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MAKING CONSENSUS SENSIBLE: THE TRANSITION OF A DEMOCRATIC IDEAL INTO WIKIPEDIA'S INTERFACE

Steve Jankowski

Wikipedia is composed from consensus. Discussion by discussion, article by article, the "online encyclopedia that anyone can edit" holds a steady drumbeat toward agreement. While it is often positioned as a self-evident good, its usage on Wikipedia is not without concern. In this paper I mobilize Chantal Mouffe's (2000) feminist critical political theory and Johanna Drucker's (2014) methods of interface analysis to raise important questions about the relationship between consensus and peer production [1]. Through a discourse analysis of consensus as an ideal and a technique, I identify the multitude of ways that Wikipedians perform consensus: not only through understanding and decision-making, but also through acts of composing, showing, processing, closing, and calculating. However, because Wikipedia's socio-technical vision is over-determined by consensus, its political design is ill-equipped to address the political conditions of pluralist societies. As a result, I identify the reasons why Wikipedia should strengthen its democratic commitment by engaging with dissensus. By conducting this research, I demonstrate how consensus has transitioned from a democratic ideal into an interface and why it should be re-imagined within peer production projects.

Keywords: Wikipedia, democracy, consensus, policy, user interface, discourse analysis

Complement: The link: a policy fiction [pdf]

1. INTRODUCTION

Consensus is both a democratic concept and a feature within peer production projects (Haythornthwaite, 2009, p. 4; Reagle, 2010, p. 101–103; Dafermos, 2012). It offers the promise of a non-coercive collaborative environment while also serving to pursue a common goal. But what happens to consensus when it transitions from a theoretical ideal and into a set of practices and techniques enlisted by millions of users? What kinds of compromises are made to the concept during this process? In other words, how is consensus made sensible through the socio-technical structure of a digital platform? These are the questions that I ask in this paper as I explore the meanings and the materials that shape Wikipedian consensus.

Through a discourse analysis that combines Chantal

Mouffe's political theory (2000) with Johanna Drucker's theory of interfaces (2014), I examine how English Wikipedia's consensus policy expresses different theories of consensus — and then — how these forms of consensus are enabled by the platform. As a result, I found that there is no singular meaning of "consensus" on English Wikipedia. Instead, it is a patchwork of theoretical affinities that shift between Jürgen Habermas, Walter Lippmann, John Dewey, and Friedrich Hayek. Secondly, consensus is not just a function of talk page discussion. Instead, it is experienced when users link to policy shortcuts, make edits, undo versions, compose pages, as well as close threads. And finally, English Wikipedia's approach to consensus follows the same pitfalls that critical feminist political theorists have raised against progressive visions of liberal democracy. The consequence is that Wikipedia over-extends the value of consensus at the expense of making collective dissent sensible. As such, if Wikipedia is to continue to be a model of peer production within

pluralist societies, I argue that these characteristics of consensus must be considered.

This critical perspective may come as a surprise. In many ways, Wikipedia owes its success of creating 55 million articles to its 59 million registered users (Wikimedia Foundation, 2020a, 2020b) being committed to consensus instead of other forms of governance. For example, while Wikipedia is shaped by the founder's leadership authority (Reagle, 2010, p. 133) and its parent organization provides economic, legal, and technical support (Lund, 2015, p. 59; pp. 166–167), the direction and content of the encyclopedia is largely decided by Wikipedians. Furthermore, despite the tendency for organizations to become oligarchies, Wikipedia's open decision-making process prevented small groups of users from dominating the project (Konieczny, 2009, p. 25). In lieu of these regimes, Wikipedians have created a "radical autonomy" where external authority has been replaced with internal rules and policies (Jemielniak, 2014, p. 103). This is where consensus comes into play.

Wikipedian rules are often in conflict with another (Leitch, 2014, p. 38) and this means that interpreting their ambiguous authority produces conflicts that not only "fuels Wikipedia growth" but also channels each user towards "consensus seeking" (Jemielniak, p. 59; p. 103). This activity, which Yochai Benkler described "as a collective output," emerges from the jostling of opinions in a "free-flowing exchange of competing views" (2006, p. 218). But even more than a pragmatic means of decision-making, the preference for consensus is imagined to manifest David Clark's bombastic claim: rough consensus would wrest control away from kings, presidents, and the majority (Reagle, 2010, p. 101). Or, as Nathaniel Tkacz put it, Wikipedia animates the dream of a "future without politics" (2014, p. 7).

But politics are far from absent on Wikipedia. Not only does the platform reflect patriarchal assumptions about women (Reagle and Rhue, 2011; Jemielniak, 2016), Wikipedia's own rules are

weaponized to limit the participation and representation of feminist and non-Western knowledges (Peake, 2015; Gautier and Sawchuk, 2017; Maja Van der Velden, 2011; Vetter and Pettiway, 2017). These situations demonstrate that despite the utopian promise of consensus to limit external regimes of power, forms of domination continue to proliferate.

In response, the Wikimedia Foundation has supported several initiatives like "Whose Knowledge?" (Balch, 2019), the Feminism+Art edit-a-thons (Tamani, Mandiberg, Jacqueline and Evans, 2019), and a universal code of conduct to address harassment (Wikimedia Foundation, 2021). While these efforts are important developments, several researchers have identified that Wikipedia's problems are not just an expression of external social inequality; the design of Wikipedia itself obscures the underlying politics of peer production (O'Neil, 2009; Tkacz, 2014; Menking and Rosenberg, 2020). In this vein, Heather Ford wrote that "the notion of Wikipedia as the model for global democratic production" becomes complicated when we keep a keen eye on its politics (2017, p. 417). This paper follows this line of inquiry by examining the political consequences of consensus and it does so by following it along its path from a democratic ideal and into a Wikipedian technique.

2. DISCOURSE AND INTERFACE ANALYSIS

Like other research about Wikipedia (Pentzold, 2009; Lund, 2015; Lindgren, 2014), I conducted a discourse analysis to assess power relations and "the possibilities for social change" (Jørgensen and Phillips, 2002, p. 2). While many discourse analyses concentrate on "texts," Laclau and Mouffe argued that discourse includes "all social phenomena" (p. 33). From this perspective, texts, social practices, and platform structures are all articulators of discourse. This expanded notion of discourse has been used to study Wikipedia as a socio-technical structure (Geiger, 2014; Ford and Wajcman, 2017).

Running parallel to these studies are critical

approaches to interfaces, such as Tkacz's analysis of Wikipedian openness (2014). Drawing from cultural studies and science and technology studies, interface critique (Hadler, 2018) and the walkthrough method (Light, Burgess and Duguay, 2016) I seek to uncover obscured cultural meanings within the mechanisms of interfaces. My research differs by relying on Johanna Drucker's interface analysis (2014) that combines media archaeology and design. By treating visual knowledge as a set of frames encoded with graphic traditions and "structuring regimes," her method provides a toolkit to analyze how visual interfaces generate *enunciated subjects* that are afforded specific kinds of actions (pp. 146–147). For the purposes of my research, Drucker's approach facilitates the connections between ideas, subjectivities, and visual structures that may otherwise be overlooked.

Through this joint framework of discourse and interface theory, I begin my analysis of Wikipedia by providing an overview of democratic theories of consensus. Following this, I provide a textual analysis of English Wikipedia's consensus policy to identify how these theories align with Wikipedian interpretations. It is important to note that different language versions of Wikipedia have different wording and policy structures. Therefore, my research cannot represent these linguistic differences. However, English Wikipedia has been the largest of all the editions to date, and therefore provides an appropriate stage to assess consensus as a policy. Welcomed research in this area could compare how consensus is articulated across Wikipedia's language editions.

Building from the textual analysis, I identified how the English policy implicates the interface as several contexts of consensus. These interface features are then analyzed to identify how the technique of consensus generates different kinds of subjects. I conclude by reviewing the presence and absence of various theories of consensus and what this means for understanding how consensus transitioned from an ideal to a set of interface techniques performed by specific enunciated subjects.

3. CONSENSUS AS DEMOCRATIC IDEAL

In the 1920s, Walter Lippmann argued that because modern society was increasingly complex, it was only possible for the public to discuss opinions and not facts (1997, p.27). It was therefore necessary that the organization of democracy to be informed by "a centralized body of experts" who "act as society's intelligence" (Whipple, 2005, p. 160). This meant that ordinary citizens should have almost no responsibility in shaping their political system. This did not sit well with John Dewey. In contrast, he argued that all societies exist "*in* communication" (1916, p. 5, emphasis original) and that the ideal form of democracy is the "Great Community" which is sustained by the "free and full intercommunication" between all individuals (1946, p. 211). Rather than a passive assent to technocratic authority, Dewey argued that democracy was sustained through participation and a consensus which "demands communication" (1916, p. 6).

A similar view of liberal democracy was developed by Jürgen Habermas who argued that democracies are legitimated by the authority of the public sphere. Through this abstract space, he argued that citizens can arrive at an objective consensus on "what was practically necessary in the interest of all" (1991, p. 83). A critical characteristic of this consensus was that it was achieved through deliberation: a process of "intersubjective understanding" founded on the principles "publicity and inclusiveness," "equal rights to engage in communication," "exclusion of deception and illusion" and the "absence of coercion" (2008, p. 172, p. 50; p. 82; 2003, p. 36). This last point was shared with Dewey, who was similarly concerned about "communication distortions" that would negatively effect deliberations (Whipple, 2005, p. 158). And finally, a unique aspect of Habermas's view was consensus was equally useful for making democratic decisions as well as to create common understanding (Jezierska, 2019, p. 18).

While consensus is often understood as deliberation,

it can also be attached to the idea of exchange. For example, Friedrich Hayek explained that deciding how to solve society's problems does not "rely on the application of anyone's given knowledge, but encourage the interpersonal process of the exchange of opinion from which *better knowledge* can be expected to emerge" (Hayek, 1990, p. 148, my emphasis). He further explained that such knowledge comes from competitive action assisted by the market (p. 149). In turn, these economic encounters are democratic because they transform the enemy into a friend (p. 60). It is therefore through the aggregate of the decisions of strangers coordinated by a price system that Hayek imagined the simultaneous discovery of "better knowledge" and the creation of a community. While Hayek did not explicitly use the term consensus, his phrase "better knowledge" and its connections to community are suggestive of the concept.

From Dewey, Habermas, and Hayek, the meaning of consensus therefore leans in different directions: participation, deliberation, and competition. However, the common thread between them is one that Chantal Mouffe identified of liberal theories of democracy: that consensus exists as "the aim of democracy" (2005, p. 29) and operates through a nonexclusive space of rationality (1994, p. 1545). Mouffe acknowledged that "[c]onsensus is indeed necessary" to maintain democratic systems because it is how we can create a common identity. In her words, it is a "moment of closure" that forms a "people" (2000, p. 113). However, putting consensus on a pedestal comes at a cost. She explained that consensus is "and will always be — the expression of a hegemony and the crystallization of power relations" (p. 49). The concern she expressed was that to keep consensus democratic, it must also "be accompanied by dissent" (p. 113).

Citing Jane Mansbridge, Joseph Reagle made a similar argument. He stated that if consensus is always the goal, then it is likely only achievable within small and localized communities (2010, p. 110). This is largely the case since each distinction

of a group of people will "[conjure] up its dominant or majority referent," which "implicitly excludes those whose experiences differ from that majority" (Mansbridge, 1993, p. 367). However, when political difference defines the character of social encounters, Mansbridge argued that voting can be used to legitimize a minority which can "rework their ideas and their strategies [...] in a more protected space" (Mansbridge. 2017, p. 105).

Others have also identified issues with the deliberative model of consensus. In Habermas's theory, interlocutors are required to set aside "differences in birth and fortune and speak to one another as if they were social and economic peers" (Fraser, 1997, p. 77). However, Nancy Fraser argued that this bracketing of difference is more accurately a description of the "protocols of style and decorum that were themselves correlates and markers of status inequality" (p. 78). This means that public deliberation "functioned informally to marginalize women, people of color, and members of the plebeian classes" (p. 78). Zizi Papacharissi expanded this critique when she explained that the reason such protocols of civility, especially those attached to politeness, are detrimental is that they deny the fact that "democracy can merit from heated disagreement" (2004, p. 262). Instead, a civility based on politeness presumes that consensus is the resolved state of democracy.

Katarzyna Jezierska identified this problem as the perceived role of consensus as the "telos" of deliberation (2019, p. 22). By renaming the goal of democracy as "understanding," she argued that both consensus and dissent can be considered possible and desirable outcomes of deliberation (p.16). Her argument also means that consensus cannot be a device for making decisions. Since it is oriented toward understanding, the outcome of consensus "provides stronger support for decisions" but is not the mechanism itself (p. 18). For this task, she suggested that the preferred institutional design for democratic decision-making should be "voting after deliberation" (p. 19).

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3.1 What is consensus as a democratic ideal?

To summarize the discursive field so far, each theorist works with ideas of communication, community, and rationality in contrast to Lippmann's proposal of a centrally organized democracy. However, there are substantial differences between how these theorists position consensus as an ideal. Dewey's consensus was predicated on face-to-face participation; Hayek alluded to the product of "better knowledge" as the output of market exchange between strangers; and Habermas combined the two by suggesting that civil deliberation can provide both understanding and decision-making. In feminist articulations of consensus, these same characteristics are rewritten as hegemony and coercion. They make this case by describing how the unrelenting pursuit of consensus necessarily produces the conditions of exclusion which manifest as the conflation of civility with politeness, as well as consensus (read: one outcome of understanding) with decision-making. The result is that when consensus is imagined as an ideal state of democracy, it actively obscures and undermines the democratic value of dissensus. Now that these theories have been outlined, I can describe how Wikipedian interpretations of the concept form a set of theoretical affinities.

4. CONSENSUS AS POLICY

Consensus has been considered by researchers to be "the most fundamental articulation work done within Wikipedia" (Kriplean, et. al., 2007 p. 9). That is because it is fundamental to creating Wikipedia's "policy environment," — a hierarchy of policies, guidelines, and essays — that "encodes and explains norms" in ways that institutionalize and legitimize the ideals of the project (Beschastnikh, et. al., 2008. p. 27). These documents range from the standardization of content styles, the notability of topics, to the expected conduct of users ('Wikipedia:List of policies and guidelines,' 2020). What holds them together is the fact that each policy is "controlled by community-wide consensus"
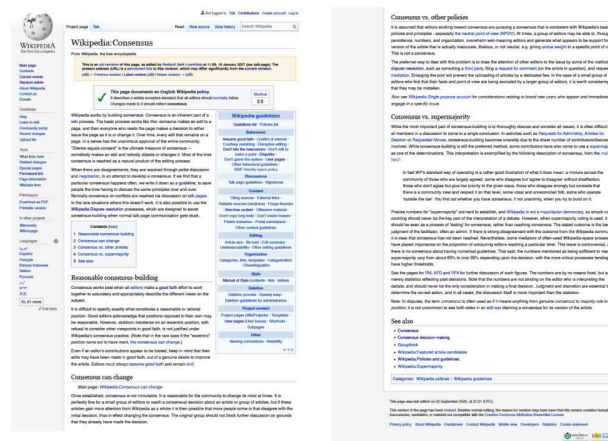
('Wikipedia:Policies and guidelines,' 2009).

Figure 1: Screenshot of the first version of WP:Consensus to be designated a policy, January 18, 2007.

The creation of this environment follows an iterative path of development. First, Wikipedians begin to document important practices as essays. As the value of these practices is verified, essays become designated as guidelines and then policies (Kriplean, et. al., 2007, p. 2). The development of consensus as a policy (WP:Consensus) followed this same process. In 2004, the user Hyacinth started a project page to document consensus as a practice ('Wikipedia:Consensus,' 2004). This project page continued to be developed by other users and was eventually designated as a guideline in 2005 and a policy in 2007 ('Wikipedia:Consensus,' 2005; 2007). In February of that year, a hyperlink to the policy was added as part of the description of Wikipedia's principle of conduct ('Wikipedia:Five pillars,' 2007; 2020). In 2008, WP:Consensus was linked to a template that announced that users must ensure that each edit to *any* policy "reflects consensus" ('Template:Policy,' 2008). As a result of this three-year period, consensus on English Wikipedia shifted from being an implicit practice to *the* measure by which the development of *all other policies* was recognized as legitimate. How Wikipedians articulated consensus as a policy is therefore a matter that affects the entire platform. The following analysis describes the content of the first version

and most recent version of WP:Consensus at the time of analysis before connecting the language of the policy to democratic theories of the concept.

4.1 WP:Consensus, 2007

When WP:Consensus was designated as a policy, it opened with two assertive sentences: "Wikipedia works by building consensus. Consensus is an inherent part of a wiki process" ('Wikipedia:Consensus,' 2007). This was followed by four entwined descriptions. The first conceptualized consensus as the accumulation of unchanged edits made to an article page because they constitute the "unanimous approval of the entire community." Under this condition, "[s]ilence equals consent," and "is the ultimate measure of consensus." The second description specified that consensus occurs by resolving disagreements "through polite discussion and negotiation" and that "[e]ditors must always assume good faith and remain civil" and "reasonable" on the talk page. It went on to explain that consensus is also established when Wikipedians document a guideline which is created "to save people the time having to discuss the same principles over and over."

WP:Consensus also presented a fourth meaning. When users cannot voluntarily agree, they are referred to the community's dispute resolution processes, "which are designed to assist consensus-building when normal talk page communication gets stuck." In 2007, dispute resolution was described as avoiding disputes, deliberating, disengaging, and seeking the opinion of non-involved editors ('Wikipedia:Dispute resolution,' 2007). But when communication failed, users were instructed to resolve disputes by appealing to an Arbitration Committee who voted on a binding decision.

Following these descriptions the policy explained that "consensus is not immutable" and that it can "change" ('Wikipedia:Consensus,' 2007). This was dovetailed by a tangent about voting where cases of "supermajority […] should be seen as a process of 'testing' for consensus, rather than reaching

consensus." Afterward, consensus was permitted to be judged by "the facilitator, often an admin." Finally, the policy acknowledged that "a group of editors may be able to through persistence, numbers, and organization, overwhelm well-meaning editors and generate what appears to be support for a version of the article that is actually inaccurate, libelous, or not neutral." This, the policy states, "is not a consensus."

4.2 WP:Consensus, 2019

Figure 2: Screenshot of the most recent version of WP:Consensus at the time of analysis, January 22, 2019.

In the January 22, 2019 version of the policy ('Wikipedia:Consensus,' 2019), a number of the first version's definitions of consensus were crystallized as top-level headings. Under the first heading

"Achieving consensus," happens "[t]hrough editing" and "[t]hrough discussion." Like the first version, these articulate a difference between consensus as it exists on the article page and the talk page. Under "Determining consensus," the policy described how a consensus "among a limited group of editors, at one place and time cannot override community consensus on a wider scale." It is here that "community consensus" is inscribed in Wikipedia's policies, and that these policies are valued for their "stability and consistency" and therefore are subjected to a different "standard of participation" which moves "slowly and conservatively." This position is reinforced by a link at the bottom of the page that states "[s]ilence does not imply consent when drafting new policies."

Under the section describing consensus-building, editors were encouraged to maintain a "neutral, detached, and civil attitude." Like the first version, this 2019 revision asserted that "consensus can change," and it inscribed this notion within a flowchart of editor actions to help users understand how to move from a "previous consensus" to a "new consensus." As such, the concept of "consensus-building" takes on the character of a decision-making process.

When Wikipedians encounter "no consensus" the policy suggests that editors solicit "outside opinions" and "Administrative or community intervention." This preference for external opinion is extended by the fact that not all decisions are "subject to consensus of editors." These exemptions include the Arbitration Committee, legal issues, and the operations of sister projects maintained by the Wikimedia Foundation (Wikipedia's parent organization).

4.3 What is consensus as a Wikipedian policy?

Presented by this review of the 2007 and 2019 policy versions is the fact that there are several competing views concerning what consensus is, how it operates, and who is involved in the process. In many ways, these differences reflect previously described theories of liberal democracy. For example, consensus often appears in the form of Hayek's discovery of "better knowledge" when Wikipedians think of it as the asynchronous aggregation of individual editing, or when consensus is primarily understood to make decisions amongst strangers.

WP:Consensus also reinforced Habermas's view when they described consensus as resulting from rationality, civility, and politeness. Likewise, Dewey's theory emerges when it explains how policymaking relates to the Wikipedian community. Here, consensus is articulated as active participation to make the community cohesive and when the resolution of disputes is achieved through communication. The policy also expressed concern about the power of vocal actors to manipulate consensus, a point that was raised by both Dewey and Habermas.

Interestingly, because policy-as-consensus is slow and active, it directly challenges the type of consensus assumed by a Hayekian focus on the quick action of pseudo-anonymous users who create articles. Likewise, there is a persistent assent to the bureaucratic authority of administrators — either when consensus is not achieved or for practical matters. This aspect therefore presents a self-acknowledged limit to the value of consensus, one that aligns with Lippmann's preference for a technocratic form of democracy.

Perhaps not a surprise given these theoretical affinities, WP:Consensus makes a number problematic equations. For example, it is explicit that civility requires politeness, and that deliberation will result in decision-making. Furthermore, "no consensus" is understood as a momentary obstacle towards consensus. Given these characteristics, the policy repeats the pitfalls that critical feminist theorists identified within theories of liberal democracy.

As a result, while WP:Consensus may be categorized

broadly as a document that is liberal democratic in nature, it does so without a concern for theoretical consistency. It exists as a composition of contrasting and conflicting theories that outline a whole coterie of subjectivities that perform Wikipedian consensus: active editors, judging administrators, civil discussants, and majoritarian voters. At this point of the analysis, these discursive conflicts and contradictions within the meaning of Wikipedian consensus are suggestive, but they are also incomplete. The policy itself does not make it clear why this specific patchwork was chosen. However, it does leave a clue. These meanings were often affixed to different Wikipedian spaces: on articles, through editing, on the talk page, within policies, and as an aspect of a history of editing. The following section examines these spaces in close detail to gain a deeper understanding of how this consensus, as an ideal, became embedded within the platform.

5. CONSENSUS AS INTERFACE

Following Drucker's interface theory and method of frame analysis, the following section follows this lead by examining how consensus is made sensible through the interface of five spaces identified in the policy: Article, Policy (Project), Talk, Edit, and History. On May 13 and 14, 2019, a purposive sample of these frames was chosen by collecting twenty representative instances of Wikipedian consensus: Wikipedia's policies and featured articles (Figure 3). This sample of twenty pages and their respective talk, history, and edit pages were analyzed for their most common features to create composite wireframes. In producing the wireframes, I became aware of "different forms of visualization" (Drucker, 2014, p. 65–66) that were specific to each space. The following section unfolds their graphic traditions and connects them to the enunciated subjects of Wikipedian consensus. Following these descriptions, I explain how these meanings compare and contrast with WP:Consensus and the cadre of political theorists.

Featured Articles	Edits		Policies	Views
Michael Jackson	30,547		Verifiability	5,3222,799
Barack Obama	27,196		Username policy	1,927,537
India	24,585		What Wikipedia is not	1,682,159
The Beatles	23,589		No original research	1,626,681
Canada	20,878		Biographies of living persons	1,322,599
Germany	19,158		Neutral point of view	1,087,158
Japan	17,586		Consensus	873,479
Australia	15,910		Administrators	758,827
Lady Gaga	14,879		Blocking policy	653,728
Elizabeth II	13,155		Vandalism	590,732

Figure 3: Sample of Wikipedia pages used to design the composite wireframes.

5.1 The composition of consensus

Figure 4: Wireframe composition of Wikipedia's Article and Policy frames.

When WP:Consensus described consensus, it was often in regards to the unchanged edits made to an article page. However, there is no default way to show which specific sections of an article have either been unchanged or disputed throughout its lifespan within the article frame itself (Weltevrede

and Borra, 2016). If the article frame represents consensus, then it must have another meaning. By examining the visual space of English Wikipedia's articles, (Figure 4, left) there is an uncanny connection to the expectations about the mercurial form of the book. A quick glance at the composite illustrates that Wikipedia articles are rife with the denizens of the page: paragraphs, headings, footnotes, cross-references, images, tables, and lists. Decisions about how these elements are arranged are not made lightly. During the 2014 reassessment of Wikipedia's typographic style (Walling, 2014), the designers sought to allow "users to efficiently scan the page or engage in long form reading" (Mediawiki, 2014). Katherine Hayles described this cognitive activity of pecking, juxtaposing, and switching rapidly "between different information streams" (2012, p. 69) as one that has been practiced by centuries of scholars (p. 61).

Aligned with this scholastic activity is the list, a device that proliferates within the frame of the article. Liam Cole Young defines the list as an "an operational form of writing" that streamlines as much as it combines and associates disparate information (2013, p. 498). This is achieved because each list is a "context of citation" that "draws things together and puts them in relation to one another," which in turn mobilizes the "many voices within the text in order to strengthen its case" (p. 506). This capacity of association can also be extended to other encyclopedic devices: the cross-referencing link (Zimmer, 2009) and visual glosses (Franklin-Brown, 2012, p. 136).

These forms are therefore not simply "entry points" designed to service the readability of the text. They are epistemological couriers dealing in the goods of disparate intellectual traditions. Their presence within the same visual space is purposefully designed to be read as if they belong together. They disrupt the linear authority of the singular author and introduce the "many voices" of expertise and editors into a visual context. The article frame therefore provides a visual argument that these

diverse knowledges belong together. They are a consensus by composition and proximity, one that is prefigured by the aesthetic and epistemological traditions of scholastic and scientific bookmakers.

5.2 The showing of consensus

While the policy frame shares some of the visual similarity with its article counterpart, it lacks the same visual depth and polyvocality (Figure 4, right). That is because policies operate in the "document mode" of wiki editing (Cunningham and Leuf, 2001, p. 332) where they are explicitly designed to "document the good practices that are accepted in the Wikipedia community" ('Wikipedia:Policies and Guidelines,' 2019). This description of policies as documents means that they represent, as Lisa Gitelman explained, "the kind of knowing that is all wrapped up with showing, and showing wrapped with knowing" (2014, p. 1).

A clear example of this know-show function comes in the form of the "Policy Shortcut." Signified by right-aligned outlined boxes, these devices are both a short form name to describe a policy section and an anchored link that can be used to redirect users anywhere on Wikipedia to a specific section of a policy ('Wikipedia:Shortcut,' 2020). When the policy is invoked as a hyperlinked word, Viégas et al. argued that it "is easy for moderators to point users to the precise rules they might be breaking" (2007, p. 9). In contrast, Kriplean et. al. argued against this optimistic reading of this device. Because policies are open to interpretation, the researchers observed "complex power plays that contributors make to control content and coerce others during the consensus process" (2007, p. 1). Other researchers have identified that this invocation of the rules was used to "'speak in the name of' something greater [...,] the entity Wikipedia — which gives them 'authority' in the ongoing interaction" (Gauthier and Sawchuk, 2017, p. 397). As such, both the policy and its stand-in — the policy shortcut — is not just a means of knowing and showing consensus. It is used to control the shape of the encyclopedia and the behaviours of other users. Therefore, when policy is

shown and known as consensus, it creates lines of division between who and what is acceptable.

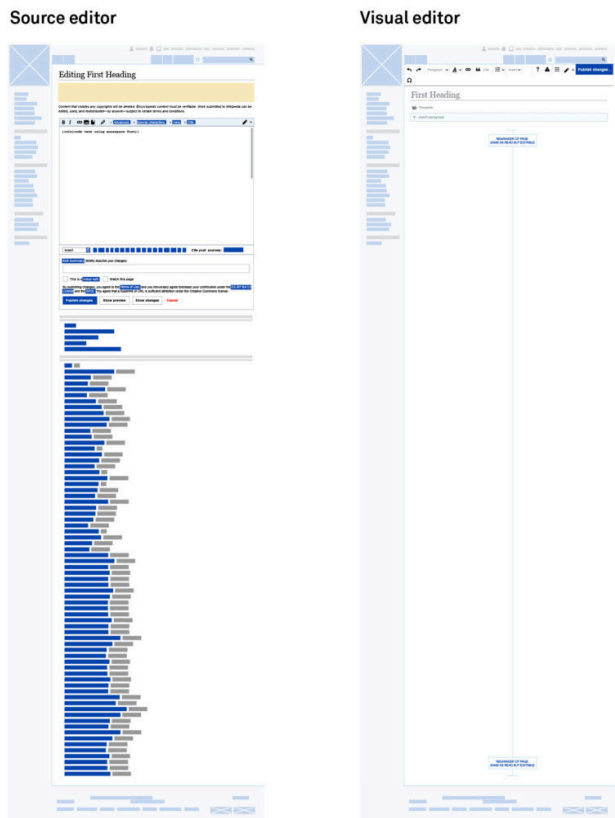## 5.3 The processing of consensus

Figure 5: Wireframe composition of Wikipedia's Source Editor and Visual Editor frames.

From 2001 to 2013, the only way for users to edit a page was to use the Source Editor, an in-browser word processor that displayed plain text files that allowed multiple users to format a document using the markup language WikiSyntax (Cunningham and Leuf, 2001, pp. 118–119). When describing the effect of the word processor on collaboration, Ward Cunningham believed that the "program wants everyone to be an author" (p. 22). However, Matthew Kirschenbaum explained that the history of word processing and printing has been structured by

facilitating the tasks of office work, not literary authorship (2016, p. 16).

This can be observed by unfolding the tradition that WikiSyntax comes from. Within the publishing industry, the formatting of content was long conducted through handwritten "proofreader's marks" (De Vinne, 1916, pp. 322–324). In the mid-twentieth century publishers shifted to using short programmable codes to markup published works (Lee, Worral, et al, 1968, pp. 127–128). Then, as computer scientists developed programs that could print themselves (Mathews and Miller, 1965), there was concerted effort to create a standard digital markup language (Cohen and Rosenzweig, 2006, p. 88). During this same period electric typewriters, such as the IBM Selectric, were re-purposed as the first remote computer terminals and their fixed-width characters served as the foundation of a programming language (Tuttle, 1981). It is therefore in this tradition of programming, markup, and office work that Wikipedia's Source Editor uses monospace fonts to display wikitext to format and publish articles.

On Wikipedia, the Source Editor was augmented in 2012 with a Visual Editor that was intended to make editing the encyclopedia user-friendly and more accessible. This feature allowed users to make direct changes to objects on a page instead of editing wikitext (Protalinski, 2013). While the Visual editor was different from its text-based predecessor, it was designed to allow user to conduct the same markup and publishing actions like "undo," "redo," "format," "style," "link," and "Publish changes." So, when Cunningham argued that adding content to a wiki "can cause the result to drift toward an implied consensus style" (2001, p. 326), the style is that of the publishing office where one worker (ideally) directly improves the work of another — not an author. The edit frame is therefore not only a word processor. It is a consensus processor where every click of the "Publish" button, consensus is processed by the decisive actions of editors.
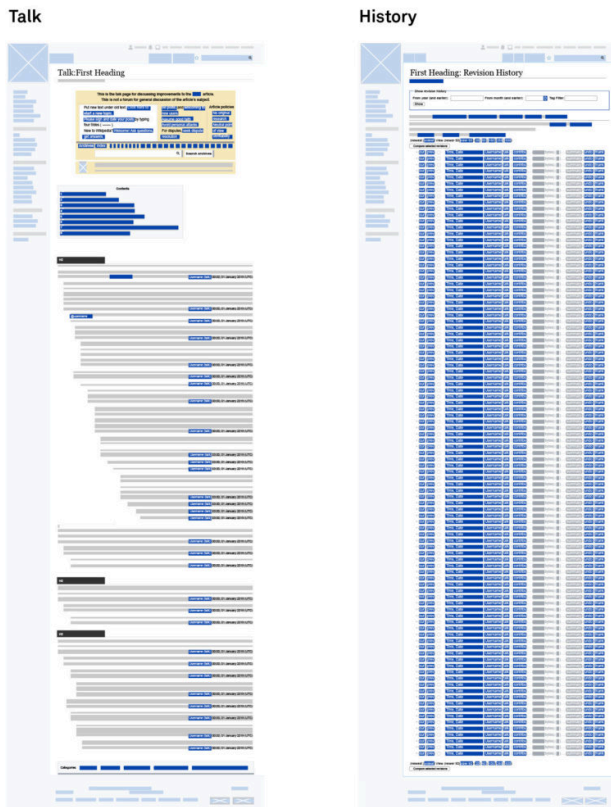
5.4 The enclosure of consensus

Figure 6: Wireframe composition of Wikipedia's Talk and History frames.

The most common space that researchers have attributed to consensus are Wikipedia's talk pages (Benkler, 2006, p. 72; Kriplean, et al., 2007, p. 7; Forte and Bruckman, 2008, p. 7; Reagle, 2010, p. 52). Each talk page discussion begins with an <H2> heading followed by a "post" paragraph and then bifurcated by a cascade of indented replies — each terminated by a "signature" with a username link and a timestamp (Figure 6, left). In most cases, the resetting of indentation indicates "the start of a new thread in the discussion" (Laniado, et. al., 2011, p. 178). Because this figure of the ever-growing tree has been part of the visual aesthetic of operating systems (Salus, 1994, p. 2) and turn-based web forums (Lueg and Fisher, 2012, p. 57), it is with little surprise that Ward Cunningham also designed this structure into 1990s wiki software. However, it was

not discussion that these threads were ultimately aimed at producing. Instead, he envisioned that discussion could be *refactored,* that is, to agreement between contributors into statements that "capture the ideas present in the discussion" (Cunningham and Leuf, p. 333).

While he described how refactored discussion is produced on an associated article page, I found that it can also occur on the talk page itself. Here, refactored discussion is "closed" with an {{Archive}} tag which renders a purple box around the whole discussion. Occasionally, the "closer" will use a template to add a statement that summarizes the result of the discussion and the quality of consensus. Additionally, users also make notice boxes at the top of the talk page to alert new users about settled discussions — such as which English dialect an article should be written in. These agreements are sometimes graphically represented by an image file ('File:Consensus_icon.svg,' 2021).

Another example of refactored discussion is the archive box produced by bots like Lowercase sigmabot III. Because conversations rarely have a definitive end, talk pages can become filled with old threads that make it difficult to navigate relevant discussions (Laniado, *et. al.*, 2011, p. 179). Bots solve this problem by calculating the differences between the current date and the last reply of a discussion thread. If the thread has been inactive for a user-defined period, then the bot automatically moves the thread to an archive. These moved discussions are then represented as numbered archives in an header or box at the top of the talk page ('Help:Archiving a Talk page,' 2020). Through this process, the bots effectively quantify the passive agreement — a consensus — that a discussion is no longer relevant. Together, the enclosures made by bots and humans are the more appropriate markers of consensus on talk pages, not the discussion threads.

5.5 The calculation of consensus

To assist in keeping track of each edit made to

Wikipedia, each page has an associated history page. Formally, this frame begins with a section of options to view the "newest / oldest" versions and can be viewed by sets of 20, 50, 100, 250, and 500 revisions (Figure 6, right). Below that is a button to "Compare selected revisions" which displays the differences between any two versions side-by-side. Following this is composed of a list of revisions, with each line item containing information about time of creation, username, total bytes, difference of bytes from the previous version, and an edit summary. These lines also contain a link "undo" a revision (replacing it with the previous version) and — if a user is logged in — a link to thank the username of the revision.

Technically, each revision line is encoded as a list using the <ul> and <li> tags. But in terms of visual form, the history page operates like a table which can "hold information" and has "performative capabilities" to operate on that information (Drucker, 2014, p. 88). For example, researchers have used this capacity to display patterns of dramatic quantitative changes to identify controversy and aggressive editing behaviours (Viégas, Wattenberg, and Kushal, 2004). In this respect, the history page can be used to identify anti-social activity. But these same numbers can also tell the chronicle of consensus.

By calculating the time between the current revision and a previous revision, or by using "compare selected revisions," users can assess the length of time between edits and the location of those edits. As such, the history frame manifests the idea that consensus can change — every line item is evidence of this fact. It is therefore not a coincidence that some signifiers of the consensus policy included the terms "new," "version," and "revert." These are the same discursive articulations embedded in the structure of the history frame. Furthermore, the history page tacitly identifies what counts as consensus: the most recent edit at the top of the table. Accordingly, the history page gives new meaning to consensus and not as a form of deliberation. Consensus is an act of calculation. In

this context, Wikipedian consensus is an accounting, a constant dip and peak of accumulated bytes that represent social actions. As such, the telos of consensus becomes inscribed in the ebb and flow of information over time.

5.6 The meaning of an ideal technique

By paying close attention to the interface, several differences emerge between what consensus has been ideally conceived as, how it is been defined by Wikipedians, and how it has manifested as a set of techniques. The remainder of this section describes these connections to provide a better picture of Wikipedian consensus.

The article frame as scholastic consensus: In this space, consensus emerges from the associations made from lists, texts, citations, and juxtaposed images connect disparate intellectual traditions together as a gestalt of topical agreement. In other words, instead of representing decision-making, scholastic consensus represents heterogeneous understanding. What is fascinating is that despite the fact that this kind of consensus is the focus article editing, WP:Consensus does mention this feature of peer production.

The history and edit frames as Hayekian consensus: So, if not the article frame, where does the idea of consensus as the accumulation of unchanged edits resonate? A good candidate for this meaning is the history frame where each edit is logged and counted. Furthermore, this frame allows users to compare revisions as well as revert any previous edit. Given these numerical, homogeneous, and impersonal characteristics, the history frame aligns with Hayek's theory of "better knowledge" that arises from quantitative exchanges between strangers. However, this is just one aspect of his theory. He also argued that "better knowledge" arises from action. In this way, the edit frame best personifies this attribute of consensus. By allowing individual users to manipulate the content of previous contributions, they actively process and edit consensus. Through these two frames,

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Wikipedians interpret consensus in ways that are akin to Hayek's approach to the aggregate of quantitative decision-making.

The talk frame as a tension between Habermas and Lippmann: With the same degree of importance as editing, WP:Consensus also defined consensus as something that happens through discussion. However, despite placing emphasis on conditions identified by Habermas — such as civility, politeness, and limited coercion — consensus within the talk frame is not articulated by discussion threads. Instead, I identified that consensus takes the form of graphic enclosures that are implemented by an individual human on non-human discussion closer. Importantly, WP:Consensus specified that disputes and discussions that needed to be closed should rely on outside opinions, often an administrator. Given the authority given to admin and bots on talk pages, consensus in the talk frame is a theoretically tense space between Habermas and Lippmann's views of democracy, one that amplifies a discursive conflict between *consensus as understanding* and *consensus as decision-making*.

The policy frame and Deweyian consensus: Wikipedian policies are expressions of practices grounded in the experience of the community. Furthermore, they are purposefully slow to develop, require active consent for changes, and impact how the entire community functions. Because of these features, they fit within a Deweyian notion of consensus. However, while Dewey described the construction of a democratic community as an inclusive process, Wikipedian practices suggest that this is only partially true. Through the practice of using policy shortcuts, esoteric knowledge of Wikipedian processes can be used to reinforce power structures. In such a situation, policy-oriented Wikipedians may be positioned to present ambiguous policies as self-evident community consensus, rather than their own interpretation. In this context, the notion of the community is presented as more solid and exclusionary than it is.

The absence of a frame for "no consensus:"

Wikipedia provides very little in terms communicating dissensus. Not only was there only a fleeting policy description of "no consensus," the analysis did not uncover a frame that resonated with the idea. From a critical perspective, this is a significant concern, especially since the interface is designed to ensure that consensus (of some form) can be interepreted. With both the policy and the interface denying the value of dissensus, Wikipedia has therefore inadvertently created the conditions it was designed to challenge. Instead of leveling power inequalities, Wikipedia's myopic reliance on consensus orients the platform towards coercive forms of hegemony under the guise of "community."

6. CONCLUSION

Scientifically informed bureaucrats, communicators, deliberators, and market actors. These are the ideal subjects described by Lippmann, Dewey, Habermas, and Hayek. In many ways these same personas have established themselves within WP:Consensus, but under the names of admin and editors. After examining Wikipedia's interface, this list is extended to include closers, composers, processors, calculators, and boundary-makers. However, the performance of each subject is not treated equally. This is due to the perception that Wikipedian consensus is a form of decision-making. If Wikipedians align with Hayek or Lippmann, then their perspective is reinforced by the edit, history, and talk frames. Nearly everywhere Wikipedians wander, the interface speaks of making decisions. Of course, Deweyian and Habermasian views are also present and can articulate consensus, especially as policies that seek to unify the community by establishing boundaries for who is and is not included. This set of discursive conflicts means that Wikipedian consensus is more than a guiding ideal or a self-evident practice. It is a complex socio-technical performance that leans into action and hegemony.

This last quality is important. Despite the utopian purpose of consensus, I have presented a different explanation about Wikipedian forms of domination.

Through the socio-technical focus on consensus, the idea of dissensus has been rendered insensible. This means that marginalized identity groups that contest Wikipedian protocols will do so from a disadvantaged position. Theoretically, they will be demanded to conform to consensus while they are also denied their value as a dissenting collective. Wikipedia's trouble with misogyny and racism can therefore be seen as examples of the experience of consensus in the absences of dissensus.

In light of this consideration, I argue that the transition from ideal to a technique that makes that ideal sensible provides a useful precedent for rethinking consensus within Wikipedia and other peer production projects. The same could be achieved for dissensus. As a sign of encouragement, Wikipedian consensus demonstrates that negotiating opposing views about democracy is a strength to foster. Dissensus should be no different. While this is a laudable task, the paper also demonstrated that the transition from ideal to technique dramatically changes the meaning of the concept. As such, whatever dissensus is imagined to be by feminist political theorists, it will certainly emerge as something different when it encounters the material of digital platforms. Therefore, if Wikipedians are committed to the dream of a better world based on knowledge and understanding, then there is a space to reimagine the politics of consensus.

ENDNOTES

[1] Portions of this paper are based on my dissertation, *The Trouble with Knowing: Wikipedian consensus and the political design of encyclopedic media, York University, 2021*.

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