Extended: Making Community with Wikimedia

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Abstract

In this research we propose to examine the historical, contemporary, and future contributions that Wikimedia community practices can provide to the generation, evaluation, and survival of facts within the global information commons. In particular, we will be conducting cross-platform analyses of Wikipedia, Wikidata, X's Community Notes, and Facebook's Community Notes to assess the ways the Wikimedian approaches to community can serve as a democratic model of moderation. The research team will consist of the Principal Investigator (PI) (Steve Jankowski), a co-PI (Richard Rogers), and a postdoctoral researcher (to be interviewed) who will be hired for the project and connected to University of Amsterdam's Media Studies department and Digital Methods Initiative during the duration of the project.

Introduction

In 2021 and now in 2025, both Twitter/X and Meta shifted their focus of content moderation from automated and paid manual forms to include a volunteer community-based model called "Community Notes." This renewed attention to using the "wisdom of the crowd" (Surowiecki, 2004), and the cultivation of a community dedicated to producing facts, on the face of it, shares many overlaps with Wikimedian communities. However, Wikimedians' unique innovations in the creation and maintenance of their communities and their practices have often been overlooked by social media. In the past, social media have regarded Wikimedian content as a means for legitimizing and validating the requests of information searchers. But with the recent move towards relying on community, this moment presents an opportunity for Wikimedia to reassert itself – not just as a source of knowledge, but as a leader in how to negotiate the peer production of facts and the social conflicts that come with this process. Without a concerted effort by Wikimedia to position itself as a leader of "community notes," social media companies will formulate and extend their own mechanisms that are oriented towards engagement rather than a service for knowledge.

In the past, social media were recognized as significant (and complicated) contributors to the polarization of politics that emerge from inequalities (Kriess and McGregor, 2024) as well as the circulation of networked propaganda (Benkler et al., 2018). Likewise, Wikimedia communities had to adjust to these conditions enabled by social media, such as reporting on breaking news and "social media" revolutions (Ford, 2022), #Gamergate (Jankowski, 2024), or the "infodemic" that emerged during the COVID-19 pandemic (Benjakob et al, 2022).

It stands to reason that Wikimedia will continue to be responding to the ways that social media moderate their platforms, both in direct and indirect ways. With the return to community as

part of their moderation tools, it is important to consider Wikimedia's role at this moment.

In this context, this project suggests three parallel research questions:

- RQ1: How do the different institutional conceptions of "community" between Wikimedia, Twitter/X, and Facebook/Meta function as a historical "keyword" to evaluate and assist the survival of facts within the global information infrastructure?
- RQ2: What are the differences between membership, organizational resources, dispute and resolution practices, and the outcomes from Wikimedia, Twitter/X, and Facebook when the purpose is to assist the creation and survival of facts?
- RQ3: What steps can Wikimedians follow to increase the equity of their own communities which can further establish Wikimedia as a leader in moderating though "community notes"?

The first research question will be conducted through a historical analysis of how the meaning of "community" has been encoded into the strategic plans of Facebook/Meta, Twitter/X, and the Wikimedia Foundation since the mid-2000s up to 2020. This will provide the contextual groundwork for understanding the shifting values, purposes, and commitments to the communities of these platforms. The results of this analysis will also highlight institutional similarities and differences that can serve as precedents for future actions that Wikimedia can take in fostering the survival of facts. The second study will conduct a cross-platform analysis of membership, dispute practices, and outcomes between the three platforms' epistemic communities. The goal of this study will be to identify the discrete ways that various community cultures, techniques, and governance systems contribute to the survival of facts. And finally, the third study will extend the insight of Kriess and McGregor (2024) who argued that informational polarization that is detrimental to the survival of facts is deeply connected to the presence of inequalities. As such, it is necessary to level the inequalities that exist within Wikimedian communities. Of course, Wikimedia has already identified many of these issues in its taxonomy of knowledge gaps (Redi et. al 2021). What is needed is to develop further actions. In Jankowski et al. (forthcoming), they describe how policies are a foundational location where community is established. As a continuation of the preliminary research that was conducted by the applicant under the Wikipedia Research Grant project *Slow Editing Towards Equity* project, our proposed project will investigate the creation, development, and maintenance of equity-based policies that can be enlisted to lead the way as a means to make equitable communities who peer produce facts.

Through these three studies the project expects to produce a number of direct and overarching outcomes. The first is to identify the most suitable conditions where Wikimedian fact creation and evaluation practices could be used within social media platforms in general as a report on best practices. The second is to produce research that provides Wikimedians a broader context for their everyday practices and contributions beyond the borders of Wikimedia. The third is to present trajectories for integrating and extending Wikimedia's leadership in shaping our global knowledge infrastructure and the expansion of the information commons.

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Related work

Researchers: Understanding how Wikipedia's structure and content is designed to adapt to epistemological conflicts has been a long-term project of Steve Jankowski. For example, his work on Wikipedia concentrates on its epistemology of consensus, including an analysis of the consensus policy (Jankowski 2022) as well as the role that consensus played during #GamerGate and the resulting conflicts on Wikipedia's Gender Gap Task Force (Jankowski 2024a). Additionally, as part of the 2022 cohort of Wikimedia Research Grants, his team analyzed the techniques and practices Wikipedians use to designate the status of rules in the policy environments of five language editions (Jankowski et al., Forthcoming; Jankowski et al, 2024). In terms of methodological familiarity, these studies engage with qualitative content analysis, network analysis, and discourse analysis, as well as the cultural history method of keyword analysis (Jankowski, 2024b).

Richard Rogers will also play a role as a co-PI on the project as an expert in the field of information politics and digital methods. He has written extensively on using the research affordances of Wikipedia to develop new digital methods, including query design (Rogers 2017), comparing Wikipedia language versions to analyze differences in cultural points of view (Rogers 2024), and digital methods for cross-platform analysis (Rogers 2018).

Context: While this research experience will be instrumental in informing the proposed project, there is also a need to understand Wikipedia not only in terms of the broader connections with other Wikimedian projects, but also how Wikimedia forms relations with the broader social media ecosystem.

When Wikipedia took its meteoric rise in the mid-2000s as the web's encyclopedia, it was breathlessly discussed alongside the similar trajectories of Twitter/X and Facebook/Meta. Indeed, some of the early reflections by media scholars of this period cast Wikipedia as unquestionably belonging to the category of "social media" (Fuchs 2013) which were oriented toward the "creation and exchange of user-generated content" and subsequently developed into platforms that “form a new online layer through which people organize their lives” (van Dijck, 2013). By the mid-2010s, this twinned focus on content and social organization shifted from the democratic capacities of social media to the concerning issues of hate speech (Matamoros-Fernández and Farkas, 2021) and the political engineering of elections through data collection, famously captured by the Cambridge Analytica scandal in 2018 (Berghel, 2018). During this pivotal moment, a large portion of social media research shifted to questions of content moderation: What was the purpose of content moderation for social media companies (Gillespie, 2018)? What are the differences between automated and manual forms of moderation (Gorwa et. al, 2020)? And how such moderation techniques constituted different forms of platform power (Cobbe 2021)?

It was also during this period that Wikimedia projects seemed to be discursively distanced from "social" media and became more recognizable in terms of being a set of peer production communities. This approach was first articulated in Yochai Benkler's *Wealth of Networks* (2006). For him, Wikipedia was certainly interesting because it relied on user-generated content (a characteristic that would be later identified as being quintessential to defining social media), but it was unique because the goal was not simply to individually produce content, but for the content itself to be the result of non-market collaboration through

online technologies. From this perspective, Wikipedia was politically and economically dissimilar to nearly all the popular social networking sites. Instead, it had more in common with other non-market peer production communities.

Mathieu O'Neil (2009) pointed this out in his analysis of how online tribal authority creates various governance structures. These ideas were echoed in studying FLOSS communities like those connected to Debian (Mateos-Garcia and Steinmueller 2008), Github (Zöller et al., 2020), as well as the limitations of open source projects in general (Schneider, 2021). From this perspective, the main questions concerned how the community organized itself to produce high quality cultural content and software through collaboration (Wilkinson and Huberman, 2007; Liu and Ram, 2011; Shenoy, 2022; Oliveira et al, 2023).

A separate thread can be found in the way that Wikimedian content is understood as playing fundamental roles in shaping the information environment. Chiefly, Heather Ford's (2022) theory of datafied facts serves as an excellent source of how to understand how information and facts survive their journeys through different epistemological communities as they move back and forth from Wikimedia projects to social media and Google. Such movements are not without concern as the way that Google has used Wikimedian content has been argued to limit increasing the Wikimedian contributors (Vincent and Hecht, 2021). Andrew Iliadis (2022) work on how the semantic schemas of Wikidata are the results of imperfect inscriptions and interpretations is helpful for understanding the infrastructural components of Wikimedia data. And likewise, Zach McDowell and Mathew Vetter (2022) excavated the philosophical and sociotechnical grounds for understanding Wikipedia's role in how its policies and practices work towards representing reality.

To summarize, studies of Wikimedia have often sought to understand how it produces both facts and communities by moderating the behaviors of users so they are apt at evaluating and negotiating sources. Conversely, social media have often been studied in terms of how they produce engagement behavior data by moderating user content and the sociotechnical design of communities. Of social media, Reddit has largely served as the clearest example of how both questions of the platform power of content moderation and peer production are meaningful (Leavitt and Robinson 2017; Chandrasekharan et al., 2022). It is perhaps this reason that there are occasional overlaps in research about Wikipedia and Reddit (Vincent et al, 2018). Other connections have been to understand Wikipedia's informational connection with journalism (Keegan, 2013; Ford, 2015; Avieson, 2019) and disinformation campaigns (Saez-Trumper, 2019). But over the past four years, there has been a shift that now expands this overlapping literature to include both Twitter/X and Facebook with Wikipedia once more.

Originally described as "Birdwatch" in 2021, Twitter launched a "community-driven approach to help address misleading information" (X, 2021). Up to 2024, Meta had used a group of independent fact-checkers to identify misinformation (Meta, 2024). Then, at the beginning of 2025, Meta announced that Facebook would replace this service with its own Community Notes (Meta, 2025). Since Twitter's move, there have been a growing list of studies that examine it in terms of partisanship (Allen et al., 2022) and credibility (Kangur et al., 2024), the labor involved (Jones et al., 2022), vulnerabilities (Benjamin, 2021), and misinformation (Drolsbach and Prollochs, 2023). Given the recent announcement on Facebook's community notes, there has yet to be research conducted on this topic.

This reliance on users to filter information instead of experts or automated systems renews earlier promises about the value of crowdsourcing as a solution to epistemological problems of the Internet's information ecosystem. This return to the "wisdom of the crowd" is a curious moment within the history of social media. It not only demands greater attention but must be brought into conversation with what is arguably the most successful project of negotiating the creation of information, facts, and knowledge through an online community: The Wikimedia Movement.

This research project argues that if Wikimedia is to pursue its 2030 Strategic goal of bolstering itself in terms of being "knowledge as a service," then it should re-entrench itself as *the* model for creating systems to aid the creation and survival of facts.

Methods

RQ1: Within the discipline of cultural studies and media history is the method of keyword analysis (keywording). Distinct from information science notions of keywords, keywording is "the analysis of a carefully chosen, interlocking vocabulary through which historical transitions can be glimpsed and a changing society mapped via a dynamic history of shifting meanings within this vocabulary" (Highmore, 2021, p. 3). Within this method, the researcher selects the vocabulary of words that are shifting in meaning. This will require choosing a purposive sample of texts from each of the three platforms' grey literature (official blog posts, annual reports, strategy documents, etc) over the course of fifteen years. The criteria to be developed for selecting texts will begin with their significance in the popular press and their inclusion of the words "community," "fact," and "information." During the initial passes of open coding of these texts, a selection of attached vocabulary will be identified. The analysis itself will follow the format of other keyword analyses found in media studies (Striphas, 2015; Peters, 2016; John, 2022).

RQ2: The study will conduct a cross-platform analysis (Venturini et al., 2018) using digital ethnographic methods which are useful for analyzing "cultural processes" through digital methods which "entails embracing the natural logic the internet applies to itself in gathering, ordering, and analyzing data" (Caliandro, 2016, p. 667). This "natural logic" also includes the activity of "lurking" as a method of digital ethnography (Kavanaugh and Maratea, 2020). It is a covert approach that is "especially useful when studying sensitive topics or stigmatized groups, as one may observe persons interacting naturally without directly impacting or leading communicants in a manner that may artificially impact the data" (p. 6). Kate Crawford has argued that this kind of activity is also an important form of participation, which she called "social media listening" (2011, p. 67).

As such, the study will begin with observations of emerging cases of community notes from both X and Facebook for a one-year period. Each case will then be assessed if it has reciprocal instances within Wikipedia articles and Wikidata entries. The total number of cases observed will be reduced to a purposive sample of five case studies which will ideally cross all four communities. This sample will then be analyzed in terms of the membership, the organizational and external resources they rely on, how disputes are coordinated and resolved or not, and what outcomes are produced by these cultural processes.

RQ3: As a continuation of the data previously collected for the *Slow Editing Towards Equity* project, we will use the descriptions of equity included in the 2030 Wikimedia Strategic Direction document as means to define equity

as an analytical category for a qualitative content analysis. These characteristics of equity will be compared against five years (2020-2025) of governance mechanisms, policies and documentation that have been dedicated to creating equitable peer production communities across Wikipedia, Wikidata, Twitter/X, and Facebook. In this cross-platform analysis we will therefore map the landscape of peer production equity dedicated to the information commons.

Expected output

Academic Publications: The project will publish the results of the first research question in a high impact factor journal related to media history or media studies. In the second year, we will publish an additional two articles, each one dedicated to RQ2 and RQ3 in journals that specialize in cross-platform analyses. In accordance with the Research Grants requirements of adhering to the Wikimedia Foundation Open Access Policy, all publications will be published with open access licenses. The University of Amsterdam has agreements with a number of academic publishers that ensures open access costs are institutionally covered and therefore do not impact the proposed budget.

Datasets: In accordance with the Wikimedia Foundation Open Access Policy, all supportive datasets for the research will be made accessible via DOIs, have indefinite storage, and are licensed under CC0. For this purpose, the project will use the University of Amsterdam's Figshare service.

Events: Additionally, we anticipate submitting and participating in Wiki Workshop 2025 and Wiki Workshop 2026. Beyond these two conferences, the research will be presented at two other academic conferences. Due to the scheduling of the funding, we will be aiming to present at the Association of Internet Researchers' annual conference in 2026 and the International Communication Association's annual conference in 2027.

And finally, the University of Amsterdam hosts the Digital Methods Summer and Winter schools which are organized by Richard Rogers of the Digital Methods Initiative (DMI). The project will use these opportunities to coordinate week-long data sprints with other researchers to explore, develop, and execute unique digital methods strategies for the various components of the project.

Risks

The current risks of the research are tied to the problems of studying corporate platforms. It cannot be predicted how long "Community notes" will continue to exist or how changes to their structures and access will impact research. In these cases, it is important to consider that Twitter/X has been using Community Notes for a number of years, and there are a variety of sources to triangulate research on this topic if they become inaccessible. Additionally, Facebook's own initiative has just started and there is no current research on it to build from. From this angle, we will be one of the first studies to encounter any issues that emerge from studying it and will have to adapt to these conditions. Despite these issues, access to Wikimedian documents and processes can be assumed to remain accessible, and the research can focus more squarely on these aspects of the research.

Other risks involve ethical concerns of studying the user behaviours and content of potentially divisive topics. Our research will apply for ethics approval through the University of Amsterdam Research Management Services.

With their specific expertise as datastewards and social media ethics, we will develop ethical procedures for conducting this research.

Community impact plan

We are planning to engage with the community directly and anticipate following the advice currently being developed by Zent and Yarosh (2023) on their framework for ethically studying Wikimedia projects.

As per an ethics review, we will be notifying any communities whose pages we are studying for RQ2 and RQ3. We will also be making notifications on the various Village Pump (policy) pages and newsletters to gain advice, insight, and feedback from the community.

Evaluation

We believe that the success of this project should be measured in three ways.

1. The success of RQ1 will be in mapping the sets of vocabulary that are being associated with changes in the meaning of "community." This identification serves as "resources for hope," (Highmore, 2021, p. 3) that Wikimedians can reflect on as we notify them about these results in Village Pump spaces and newsletters.

2. For RQ2, partial success can be measured in the way that Wikimedia responds to our indications of what are the trajectories and sightlines of action that they can take to be leaders of "community notes" processes. A full success would be to see Facebook and X respond with changes to their "Community Notes" environments, although this will likely require a communication outreach program, one that might be realizable with a third year of funding.

3. RQ3 will be successful if there is an increase of renewed discussion and activity dedicated to bolstering Wikimedia equity policies in terms of content and conduct that is inspired by the conclusions and recommendations of the research.

Budget

The majority of the budget will be dedicated to creating a two-year postdoctoral position at the University of Amsterdam's Media Studies Department and additional conference travel for this individual. The position will be filled through an interview process.

Funding for the contributions of the PI (Steve Jankowski: $24,059.98 USD) and the collaborator (Richard Rogers: $20,574.34) and the overhead for their research ($25,016.40 USD) will be covered by the University of Amsterdam. As well, the University of Amsterdam will cover the costs of open access publications and the storage and access of datasets. As such, these aspects of the budget do not impact the proposed budget.

Link to full budget here: Research Fund Budget Proposal

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