipedia, was the coverage it received off-wiki and the new actors that became involved in the conversation about the gender gap and systemic bias. Filipacchi’s op-ed prompted swift action on Wikipedia both in the administrative section of the encyclopaedia called “Categories for Discussion” and on her own page which was subjected to a flurry of “revenge edits” (Leonard 2013). Filipacchi’s involvement in the controversy also brought new actors to the conversation about the category however interestingly, despite the presence of new voices, the discussion about the category was one of the more civil exchanges regarding gender in Wikipedia.

The conversation was located in two governance areas of Wikipedia, the Categories for Discussion page (a constantly updated page to discuss issues with new and existing categories) and the American Women Novelists talk page, totalling 35,976 words (34,022 and 1,954 words respectively). This conversation was analysed in light of continued media coverage, social media discussion and a 40,000 word concurrent debate at the American Novelists talk page. Unlike the previous two controversies, I used NVivo to undertake the first round of coding. This method proved effective for discovering which parts of the conversation had similar themes, and visually identifying which posts were tagged with multiple codes, however the inability to include the textual and formatting cues that are in the original webpages made subsequent, more fine-grained analyses harder. I therefore switched back to hand coding each post and recording the codes, themes and categories in Excel.

This difficulty may also be due to the nature of the discussion, as it did not follow normal conversational online forum/posting rules, but rather followed the format of a poll similar to the paid editing policy proposals. In such a form, the responses were either to ‘Merge’ (merging American novelists with American women novelists, therefore making the new category obsolete) or ‘Keep’ (thus separating out male and female authors). Responses posted ranged between these two positions, with the ultimate decision being to keep the new female category and to also repopulate the American Novelists category with the female authors who had been taken out. In total there were 215 contributors to the discussion, a relatively large amount for the type of discussion normally left to metapedians.

The first part of the discussion set up the conditions for participating conversation. It was quite hostile at first with accusations of canvassing and off-wiki organising, sock puppetry, meat puppetry (encouraging other people to vote in your favour) and spam voting. Consequently one of the first actions on the discussion was the striking out of two votes from new user accounts that an existing user deemed to be accounts only set up for the purpose of voting (a single purpose account – SPA). New users often look like an SPA by virtue of the fact that neither have any or many edits attached to their accounts. The rhetoric around SPAs can therefore be used to discourage new editors from participating, and work to strengthen boundaries around existing editor groups. However not all existing users can be grouped together as opposing the participation of new users in the community and in this discussion another user stood in for new users and voiced his objection at the votes being struck.

I just want to register my objection to the striking out of the two votes. These are people who have bothered to get involved. By pushing them out of this conversation, you are contributing to the continuing inability for newcomers to feel comfortable here. Especially women. Which is of course, the subject of the article being discussed. These are primarily contributions from new editors who were outraged by the sexism implicit in removing women from the novelist category. This move went viral on Facebook, and of the hundreds posting on Facebook, these are the three or four who have taken the time to try to take part in the Wikipedia process. By summarily negating their voices, you are just making it worse. (Wikipedia 2014k)

Off-wiki organising and canvassing on platforms like Facebook is against community norms particularly regarding votes that affect the health of the community. In accordance with openness, all discussion should be on Wikipedia, so it can be followed, archived and transparent for anyone who wishes to see the progress of an issue. However in recognition of the issue being discussed, and the fact that at times Wikipedia may not be seen as a safe place for women to participate, the discussion acknowledged the use of off-wiki spaces for those with an interest in the health of the encyclopaedia to organise in relation to issues concerning gender.

Another major theme to emerge was the construction of Wikipedia as a post-political open space where gender didn't exist. For many users, Wikipedia cannot be sexist as Filipacchi alleged because Wikipedia should not even have gendered categories. In this theme, the concept of gender is problematic as it is an open context where "anyone" is free to edit. Editors are judged by the content they contribute and the edits they make – the same "focus on the content not the contributor" rhetoric that is used to include paid editors (Chapter 4), is deployed in this controversy to negate female voices. Similarly, the idea that the initial move was in some way sexist or a reflection of Wikipedia's systemic bias was dismissed by the editor who began moving female novelists:

Those looking for some negative agenda in this recent editing are just plain wrong. I have created a whole slew of articles on women... (Wikipedia 2014k)

The idea of Wikipedia as a "gender-free space" was also found as a theme in an analysis of US media coverage of Wikipedia's gender gap (Eckert & Steiner 2013, 289). Eckert and Steiner's analysis of coverage from 42 United States news outlets and the associated comments found that the gap was rationalised by commentators as being the result of gender differences where women aren't interested in editing an encyclopaedia. Further to this they conclude, "the freedom celebrated in Wikipedia's slogan (the free encyclopaedia that anyone can edit) encouraged many commentators to blame individuals for refusing to use their postfeminist liberation to produce knowledge" (Eckert & Steiner 2013, 299). Similarly, the concept of a systemic bias – while widely acknowledged as a problem for the encyclopaedia – is still seen by some editors as an issue that with

time will self-correct or as one comment to a talk page put it, “Anyone who feels this site is too rude or too male-dominated has the freedom to leave, or the freedom to fork” (@SaidOnWP 2014).

The categorygate discussion also served to highlight the Wikipedia’s boundaries with the outside digital media ecology, and how in the process of the controversy these lines had become blurred. Traditionally, in this platform where the open spaces are meant to afford the ultimate transparent discussion space, where all interactions are archived and can be linked to, referred to, and preserved, the norm is for discussions to take place on-wiki. What happens outside of this process (e.g. on Facebook, media coverage), is not seen as relevant by some participants who still maintain that groups external to Wikipedia cannot understand the true nature and intent of the platform.

To me, it's really rather useless when someone in the outside world throws rocks at Wikipedia and says "Wikipedia does this stupid thing" or "Wikipedia doesn't have an article about this amazing thing" - If you really care about what Wikipedia does or how it behaves, there is one clear course of action open to you - open up an account, join the community, and learn how to edit. (Wikipedia 2014k)

Other participants in the discussion however were aware of the fact that several people and media outlets would probably be following the discussion, and that at stake was Wikipedia’s reputation, indeed as one participant put it, Wikipedia “is not a silo.” One user expressed the need to shut the discussion down quickly as

the error was “too egregious” to stand and the separation of women from the main novelists category was “sexist, and a public relations disaster” (Wikipedia 2014k).

However in a debate about a subject that often raises passions online, and in a platform that is often noted for its conflict-laden communication style that favours men, there was only one personal attack. I argue that initial media coverage of the event influenced the communication in the discussion as participants were aware of external oversight of their conversations (it was the fifth most mentioned theme). In a conversation dealing with a subject that has, in other areas of the encyclopaedia resulted in such vicious discourse that ends with editors being banned (rightly or wrongly) from the encyclopaedia, the discussion at Categories for Discussion was restrained and genuinely questioning of Wikipedia’s culture and approach to organisation.

Indeed as the conversation took place in an administrative area of the encyclopaedia, much of the discussion focused on the organisation of content in Wikipedia and importantly, the philosophy behind this organisation. This theme often overlapped with the identification and naming of readers as important actors in Wikipedia, as participants discussed the formation and purpose of categories. Users sought to demarcate boundaries between expert user groups – those who use the category system to organise content and those who consider the role of categories in enabling readers to navigate the encyclopaedic content.

Merge and Keep—The category is notable, it should just be marked by Template:Distinguished subcategory.

Also, reply to [redacted user’s] last comment: A system where men appear in the default category while women

are appear in the women's category looks sexist. I don't care if you are sexist, just whether Wikipedia's interface is. Fundamentally, your arguments ("Categories are not meant to be overly large") are about our filing system, and not about how users access human knowledge, so please get over it. Wikipedia is mostly visited by readers, not editors. It's our job to make their lives and visit easier, not to make ourselves happier about the simplicity of our filing system. (Wikipedia 2014k)

This tension as to who categories are actually *for*, echoes a similar debate about the role of Visual Editor (was it for old users or new?) and the responses in this discussion also work to articulate the philosophy and ideology of the platform. In response to the idea that articles can't be categorised in both a parent and a sub-category, this user points to the overall role of Wikipedia:

[This] comment seems to assume that we have categories in order to satisfy some abstract notion of categorization and order, when in fact we have them for one reason only: readers' convenience. If readers find it convenient for categories to feature a certain amount of redundancy, then that's precisely what we should do. We're not trying to make a point about categorisation, only to serve readers. (Wikipedia 2014k)

Indeed, correct categorisation and the focus that such meticulous work requires maps well to the "tireless, detail-oriented" (Loveland & Reagle 2013, 3)

knowledge workers of encyclopaedias past. Such debates work to highlight the tensions between ease of use for existing volunteer workers and ease of use for readers and potential contributors. These posts around ideal forms of categories and the purpose of Wikipedia, using a collective “we” centred the discussion around Wikipedian norms and in the process moved the debate from one about sexism, to one about procedures and process.

Questions were raised about Wikipedia’s insistence on a top-down categorisation system similar to traditional classification systems rather than the folksonomy approach of other online media. As one observer of the controversy wrote on his blog, “if you can’t get this right, you can’t get any of your folksonomy right. You just can’t expect a sound taxonomy to emerge magically from a site that’s increasingly dominated by cranks. After this, no one is ever again going to simply trust Wikipedia taxonomies as “good enough”” (Bernstein 2013). Categorisation feeds into Wikipedia’s structure and the bias evidenced in the move from American Novelists into American Women novelists is perpetuating the systemic bias evident in different layers of the project. In response to this rigid approach to organisation and structure, some users expressed a preference for creating the ability to tag articles in an associative and open-ended process.

I'm sorry, I wasn't clear. Tags are kind of like top-level categories. People could construct Boolean searches, for articles that have tags A, B and C, but not Z. It's really the same idea as category intersection. There would be no need for a category or tag for American Women Novelists, because those pages would be tagged as

"American", as "women" and as "novelists". (Wikipedia 2014k)

Another user noted the technical limitation Wikipedia has compared to similar size platforms however, and that while a change to the technology may help with categorisation problems, as a non-profit, those changes are sometimes difficult to develop. Indeed the main theme to result from the discussion was the ideological approach to categorisation employed in Wikipedia. The issue of bias and sexism that dominated the initial parts of the conversation was resolved quite quickly (the move was sexist and women needed to be listed in both the American novelists and American women novelists categories). Having established the obvious bias, talk turned to technical mechanisms that could prevent such instances in the future, a system that would effectively “open up” the categorisation of articles.

This is a good idea, although people at Semantic Mediawiki have been working for years on an interface and backend that would make this possible. It is a very complicated technical problem, made all the more difficult by the massive size of Wikipedia, the number of potential categories and category members, the speed at which editing takes place, and the relatively small number of servers that Wikipedia runs on (compared to Google, Facebook, etc.) The current system was designed on a shoestring budget almost a long time ago, and it isn't ideal for sure. (Wikipedia 2014k)

The response by the community to Filipacchi's article demonstrates a number of different factors at play in Wikipedia and differences in how it was interpreted by user groups – for some the article was proof positive of bias and a sexist editing community, to others it highlighted biases and flaws in the system while to others still it was a technical problem that could be either fixed by the application of existing standards or the formation of new methods.

This last point is interesting in relation to the inversion and examination of infrastructures as suggested by Bowker & Star (1999) in order to highlight the biases and inscribed politics in the system. Formulating a new system is hard, but in terms of designing for inclusivity and access it may be one of the best opportunities Wikipedia has for shaping participation and designing a more accessible structure for Wikipedia. Even if it is one small part at a time, something as simple as the ability to tag an article with an identifier could have dramatic effects on the way Wikipedia is used and accessed by editors and readers alike.

6.4 The gender gap persists

Wikipedia's new Executive Director Lila Tretikov is well aware of the changing nature of the web, Wikipedia's users and potential new editors and Wikipedia's need to respond. In her keynote at Wikimania 2014, Tretikov said, "How do we move from website to mobility, or potentially even further out as new ways to interact emerge? From the community to any user participation?" (Wikimania London 2014, 20:40). At the same event, co-founder Wales noted the cost-benefit relationship of keeping argumentative Wikipedians – often credited with creating

a hostile environment that women are unwilling to participate in – in the community:

To resounding cheers, he told the assembled audience in Barbican Hall that the breed of annoying, confrontational Wikipedian (even if they contribute good content) simply "costs more than they're worth," and need to leave the community. (Price 2014)

While the confrontational communicative style of many Wikipedians has long been the subject of research (Kittur et al. 2007; Viégas et al. 2004; Morgan & Zachry 2010; Kriplean et al. 2007), this is a brave stance to take in front of an audience of volunteers of an open project that “anyone” can edit. This is one of the tensions that compromise the gender gap controversy, that of being bold (in making changes) and adopting a masculine communicative style in the encyclopaedia, or of following processes and procedures and making oneself familiar with the norms of the community before starting to make substantial edits to the encyclopaedia.

This is also the tension of an open platform, it is open in that it invites anyone with an internet connection to edit, but in its long history this openness has afforded the formation of rules, norms and technologies, that make for an increasingly closed platform of participation. And by the time a user has navigated these rules she may have decided that the cost benefit ratio of her volunteering her time may not in fact be worth it. She has entered the system via boundary objects such as talk pages and policies and is familiarising herself with

them, but in the process may decide that the translation from reader or new/casual user to active participant is too hard.

Having experienced the last seven months of GGTF, I wonder whether we should be encouraging women to edit Wikipedia. Is it fair to ask women for their unpaid labour in exchange for the kind of treatment we've seen some women experience, in order that a critical mass is eventually reached? I also wonder what we can do, as [argued] should be happening, to encourage male editors and admins to be more pro-active in dealing with the problems. (Wikipedia 2015h)

How rules are constructed and particularly for this section, are enforced, in Wikipedia therefore has implications for participation. If indeed it is the “confrontational, annoying Wikipedian” who is contributing to the standardisation of practices in Wikipedia then new users, or those from cultures not comfortable with adversarial communication styles may indeed be disinclined to edit. The problem for Wikipedia, and to an extent the Wikimedia Foundation, is the multiple layers on which rules are enforced. It may be anything from a simple, friendly user talk page reminder about editing conventions (if another user feels an editor has breached these) to a case brought before the Arbitration Committee - in effect Wikipedia’s highest court – that requires briefs of evidence, statements and involvement from a variety of actors.

Through an analysis of two cases brought before the Arbitration Committee, this next section examines how decisions by a closed, select group of users draws

quite distinct boundaries around the types of participation that is allowed in Wikipedia and the effects that this could have on shaping and constraining access for “everyone,” including women.

6.5 ArbCom, Gamergate and the Gender Gap Task Force

In 2014 two cases were brought before the Arbitration Committee that demonstrate how flammable the issue of gender can be in Wikipedia. The Arbitration Committee is a group of elected community members – generally experienced editors and also admins – who have the responsibility of mediating and resolving disputes that have not been resolved through other available mediation channels in the encyclopaedia. The committee, known colloquially as ArbCom had 15 active members in May 2015. Of these members 11 were male, three do not identify their gender on their user page, and one is female. This is an interesting statistic in light of the following decisions around disruptive editing of gender-related articles in the encyclopaedia. Committee members are nominated, voted on, and appointed by Jimmy Wales. The body has been referred to in the press as Wikipedia’s “supreme court” (Hern 2015) and its decisions determine acceptable editing practices and shape participation via enforcing the norms and rules of the platform at the highest level. The Arbitration Committee rules on cases that have been brought to them. That is, it doesn’t actively seek instances of conflict in the encyclopaedia to mediate, but rely on cases being nominated by other users who cannot resolve conflict in another manner. Cases may be brought by disgruntled editors or groups that are engaged in ideological editing battles (around things like climate change or gender). Indeed it is not uncommon for groups of editors who have issues with other editors to actively engage their

opponent in editing wars, and then bring that case to Arbcom in an effort to get their opponent sanctioned or banned.

Gender Gap Task Force

The first case discussed here involved a group of experienced editors being brought before the committee for disruptive editing to the Gender Gap Task Force Page (GGTF). The Gender Gap Task Force aims to counter gender-related systemic bias in the encyclopaedia by improving content in both article and governance space. It was established to increase women's participation on the project and has been labelled both a "political pressure group" and a "crusade" to "alienate male editors" (Wikipediocracy 2014; Auerbach 2014). In reality it is a loose group populated by both dedicated volunteers who want to reduce the gap, and those who are policing the "crusade." It is not uncommon for spaces such as this to be populated by groups with differing ideological points of view – indeed it is one of the mechanisms that form an effective method of self-regulation in the encyclopaedia. In controversial areas, actors holding different worldviews work in boundary spaces such as talk pages to approximate "neutrality," where neither side influences content unduly. They keep checks on the other and enforce norms and standards, and in relation to the Gender Gap Task Force, this often transpired as "sealioning." Sealioning is an internet slang term derived from a webcomic to explain repeated questioning of a person in an attempt to engage them in a debate they have no interest in.

The purpose of sealioning never to actually learn or

become more informed. The purpose is to interrogate.

Much like actual interrogators, sealioners bombard the

target with question after question, digging and digging until the target either says something stupid or is so pissed off that they react in the extreme. (Tegiminis 2014)

This style of communication plays out well in Wikipedia, where as Jemielniak (2014) noted, often the easiest way to win a debate is to stay in the argument the longest. And indeed also maps well to the libertarian claims that Wikipedia can't constrain participation based on gender when it is an open space where "anyone" can edit. Sealioning thus often occurs in the form of questions along the lines of asking for proof or reliable sources in Wikipedia, or what actions editors are taking to address an issue. As one actor named in the Gender Gap Task Force ArbCom case stated:

Quite. I'd bet that I've done far more work on biographies of females than many of the most vociferous anti-male commentators here have done. When working on Enid Blyton for instance, the fact that she was female was hardly in my mind. The important thing was that she is one of the most widely read authors in the world, male or female. I'd also like to mention Margaret Thatcher, one of the most important figures in 20th-century British history. Where were the members of this project [Gender Gap Task Force] then, when there was work that needed to be done? (Wikipedia 2015g)

These two oppositional groups in the task force debated issues related to the gender gap and the task force's role for approximately a year and a half before conversations became a series of personal attacks and violated Wikipedia's civility norms. Of the two dominant actors, one a man and one a woman, only the woman was site banned (who perhaps "reacted in the extreme"), while the male was given an effective slap on the wrist – banned from editing the topic and told to be civil. This is despite a history of incivility on his part and other appearances before Arbitration. The female editor however had a history of "disruptive" editing on controversial topics, while the male user had a long edit history on a range of topics. The problem with this evidence is that it is hard to imagine editing on controversial areas on Wikipedia – of which gender is one – without it being classed as "disruptive." Editing in such areas necessitates some form of combative editing no matter what your position in the controversy. Thus anyone choosing to edit in the area of feminism related articles is more likely to be perceived as a disruptive editor than one who has thousands of edits to relatively innocuous subjects like towns and transport, even if their personal interactions have been of a similarly uncivil nature. The case and decision was framed by some in Wikipedia as being about civility and not the gender gap, however in the media it was framed as another instance, after the Categorygate coverage that evidenced Wikipedia's inherent sexism.

In an opinion piece on the result of the Gender Gap Task Force Arbcom case, *Slate* writer David Auerbach (2014) said of the decision, "it's hard not to see this as a setback to Wikipedia's efforts to rectify its massive gender gap." The final decision marked a clear boundary about what type of editing is valued in Wikipedia and what type of editor is the ideal.

Gamergate controversy

The following is not a comprehensive account of all the important cultural implications of the Gamergate controversy, rather it is a summary that sets up its relationship to gender issues in Wikipedia, along with establishing the preconditions for how the controversy played out on Wikipedia. In this section I argue issues of gender are not peculiar to Wikipedia, but are played out in varying ways across the internet, and Wikipedia is just *one* site of these struggles. I also position Wikipedia as part of a larger web ecology where debates play out, and show how the media again influences how rules are enforced in the encyclopaedia, boundaries are drawn and the project is constructed by those outside Wikipedia.

Gamergate manifested after a game developer's disgruntled former boyfriend posted intimate details of their relationship in a blog, also alleging that she had a relationship with a gaming journalist. Following this post, the developer Zoe Quinn was subject to ongoing harassment that was coordinated on the –chan image boards and Reddit under the guise of drawing attention to the issue of ethics in gaming journalism. However the campaign, which was being played out on Twitter among other places under the hashtag #Gamergate gained notoriety for the viciousness of the online harassment of not only Quinn, but other prominent women in gaming such as Anita Sarkeesian and Brianna Wu. Quinn, Sarkeesian and Wu were all forced to flee their homes due to the nature of the online harassment campaign (Wikipedia 2015). Gamergate received media attention due to the violent and sustained harassment of women in gaming across a range of online platforms.

On November 27, 2014, after several attempts at mediation via other on-wiki processes, 27 editors were brought before Arbitration for edit warring on the *Gamergate controversy* article. The conflict stemmed from one group of editors positioning the Gamergate article as being about ethics in journalism, while the other group (correctly) noted that the reason Gamergate was *notable* in accordance with Wikipedia policy and worthy of an encyclopaedia article was precisely that it wasn't about ethics in gaming journalism, but was about a sustained campaign of online harassment and violence against women in the gaming industry. This is evidenced by Zoe Quinn's Wikipedia article being edited heavily in the lead up to Gamergate manifesting, as the analysis of edits over time shows below:

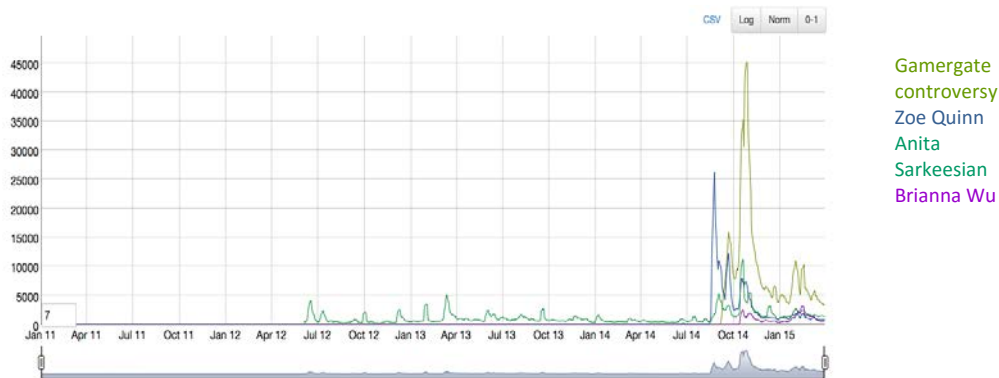


Figure 6.1: Comparative editing activity over time for the articles “Gamergate controversy,” “Zoe Quinn,” “Anita Sarkeesian,” and “Brianna Wu” on English Wikipedia.

This controversy is significant not only because it is being played out in a meta-fashion on the *Gamergate controversy* talk pages in parallel to being played out on other websites like Twitter, but also because it involved significant off-wiki organising by prominent actors in the controversy on sites like Reddit, 4-chan and 8-chan. Actors in the Gamergate controversy used Wikipedia like any number of other digital media sites to promote their specific agenda, and used the talk pages

to advocate for the correct framing of the controversy according to their position in the debate.

The controversy escalated when a blog post about the Arbitration Committee's proposed decision was picked up by the Guardian, who ran with the story as though the decision had been finalised and the banned editors were all "feminist editors" (Hern 2015). The controversy around the article stemmed from the fact that it said Wikipedia had banned feminist editors (it had not as yet), while leaving the pro-Gamergaters active and free to edit. The irony is that the pro-Gamergaters then used this story to discredit The Guardian as a reliable source and sought to remove all references (to a number of different articles) to the Guardian in the Gamergate controversy article. The reality of the situation was that although proposed decisions almost always stick, the decision was *not* final, and the editors that were to be banned were not "feminist" editors at all. In fact the editors proposed to be banned were not engaging in an ideological battle, but rather sought to bring the mainstream view to the article in accordance with Wikipedia policy – namely, that the Gamergate controversy was about a campaign of harassment and threats of violence against women.

The Guardian article was picked up by a number of other new outlets and in 48 hours, Wikipedia had been positioned as banning feminist editors in relation to Gamergate. The media discourses penetrated Wikipedia's normally firm boundaries, and the Arbitration Committee changed their final decision to topic ban a range of editors, both pro-, neutral and anti-Gamergate for disruptive behaviour. This controversy demonstrates how Wikipedia is part of broader digital media landscape and is a site where cultural struggles are played out. This

finding again works to blur the distinct boundaries of Wikipedia as an encyclopaedia, and its boundaries as a discrete platform. The Gamergate controversy serves to highlight the flow of information across boundaries of different online media and shows how Wikipedia is constructed and used a platform for larger digital media debates.

This is significant as the project has a tendency to dismiss outside criticism, and the Guardian article (and subsequent widespread media coverage) drew a response from both the Wikimedia Foundation and the Arbitration Committee. The ArbCom Statement didn't seek to address the Guardian's claims directly, but rather summarised its role as a sanctioning body. Similarly the Wikimedia Foundation's response framed the controversy as one not about gender, but about civility: "This is not about a small group of people being targeted unfairly. It is about a very large group of people using Wikipedia as a battleground" (Beaudette 2015).

While the above three cases demonstrate how the gender gap shapes participation in certain ways and in certain places on Wikipedia, it is important to remember the systemic nature of gender bias in Wikipedia. Many events, and the day-to-day experiences of women on Wikipedia demonstrate that the gap is an omnipresent issue that has thus far proved hard for the community and the Wikimedia Foundation to address. One user proclaiming to be "shining a light on the unpleasant core of Wikipedia" has started the @SaidOnWP Twitter account that tweets out quotes from discussions on Wikipedia, and includes tweets like "If we start tolerating sexism against men, then we have to tolerate it against women" and "There's a range of personal values being expressed from a wide variety of

perspectives. That's the problem" (@SaidOnWP 2015). Signalling the difficulties many women have in participating in Wikipedia, there are how-to guides for women editing Wikipedia, IRL and online events where women gather to edit the encyclopaedia in a collegial environment and Facebook groups where women can meet and share what they are working on in Wikipedia. The common factor in these spaces is that they are all off-wiki. On-wiki initiatives to encourage participation are populated just as much by members sincere in their efforts to address the gender gap as they are by editors who oppose the active promotion of initiatives to address the gender imbalance. As discussed, Wikipedia is often constructed by some actors in Wikipedia as a post-identity space where gender should not matter and it is this rhetoric around the openness of the platform – that it is open to everyone regardless of their gender – that enables many editors to dismiss the gender gap and allows it to persist.

6.6 Conclusion

This chapter demonstrated how existing infrastructure has created conditions that preference male participation, and these participants in turn have created material ways to organise knowledge, information spaces and decision making processes that perpetuate the encyclopaedia's systemic bias and employ a rhetoric that explains away the problem.

In the introduction to *Wikipedia and the Politics of Openness*, Tkacz sets up why he doesn't discuss the issue of gender in his account of openness in Wikipedia. He states that "If Wikipedia were to declare that all or even 50 per cent of new editors had to be female, this declaration would explicitly go against the notion that

“anyone can edit”” (Tkacz 2015, 11) However the preceding chapters have already problematised the notion that Wikipedia is the encyclopaedia that “anyone can edit, ” and indeed Wikipedia *does* have a goal of achieving a participation rate for women of 25% by 2015 (Wikimedia Foundation 2011a). Openness is contested because it is constructed differently by different groups and for some, including the Wikimedia Foundation, it means creating and fostering a platform that remains open to participation from “anyone”, while encouraging participation from “everyone,” while for others being open means creating conditions where “anyone” can edit regardless of gender. For these users, the fact that more women do not edit the encyclopaedia is not Wikipedia’s concern, the platform’s boundaries are open, and the reasons for low participation must therefore lie outside the community (and are consequently not of concern).

This chapter found that the media has a significant role in constructing Wikipedia and challenging notions of openness. The influence of the media is also important as it was found to affect the subsequent rules that are created and enforced in the encyclopaedia in two of the cases analysed (arbitration decisions and categorisation rules). Rather than being outside the community, and external to its processes, the media is an important actor in debates about Wikipedia, because how the platform evolves doesn’t just affect the thousands of active users, it affects the millions of readers, and people who consult and use Wikipedia everyday (even those who may not even visit the site, but engage with its information through a Google search).

Its role goes beyond merely documenting what happens in the world’s largest encyclopaedia and can have an impact in changing how the platform is evolving.

As one user noted in relation to the persistent nature of the gender gap despite many internal efforts to address it:

.... I think that trying to work within Wikipedia to change the grain of the culture is the wrong approach. Instead document what is happening, blog, use social media, share your results with journalists and the general public.

If you need an example from Wikipedia's own history, Categorygate (see [Wikipedia:Wikipedia_Signpost/2013-04-29/In_the_media](#)) showed the way to change things. It was public condemnation that galvanised Wikipedia into action (and even so it was a battle to just put this little bit of injustice right). What would have happened if the writer had clicked "Edit" and made her complaint here in Wikipedia instead? She would have been ignored, and quite possibly been insulted to boot. – Jayen466 (Wikipedia 2015g)

Indeed the existing infrastructure may have made it easier for any complaints to be ignored and in the context of this complex infrastructure the gender gap becomes a problem that needs “uninventing.” Bowker and Star observe that this uninventing is “properly a political and a public issue” (Bowker & Star 1999, 50), and this is echoed by users in Wikipedia themselves noting the role media and social media has in making Wikipedia’s systems and structures accountable in order to address the gender gap.

The difficulty lies in the fact that as existing users undertake boundary work to protect their autonomy over content creation and the formation of the project's infrastructure without intervention from outside actors. Gieryn theorises that this sort of boundary-work "exempts members from responsibility for consequences of their work by putting the blame on scapegoats from out-side" (Gieryn 1983, 792). Therefore if Wikipedia is to address its gender gap, the community needs to have a stake in designing the solution so that it may stick (Hess & Ostrom 2007; Bowker & Star 1999) and it also needs to be held accountable by outside actors. Wikipedia is not a silo, it is part of a wider digital media ecology where boundaries are becoming increasingly blurred as actors move between platforms and online spaces to organise, create and construct Wikipedia. The activities around the gender gap point to the increasingly interconnected nature of digital media, not just in how it is structured at an organisational level (as discussed in Chapter 4), but in how users move among different sites (off-wiki and including Wikipedia) to engage in everyday practices such as socialisation, communication and coordination.

7 CONCLUSION

The open ideology that was responsible for much of Wikipedia's early development has been reinterpreted as more users have joined the platform and the digital media landscape of which it is a part has evolved. This has resulted in the formation of different user groups that enact openness differently within Wikipedia, often resulting in friction and controversy as users seek to establish and maintain boundaries around different social groups according to these interpretations. This finding also problematises the notion of a singular editorial community that is often deployed in narratives about the collaborative nature of Wikipedia.

Indeed, as user actions on the web become increasingly regulated by technologies that have evolved in a proprietary setting, action and creativity and a high degree of agency for users becomes even more valuable in a non-profit space like Wikipedia. Consequently, users are seeking to protect Wikipedia as a "public park" and do so by enacting contested concepts of openness. This suggests that Wikipedia includes boundary spanning editors who are willing to work with groups who seem to oppose the narrative surrounding openness in an attempt to reinterpret and renegotiate boundaries to keep the encyclopaedia moving forward. This means some users are willing to negotiate relationships with paid editors, another group is willing to work with the Foundation to implement top-down changes to the platform, while yet another demonstrates the permeable nature of Wikipedia's boundaries in the interconnected digital media environment by engaging with media (social media, the press) both on-wiki and off-wiki. These relationships challenge Wikipedia's norms and some existing interpretations of

openness in the encyclopaedia, however provide the most opportunity for growth and truly fulfilling Wikipedia's potential to be a democratic platform for participation moving forward.

7.1 Anyone or everyone: Negotiating the ideal user

This thesis has identified an important distinction between the concepts of *anyone* and *everyone* as they are used in relation to participation in online communities.

“Anyone” is deployed as an ideal user type in the libertarian tradition of open communities, while “everyone” is deployed as an inclusive concept that embodies ideals about the democratising potential of the internet. According to this logic, Wikipedia may be the encyclopaedia that “anyone” can edit, but not that “everyone” can edit.

This conceptual distinction emerged from the way users interpret openness and deploy it in controversies to frame their own and others' participation in Wikipedia. Openness exists as both a contested ideal (anyone/everyone) and a coordinating ideology. This ambiguity around openness allows for work in the encyclopaedia to continue while controversies around participation and access are being played out. In order to do this, users in Wikipedia engage a boundary-work model that employs concepts of openness and friction to generate policies and standards that are in turn used to shape participation in the encyclopaedia.

The creation of these rules is enabled by the openness of the platform – both in ideology and technology – and the need to coordinate contributions from a globally distributed collective of volunteers. The thesis found that the wiki is an important actor in this process, as it provides the structure and boundaries for

friction to be employed generatively by users in the content creation process. This egalitarian and heterarchical structure afforded the mass participation of amateurs in the editorial process of an encyclopaedia at the same as it allowed the creation of rules and standards to manage this process. The abundance of rules that were created by the community in response to frictions and problems raised has in turn created high barriers to entry into the community, where access is constrained to those (anyone) who can navigate the rules and norms of the platform. Some editors also use these rules to demarcate boundaries of expertise through deploying them in conversations and discussions with other groups of editors in order to establish their own position in the controversy.

Users also participate in this boundary-work to demarcate their position in the encyclopaedia as a whole, and these positions vary in their approach to framing openness and access in Wikipedia. Indeed controversies serve to blur these boundaries and force a renegotiation, interpretation and articulation of the values that are instantiated in the rules, code and norms of the site. In this process, some boundaries are firmed (Chapter 5), others are redrawn (Chapter 4), while others continue to be negotiated (Chapter 6). This boundary-work serves to problematise the notion of a single user community and demonstrate how different groups in Wikipedia enact interpretations of openness in order to achieve the platform's goals.

7.2 Renegotiating boundaries through controversy

The thesis built on existing STS scholarship to show how controversies are one way that Wikipedia understands itself and investigating them reveals much about

the sociotechnical nature of the platform, how it evolves, what actors are involved in its evolution and how the different parts of the system (users, the Wikimedia Foundation, policies, code, automation, the media) work together across boundaries to construct Wikipedia. Boundaries and boundary objects are therefore important in Wikipedia – they serve as sites of interpretation and negotiation where users come to define and understand participation, and are necessary to navigate involvement in a platform with an abundance of rules that necessarily regulate content production, but also serve to create high barriers to access for new users.

The initial motivation for this research stemmed from the real world problems of active editor numbers declining and the gender gap in participation in Wikipedia. In light of wider narratives about the democratising potential of the internet, the research then turned to examine how openness is used to construct, interpret and maintain boundaries and position in debates about recruiting and retaining new editors, and in particular female editors.

A threat to the continued involvement of volunteers however is trying to maintain one editorial community. Deferring to a singular Wikipedian community is helpful in many scenarios, but in trying to craft responses to users, future users' and readers' needs the reality of diverse and sometimes opposed communities needs to be acknowledged. Additionally, debates in Wikipedia were often represented as containing binary positions (commercial paid editors, vs. neutral volunteers; user community vs. the Wikimedia Foundation; existing (sexist) male editors vs. feminist editors) however as the examined controversies showed the reality was a diverse, thoughtful heterogeneous group of communities and actors

that all work together to use particular events as a generative friction to improve processes, even if it didn't always mean progressing the encyclopaedia (as in the case of the reversion to the traditional editing interface).

Despite the narratives around participation, Wikipedia is a sustainable digital media institution and this is due in no small part to its users being committed to providing free and open access to knowledge. The research found Hess & Ostrom's (2007) principles for sustainable institutions scales out to a digital media platform with globally distributed volunteers. There is a need for the platform to have a critical mass of users who have a stake in creating and designing rules in order for those rules to stick, and be enforced. The thesis also found the media to be an important actor in the construction of Wikipedia. Not only for how it frames accessibility, usability and inclusivity in the encyclopaedia for readers, but for how those narratives feed back to the platform and inform and shape user and governance actions in Wikipedia.

In the first chapter I outlined the need to examine more closely conditions relating to participation and how fully Wikipedia had embodied claims relating to the democratising potential of the internet. I examined how the reality of a massive online collaborative community differs from many of the Web 2.0 discourses that surrounded Wikipedia. I also stressed the need to realise that Wikipedia, despite its faults, needs to also be recognised for its ability to include more diverse views into its creation of knowledge than any other encyclopaedia before it.

In the second chapter I presented my theoretical framework and approach that uses controversies to examine how a technology is interpreted and boundaries are negotiated that shape participation. I maintained that in this process of boundary

negotiation and formation, conflict is a generative friction as it assists in articulating the ideals related to access and participation in Wikipedia.

In the third chapter I looked at how these ideals have materialised in Wikipedia via its governance structure, rules, policies, and code. I concluded that openness is the central ideal of the project, and while it has allowed for the creation of many innovations, has also allowed for the creation of a number of rules that effectively render parts of the platform closed to new users.

In the fourth chapter I analysed the controversy around the discovery of extensive paid editing by a single company in Wikipedia along with wider concerns about paid editors and commercialism in the encyclopaedia that resulted in the Wikimedia Foundation altering its Terms of Use. My reasons for analysing this controversy were twofold, one, it presented an opportunity to look at how volunteers would react to the acknowledgement of paid editors; and two, whether or not the community saw the inclusion of paid editors as going some way to addressing the decline in editor numbers. I found that while the community and foundation initially took the historical stance of opposing any sort of commercial involvement or editing for pay in the encyclopaedia, a closer reading of the discussion and examination of the controversy revealed editors that valued the ability of *anyone* to edit the encyclopaedia over and above whether or not that person was paid. It found that in articulating this ideal boundaries around participation were redrawn. It also showed that openness is a contested concept between those who value openness in regard to participation and those who frame openness as a pre-commercial concept, where paid editing cannot have any place in Wikipedia.

In the fifth chapter I examined the controversy surrounding the rollout of a new rich text editing interface for Wikipedia articles. I found that although the primary reason given for the community rolling back the interface was technical, a lot of the discursive work among participants went toward demarcating boundaries around user types, and the value of these user types to the encyclopaedia. Those users not in favour of the new editor maintained that existing users with their knowledge and ability to tinker and innovate with existing wiki markup are of more value to the project. I found that in this case openness worked to hold the encyclopaedia back as existing users used the openness of the technology and its ability to be hacked and tinkered with as a reason for rejecting the new technology. It also found that as many users felt they did not have a stake in creating or agreeing to deploy the new interface, it did not succeed. In this debate some existing users did note the absence of the user group for whom the technology was intended (new users with little to no knowledge of wiki markup) from the debate. This chapter found that users engaged in a form of protective boundary-work that effectively created barriers to entry for new users, however in articulating these boundaries, new user groups were identified that advocated for a new interface to encourage more participation in the encyclopaedia, and therefore problematised the notion of a single Wikipedia user community that was opposed to change.

In the sixth chapter, I examined three controversies around the gender gap in Wikipedia to discover how the rhetoric of openness is used to organise information and spaces, and make decisions relating to access and participation. I looked at three controversies that received widespread mainstream and social media coverage: the removal of American Women Novelists from the main

American Novelists category in a controversy that came to be known as categorygate, and two decisions by the Arbitration Committee to ban users associated with editing gender-related content (on the Gamergate controversy article and the Gender Gap Task Force project page). I found that users engage in boundary-work to protect Wikipedia as a post-political space and the rhetoric of openness is used to position Wikipedia as a site where gender is irrelevant. I also found the importance to different community groups for demarcating *on wiki* and *off wiki* action and the confusion around what is considered acceptable organising in different spaces. This chapter also found that the media is an important actor in interpreting what Wikipedia is and how its future direction should be shaped. Far from Wikipedia being a silo, or an echo chamber, the media interest in the processes and procedures of the encyclopaedia, as well as its ability to shape actors decisions demonstrates that Wikipedia is not an alternate, open corner of the web immune to criticism from outside sources, but part of a wider web ecology of emerging media institutions.

7.3 Future considerations for access and participation

Taking into account the increased use of closed system apps to access information, and the increasing use of mobile devices to access the internet (Murtagh 2014; IDG Global Solutions 2014) the future sustainability of Wikipedia depends on its versatility across hardware forms (van Dijck 2011; Zittrain 2008), and particularly for issues of diversity, the ability for editors to contribute across devices. As this research shows, there are still debates (that are echoed from very early discussions in the encyclopaedia) about who Wikipedia is actually for, *who uses it and how*. Further research into Wikipedia's readership is

therefore needed, and this research needs to be fed back into the editorial community, so informed decisions about the shape of the platform can be made. Part of this readership research needs to consider the material form that future technologies will take, taking into consideration opening up access to a greater number and diversity of people means taking into account those who use screen reader technology, those with disabilities that make mobile and WYSIWYG editing hard as well as those who do not have access to the latest technology.

Addressing these concerns also means accepting that the Wikipedia community has evolved from 2001, and that it is not one editing community anymore, but several who hold sometimes with competing positions within the encyclopaedia, and are active across several different media platforms. Acknowledgement of multiple editing communities within the larger Wikipedian identity is vital if the platform is to progress and address issues that are leading to its problems with editor recruitment and retention. Additionally, the role the media, and more specifically social media, plays in shaping participation in Wikipedia is still being negotiated on Wikipedia. It is therefore one avenue of future research that would inform alternate ways to encourage and support inclusivity and diversity among Wikipedia editors.

The periods of controversy that have come to define the platform need to be recognised as calls to action from different actors to improve the platform and its processes, and that these calls are just as valid coming from without the community as from within. As Coleman notes, “Crisis periods are incipient calls for movement and realignment, and hence reveal commitments that, if acted on,

can lead to positive solutions and a profound renewal of the organisation”
(Coleman 2013, 149–150).

How Wikipedia positions itself as an open institution that provides free access to the “sum of all knowledge” also has implications for the types of editors that it will recruit and retain in the future. A strict adherence to founding ideals may in some cases reduce the quality of the encyclopaedia and impede its strategic goals. As Morgan et al. (2011, 14) note, “Recognition within the community of the ways in which Wikipedia sometimes falls short of its own lofty rhetoric by over-emphasizing certain values at the expense of others could make the community better able to fulfil its mission and meet the information needs of its global audience.” Further to this, any development of strategy needs to be informed by an understanding of readers and their behaviour and the factors that cause and enable a person to cross the boundary between reader and editor.

Understanding what openness is in the context of participation, and what we mean we say “anyone” and “everyone” is important because despite the differing interpretations of openness in terms of access, open *does* provide an opportunity and a space for alternate action on the web. It provides a cohesive ethos for a movement to achieve and firm boundaries around what Sue Gardner likened to “public parks” on the internet (Valby 2011) that is important in light of the dominance of commercial platforms among the world’s top sites. How access is framed and articulated in open spaces is therefore central to realising the democratising potential of the internet, and shaping participation from not just “anyone,” but “everyone.”

APPENDICES

Appendix A

Table A.1: Coding scheme for Controversy One

Theme	Description	Posts
existing	Wikipedia's existing policies are robust and designed to prevent bad faith edits. Application of policies such as neutrality and notability will weed out edits made by an editor with a conflict of interest. Existing policy embodies the core ideals of the project.	74
difference	There are differences among types of paid editing and types of advocacy. A new policy cannot address these differences.	52
underground	A new policy would drive different types of paid editors to edit covertly, and it would be harder for the community to police these types of contributions.	29
new rule	A new rule is needed to send a clear message that paid editing in Wikipedia is not acceptable.	27
nature	Paid editing is against the neutral and volunteer nature of Wikipedia.	26
wording	Comment on the specific wording of the proposal.	26
unpaid	Unpaid advocates are also a threat to the quality of the encyclopaedia.	18

unenforceable	Policing a new rule would be difficult and the sanctions unenforceable.	17
focus	The focus should be on the quality of the contribution, not the contributor.	16
anyone	A policy that specifically bans paid editors is against the ethos of an encyclopaedia that anyone can edit.	15
volunteers	The hard work of volunteers needs to be protected.	11
collaborate	The community should look at ways to collaborate with professional paid editors.	10
real world	Many non-profit organisations are required to have conflict of interest policies.	8
step	A new policy would be a step in the right direction to banning paid editing.	8
transparency	A policy would require editors to be upfront and transparent.	7
slippery	Allowing any paid editing is a slippery slope that will be detrimental to the quality of content.	5
privacy	Requiring editors to state potential conflicts of interest violates the privacy and anonymity of users.	4
not neutral	Paid editing is inherently not neutral.	2
tech	A technical comment.	1
gaming	Paid editors are already gaming the system.	1
reputation	Paid editing harms Wikipedia's reputation.	1
Total		358

Table A.2: Coding scheme for Controversy Two

Theme	Description	Posts
Technical		
Bugs	Bug report; the software is “too buggy” to use.	64
VE is slow	The new interface takes too long to load and too long to reflect and save changes.	26
Technical suggestion	Suggestions to improve the efficiency of VE.	16
Technical question/help	Requests for help using the new interface.	16
Technical comment	A neutral comment on the technology behind VE.	11
Negative technical comment	Criticism of the technology behind VE.	10
Need for testing	The need to roll out and test in a live environment to discover bugs.	4
Total		147
Sociotechnical		
Ability to disable VE	Statements and requests about the ability to disable the VE interface, hide the VE option and/or use wikitext.	48
VE as opt-in	Requests to make, or statements saying VE should revert back to opt-in mode; debates about default status.	44

VE increases low quality edits	VE will result in an increase vandalism and create more work for existing users who will have to clean up low-quality and bad faith edits.	28
Browser support/user reach	The ability of VE to be used by target audiences including those on outdated browsers, with limited processing power, using screen readers or other accessible technologies and those using mobile devices.	27
Functionality	Statements around the functionality of VE for new users and existing users.	18
UX feedback	Feedback from those editors actively using VE.	17
Need for a new editor	VE as response to changing WP articles (as they become more complex), VE is the future, it helps new users.	17
Prefer wiki markup	Users enjoy using code, don't like WYSIWYG.	12
Filter for user types	Wiki markup acts as a gatekeeper for desired user-types.	10
Article Organisation	Make it known that VE has bugs; about VE article, where meta pages should go.	10
Opt-in vs Opt-out	Statements debating the default status both for and against VE as the default state editor.	8
Community Hack	Users will hack the fixes VE needs/ users want.	3

Wiki culture	VE will degrade wikis and wiki culture; WYSIWYG is dumbing down the encyclopaedia.	3
Importance of the wiki	The wiki is integral to Wikipedia (its nature/purpose/aesthetic).	2
Performing opposition /support	Users sharing the code that puts an icon on a user profile page (userbox) showing support or opposition to VE.	2
Manual of Style	VE makes it easier for users to adhere to Wikipedia's formatting.	1
Positive general VE comment	A statement supporting the introduction of VE.	12
Total		262
Operational		
Roll out problems	Questions around why VE was rolled out in beta-mode, statements that the roll-out was too soon.	28
Operational suggestion	Suggestions for future roll-outs of the software and to what communities it should be rolled out to, and what users. Eg, wait to roll out to anonymous IP editors; not all suggestions were framed helpfully	21
Negative operational comment	Criticism of the roll-out and current handling of the event	6
Operational question	Questions asked of the roll out process, what future plans may be.	5

Positive oper'al comment	Praise for the roll out.	1
Total		61
Community		
WMF/community tensions	Posts about WMF's role in developing and rolling out VE, including how feedback is handled, a feeling that VE was forced onto the community.	22
Not notified of the change	Posts expressing surprise at the change in the default editor; statements that users were not notified of the change.	18
Treatment of editors	VE will alienate all users; VE preferences new users over old; old users will leave.	16
Research	Questions around what is known about new editors and retention; requests for proof that markup behind retention rates falling; what are the metrics for success; doubts around markup as a barrier to entry.	15
Change	If it's not broken, why fix it? Users express resistance to change, observations of resistance to change.	8
No interest	Users expressing no interest in the purpose of, or using VE	5
Two systems	VE will create user classes and hierarchies; ties to 'Functionality.'	2

Praise for WMF staff	Positive recognition of WMF	2
Total		101
Miscellaneous		
Random comment/reply		56
Reply from WMF		49
Administrative Comment	Notification of IRC office hours, etc.	7
Total		112

Table A.3: Coding scheme for Controversy Three

Theme	Description	Posts
Organisation		
Organisation	General posts about how information is organised within the encyclopaedia.	65
Philosophy of categorisation	Debates about the purpose of categories; ideal category systems; the nature of categorisation.	38
How categories work	Information about how categories work, specific to Wikipedia.	20
Category system needs fixing	Negative opinions on the current category system, needs to be improved.	6
Categories don't work	Category system needs to be replaced.	2
Total		131
Bias		
Sexism	The development of a subcategory is sexist; the removal of women from the main category is sexist.	25
Removing women	Removing women from a category silences women; hides contributions is sexist; is biased.	18
Male default	Wikipedia has a male default (that is not limited to its category system).	16
Discriminatory	The removal of women is discriminatory.	6

Biased	The removal of women from the category is evidence of Wikipedia's bias toward women.	4
Total		69
Female subcategory		
Subcategory and main category	Women should be placed in BOTH the subcategory and the main category.	39
Usefulness	It is useful to have a female subcategory.	12
No subcategory	Women should not be subcategory.	7
Trivial	Differentiation by gender is trivial; Women aren't special don't need their own cat; links to 'No need for a subcategory.'	7
Only subcategory	A female subcategory is fine; it differentiates; entries can't exist in both parent and child categories.	6
Imbalance	Having a female subcategory without a male equivalent promotes imbalance in the encyclopaedia.	2
Male equivalent	The category does not need an equivalent male subcategory.	2
No need for a subcategory	Women do not need to be differentiated.	1
Total		76

Attitudes to gender		
Balance/equality	Wikipedia should show/promote equal respect to both male and female categories (and editors).	24
Gender neutrality	Categories should be gender neutral.	17
Gender not relevant	This is a non-debate because gender is not relevant in an open encyclopaedia.	11
Not Binary	Gender is not a binary.	5
Total		57
Media		
Media coverage	Recognition that the event has generated media coverage.	34
Wikipedia reputation	The event and/or how the community responds affects Wikipedia reputation	15
Social media coverage	The event is being discussed on social media; social media is pointing people to the discussion	5
Facebook	The event is being discussed on Facebook.	3
Wikipedia's position	Wikipedia is not a silo; why target Wikipedia?	2
Total		59
Readers		
Ghettoising	An entry in a subcategory "ghettoises" the article making it harder to find and create links with	15
Overcategorisation	Allows entries to be listed in parent and child categories risks overcategorisation of an article.	7

Simplifying navigation	Categories are designed to simplify navigation.	26
Readers' needs	How do categories help or hinder a reader's time on Wikipedia, what are readers need?	10
Total		58
Technical		
Tagging-intersection	Tagging articles would be a better, simpler system; category intersection (where entries are listed in multiple categories) is like tagging	16
Technical	Discussion of the technical constraints of categories	21
Existing technology	The community should just work with the technology it has.	2
Total		39
Wikipedia		
Norms	How to engage in discussion on Wikipedia.	15
Help	Requests to an administrator for help.	3
Processes	Wikipedia has the processes to deal with bias, etc.	3
Problems	Wikipedia has problems that need addressing.	3
Policy	Read the [referred] policy.	3
Precedence example	Here are entries in both category and subcategory.	2

WP:SNOW	A reference to the Wikipedia essay, “Snowball clause”: “If an issue does not have a snowball's chance in hell of being accepted by a certain process, there's no need to run it through the entire process.”	2
Consensus	Comments about the need to reach consensus.	2
WP:OTHERSTUFF	A reference to the Wikipedia essay, “Other stuff exists”: “In Wikipedia discussions, editors point to similarities across the project as reasons to keep, delete, or create a particular type of content, article or policy. These "other stuff exists" arguments can be valid or invalid.”	1
Total		34
Notability		
Academic interest	There is academic interest in having a female subcategory; useful for women’s studies, gender studies; women’s studies is a distinct academic field.	25
Total		25
New Users		
New users	Mentions of the event in relation to new users.	7
Research	Questions around existing research suggesting Wikipedia’s gender gap contributes to creating a	4

	barrier to entry for new users (see also “What exactly are the numbers...” Ch 4).	
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Negating voices	Cancelling votes and setting up conditions for participation in the discussion can exclude new users.	3
Recruitment	How the event affects potential recruitment of new female editors.	2
Total		17
Actions		
Check other women novelists categories	Statements that users will check how other category systems treat gender in the encyclopaedia.	9
Consistency	Statements emphasising the importance of consistency in the encyclopaedia – if it happens to one category it has to happen to all categories.	2
Precedence	There are other “women” categories.	1
Total		12
Setting out conditions		
Canvassing	Accusations of advertising the existence of the conversation in order to support a position.	2
Not canvassing	Rebuttal of accusations of canvassing	2
Cancelling votes	Administrative strike of post.	1
Off-wiki organising	Accusations of communicating outside of Wikipedia.	1
Anonymous editors	Comment on the validity of votes from an anonymous contributor.	1

Meat puppetry	Accusation of canvassing support from others.	1
Sock puppetry	Accusation of using another account to support a position in the debate.	1
Accusing of spam votes	Related to canvassing support, comment that votes are not valid.	1
Total		11
Language		
Language	Debates around the appropriateness of “female” or “women” in category descriptors.	5
Total		5

Appendix B

Table B.1: Available sanctions in English Wikipedia

Sanction	Level	Description
Account Restriction	Restriction	An editor may only edit with a predetermined number of accounts, usually one.
Civility Restriction	Restriction	An editor may be subject to blocks if they do not engage with other users in a civil manner.
Probation	Restriction	A users's editing will be supervised by an uninvolved administrator.
Revert restriction	Restriction	An editor is restricted to the number of reversion they can make in a certain time period (usually per day or per week), and is expected to discuss the reversion on the relevant talk page prior to enacting it.
Interaction Ban	Ban	A ban on direct communication between two editors. The ban may involve only one or both editors. It is intended to limit disruption to other editors.
Topic Ban	Ban	An editor is prohibited from making edits to articles related to a certain topic, for example feminism (which would include men's rights articles, biographies of feminists, etc.).
Move Ban	Ban	An editor may not move or rename pages in the encyclopaedia.
Article/page Ban	Ban	An editor is forbidden from editing a specified article or page. The ban may or may not include related talk pages.

Autoblock	Block	An automatic technical block of an IP address used by a blocked user.
CheckUser Block	Block	A block that can only be implemented by a CheckUser community member based on disruptive editing from a single user using multiple accounts of IP addresses.
Oversight Block	Block	A block made when content or log entries need to be permanently deleted due to serious copyright violation, privacy, legal or safety issues.
Global Block	Block	A Global Block is enacted via a MediaWiki extension available to site stewards. As a technical block, Global Blocking can only apply to an IP address or a designated range of IP addresses that are deemed to be disrupting the Wikimedia projects.
Site Ban	Ban	The banned editor is prohibited from making any edit to Wikipedia, from any account (registered or unregistered).

Table B.2: Available dispute resolution tools in English Wikipedia

Dispute Resolution Tool	Type	Description
Third opinion	Content	Users can request a neutral third opinion when there is a dispute about content between two editors.
Special policy assistance	Content	Users can post to specialist noticeboards asking for assistance with particular areas of policy. For example the use of reliable sources in an article or the neutrality of edits to an article.
Request for comment	Content	Editors involved in a dispute can request input from uninvolved editors in a special section on the talk page. Using a bot, part of this resolution process is automated, so that the request for comment is also listed at a special (Rfc) section of the encyclopaedia.
Dispute resolution	Content	If a conflict can't be resolved through the above channels in the talk page, editors can request a moderated discussion.
Formal mediation	Content	Provided by the Mediation Committee, this is the final stage in a content-related dispute, and only takes place after other methods have been exhausted. This process is also partially automated by MediationBot, who files the case and notifies all listed parties.

Sockpuppet investigation	User	Editors can apply to the noticeboard to report users they suspect of fraudulently using multiple accounts.
Edit warring	User	Users are reported to a noticeboard for actively edit warring (where users who disagree are constantly changing the other user's edits) and ignoring the three-revert rule (which states, "An editor must not perform more than three reverts on a single page—whether involving the same or different material—within a 24-hour period"(Wikipedia 2015k)).
Administrator Intervention	User	Users can request assistance from an administrator to resolve a dispute. This is typically only required if attempts at resolving the issue on an article or user talk page have failed.
Arbitration Committee	User	This is the last step in dispute resolution in Wikipedia, and is only used if previous levels of mediation and community imposed sanctions have failed.

Appendix C



Figure C.1: English Wikipedia Homepage in July 2001.

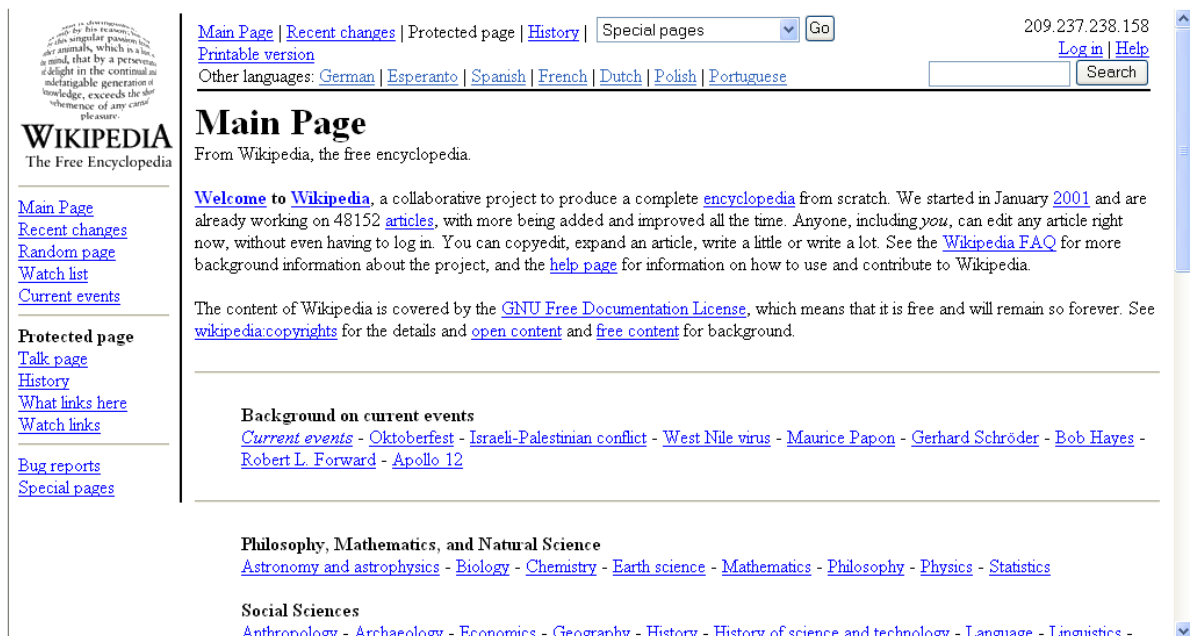


Figure C.2: English Wikipedia Main Page (homepage) in September 2002 after the introduction of MediaWiki software in January 2002.

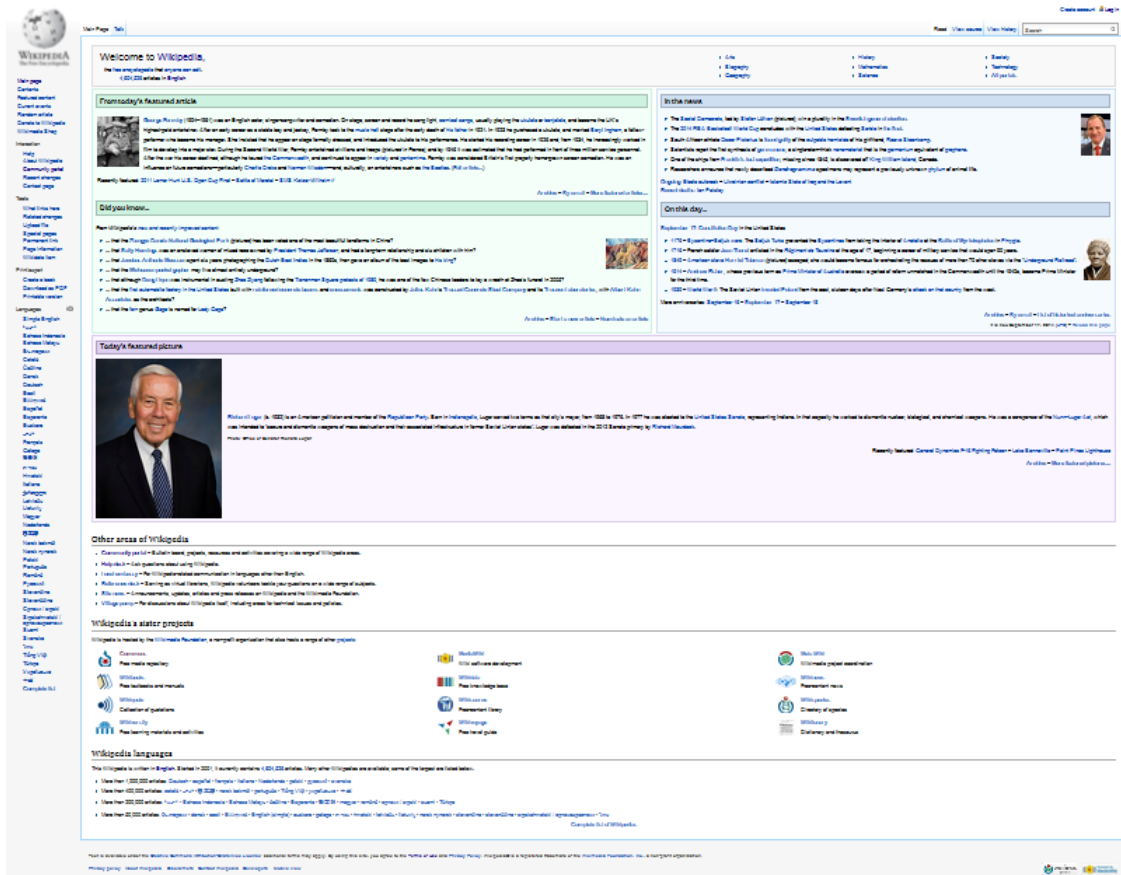


Figure C.3: English Wikipedia Main Page (homepage) in September 2014.

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