Egalitarians at the Gate: One-Sided Gatekeeping Practices in Social Media

Brian Keegan and Darren Gergle
Center for Technology and Social Behavior
Northwestern University
2240 Campus Drive, Evanston, IL 60208 USA
{bkeegan, dgergle}@northwestern.edu

ABSTRACT

Although Wikipedia has increasingly attracted attention for its in-depth and timely coverage of breaking news stories, the social dynamics of how Wikipedia editors process breaking news items has not been systematically examined. Through a 3-month study of 161 deliberations over whether a news item should appear on Wikipedia's front page, we demonstrate that elite users fulfill a unique gatekeeping role that permits them to leverage their community position to block the promotion of inappropriate items. However, these elite users are unable to promote their supported news items more effectively than other types of editors. These findings suggest that "one-sided gatekeeping" may reflect a crucial stasis in social media where the community has to balance the experience of its elite users while encouraging contributions from non-elite users.

Author Keyword

Wikipedia, collaboration, decision-making, deliberation, gatekeeping, social computing, wiki

ACM Classification Keywords

H.5.3 [Information Interfaces and Presentation]: Group and Organization Interfaces – collaborative computing, computer-supported cooperative work, web-based interaction, K.4.3 [Computers and Society]: Organizational Impacts – Computer-supported collaborative work

INTRODUCTION

Wikipedia has increasingly attracted attention for its in-depth and timely coverage of breaking news stories such as the assassination of Benazir Bhutto, the 2008 U.S. presidential election results and the Virginia Tech massacre [5, 7]. These "In the News" (ITN) stories are prominently displayed on the front page of the Wikipedia site in an area dedicated to breaking news events.

The ITN section, however, is protected so that only administrators can directly edit it—a situation that seems

incongruous with the egalitarian ethos of Wikipedia. To ensure this administrative constraint does not grossly violate Wikipedia's core model of open participation, the breaking news topics considered for inclusion are nominated and discussed in a special community forum. This mix of open community deliberation with privileged control over web publication may either replicate traditional forms of information control or permit the emergence of new forms of egalitarian agency.

In this paper we report results that show how a new form of information control is emerging—what we term "one-sided gatekeeping"—that merges some properties of traditional gatekeeping with new forms of participatory information production. We discuss how these findings have important implications for understanding roles in decision-making processes within online communities and we suggest that these findings can be useful in the future design and development of social media.

BACKGROUND AND MOTIVATION

In a recent review, Barzilai-Nahon [2] proposes a theory of networked gatekeeping in which information access and flow between individuals and communities is regulated by people or processes in control of information production and dissemination. These "gatekeepers" can operate at formal, structural, or community levels. Gatekeeping occurs via numerous mechanisms such as the privileged selection, deletion, or withholding of information from a "gated" audience by the gatekeepers. However, traditional conceptions of power and information control are transformed in dynamic environments where users have alternative channels to produce and disseminate information without the sanction of gatekeepers.

Wikipedia's mission is to be an authoritative encyclopedia collaboratively written by "anyone" with a neutral point of view and verifiable statements [11]. The participatory nature of Wikipedia suggests that it presents "new opportunities for citizens to challenge elite control of political issues" [14]. If Wikipedia was a venue devoid of traditional gatekeepers, its audience and users would be able to actively participate in the control of information. However, open participation is not a panacea and recent literature has shown how users' stratified editing activity on Wikipedia leads to problematic behavior and coordination problems [9, 13]. In particular,

Wikipedia's deliberative decision-making highlights how online communities must balance weighing the views of experienced and expert users with norms emphasizing egalitarian consensus formation despite a constituency rife with inexperience, biases, and strong dissent [11, 12].

In spite of the ability to subvert traditional gatekeeping processes, if actors within a deliberative community are privileged with the power or social capital to make authoritative decisions, then the community is effectively substituting the old elite gatekeepers from traditional media with new elite gatekeepers in social media [3, 6]. In light of this, the existence of an administrative infrastructure to negotiate and arbitrate disputes on Wikipedia [4, 9] suggests that understanding the processes of information control remains important. Does Wikipedia's participatory model fundamentally alter control over the production and flow of information or does its reliance on deliberative processes present new opportunities to engage in gatekeeping? If the involvement of a large community undercuts aspiring traditional gatekeepers, is there an absence of gatekeeping altogether or does the adjudication of deliberations become a form of information control itself? Understanding how these social dynamics influence time-constrained discussions with discrete outcomes would extend previous research on open-ended discussions in online communities [1, 8, 10].

OUR APPROACH

To investigate these questions we make use of the "In the News" (ITN) template for the English-language Wikipedia. The ITN template is a section of the main page that features current event articles, such as elections, scientific discoveries, awards, and other news items with corresponding Wikipedia articles. There are four major criteria for promoting a proposed news item to the template: previous listing on the exhaustive Current Events portal, sufficient notability to warrant inclusion in an existing article or the creation of a new article, said article having been appropriately updated, and the international importance or interest of the item [11].

Typically, a Wikipedia editor nominates a news item by writing an extended headline that would be used if the nomination is promoted as well as a brief argument on why the headline should be promoted. The headline sentence summarizes the story and also provides context as well as linking to appropriate Wikipedia articles on the main and related topics. Any editor can provide feedback regarding the appropriateness of the story, the quality of the linked articles, the syntax of the nominated headline, and any photo that should accompany the headline on the template. The discussions generally range from a few hours to a day as editors stop by to review nominations, leave their opinion and justification, and respond to others' comments in an attempt to find a consensus on whether or not the nomination should be promoted to the main page.

Because of the prominence of the template, only administrators are allowed to edit the template. Although an administrator is not compelled to promote an article against his or her wishes or even in cases when there is a clear plurality or majority of editors supporting an article, unsuccessful nominations are simply not promoted rather than being explicitly rejected.

Based on our previous arguments, we expect that under a traditional gatekeeping paradigm a minority of editors should be responsible for most of the activity and should be better able to influence the outcomes of deliberations based on their prominence or social capital within the community. These elites should be able to have the topics they nominate and support promoted at a far higher rate than users that have lower levels of activity or make only a single contribution. Similarly, elites' opposition to a nominated topic should prevent its promotion. Elite editors should also exhibit a high degree of consensus and mutual support for contested articles.

Alternatively, if Wikipedia's egalitarian model pervades deliberations, editor activity should be evenly distributed and editors with lower or token activity levels should be able to nominate, support, and oppose articles with similar success as elite editors. Similarly, elite editors should not form monolithic, self-supporting voting blocs but instead contest other elite individuals and also align with non-elites.

METHOD

The "In the News" Candidate (ITN/C) archives for October, November, and December 2007 were analyzed and hand-coded by two independent coders. The original date that a news item was nominated as well as the person who nominated it was recorded for each of the nominations (*N*=161). The total activity (contributions indicating support or opposition), topic nominator, and promoter (if any) were tallied for each nominated topic. In cases when there was no explicit indication of support or opposition, these edits or neutral comments were excluded. In cases where editors changed their mind, their final decision was coded. Two independent human coders followed a dictionary of rules for scoring editors' contributions as support and opposition and inter-rater reliability was acceptable (κ=.71). Any disputes among the coders were resolved by a third-party judge. Separate from the ITN/C forum, data from this revision history of the ITN template was also coded to capture whether or not a candidate news article was actually promoted and who took action to promote it.

To facilitate the examination of our hypotheses regarding the role of elite editors in the promotion process, the editors were segmented into three archetypes: *elites* who made more than 10 contributions over the three-month sample time, *middle-class* editors who made between 2-10 contributions, and what we call *drive-by* editors who only made one support or oppose contribution and never returned in the time frame. News coverage in *The New York Times* (*NYT*) was used as a control for professional judgment of news value; we noted whether or not a similar topic as those discussed on the ITN/C forum appeared on the front page of the *NYT* within two days as well as whether or not the *NYT* covered the topic

at all. Given that approximately half of the decisions were unanimous (*N*=92), we also analyzed the 69 non-unanimous (i.e., contested) deliberations separately.

To model the relationship between the promotion decision and the characteristics of the editors, we used a multiple logistic regression model to measure the effect of individual archetype support/oppose activity and *NYT* coverage on article promotion. Because some editors were involved in more than one nomination, we used a form of regression that adjusts the standard errors to account for the correlation in the data. Post-estimation regression diagnostics indicated no multicollinearity or model specification errors.

RESULTS

In total, 121 unique editors (by login or IP address) discussed 161 nominations and cast 508 votes over the three month time-span investigated. Overall, 74% of all votes were in support and 26% were in opposition to the nominations. 102 of the nominations were promoted (63%), 6 nominations were unanimously opposed (3.7%), 86 were unanimously supported (53%), and 69 fell into an area we refer to as contested (43%). Of the 69 contested articles, 26 were promoted (38%).

The nomination and voting activity on ITN/C followed neither a uniform nor a normal distribution. The two most active editors (1.6% of all editors) comprised 21% of all support and oppose votes, the top two nominators suggested 27% of all nominations, and the top two promoters accounted for 57% of all news item promotions. This concentration of activity among a small group of editors suggests that deliberative and nomination activity is inequitably distributed in the group and therefore could be prone to centralized agenda-setting and decision-making.

To investigate this question further, we first examined the correlation of promotion decisions within our three editor archetypes to determine whether the archetypes tended to demonstrate consensus in their decisions. There was a significant negative correlation between elite support and elite opposition (r=-0.222, p<0.01) that was not replicated within other class types (r_{middle}=0.0322, n.s.; $r_{drive-by}$=0.233, p<0.01). This finding suggests that there is a high degree of consensus on the norms and precedents of news salience that prevents elites from challenging other elites' views, but this relationship exists only among elite editors.

To address whether outcomes of decision-making are centralized or decentralized among the archetypes, the logistic regression results reveal how the various editor archetypes are associated with article promotion. The results are summarized in Table 1, which presents the standardized beta coefficients[1] from two different models. The first model

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[1] The use of standardized beta coefficients allows the direct comparison of the influence of the various independent variables on the dependent variable (nomination promotion) within a model. In other words, a larger beta coefficient indicates a larger influence on being promoted.

examines the data across all of the nominated articles and includes both contested and uncontested promotion decisions. The second model is a restricted model that looks only at the subset of articles that were contested in order to assess whether the elites were performing a gatekeeping function and holding sway over contentious deliberations.

	Model 1: All Nominations		Model 2: Contested Nominations	
	Std. Beta	*t-value*	*Std. Beta*	*t-value*
Elite support	1.81**	3.19	2.49***	3.94
Middle support	1.83***	3.84	2.21*	2.12
Drive-by support	0.86	1.05	2.30**	2.71
Elite opposition	-3.02*	-2.42	-2.38*	-2.53
Middle oppose	-1.66	-1.49	-1.74*	-2.29
Drive-by oppose	0.73	1.27	1.00	1.49
NYT cover	1.60*	2.45	2.22**	2.58
NYT article	-.05	-0.11	-0.80	-1.01
Contested	0.75	0.48	-	-
N	161		69	
Pseudo-R²	0.441		0.425	

Table 1: Logistic regression analysis of nomination outcomes.
*** p< 0.001, ** p<0.01, * p<0.05

The results of this analysis revealed two primary effects of substantive interest to the analysis: the strong effect of elite opposition in preventing articles from being promoted and the similarity of all archetypes in promoting supported material. Elite editors' support, although significant, was no more influential of the nomination being promoted (β_{M1}=1.81, p<.01; β_{M2}=2.49, p<.001) than middle editors (β_{M1}=1.83, p<.001; β_{M2}=2.21, p<.05) in both models. Similarly, the elite editors' support was influential, but no more so than drive-by editors' support in the contested condition (β_{M2}=2.22, p<.01). However, the elite editors' opposition in both conditions is substantially more influential (β_{M1}=-3.02, p<.05; β_{M2}=-2.38, p<.05) than either middle-class editors (β_{M1}=-1.66, n.s.; β_{M2}=-1.74, p<.05) or drive-by editors' contributions (β_{M1}=0.73, n.s.; β_{M2}=1.00, n.s.) in preventing nominations from being promoted.

Finally, the extent to which this social media forum replicated professional editorial news judgment demonstrates that *NYT* front page coverage was nearly as strongly associated with promotion decisions as editor support activity (β_{M1}=1.60, p<.05; β_{M2}=2.22, p<.01) in both models.

DISCUSSION

This study set out to examine whether or not participatory new media like Wikipedia provide a platform for users to engage in gatekeeping and information control. Our analysis demonstrates elite editors' opposition is effective in blocking nominated topics but no more influential than other archetypes' viewpoints in supporting topics. Yet, the lack of correlation between and within each class' support and oppose activity implies that each archetype employs different heuristics about news value. Similarly, the lack of a coherent voting block, as well as the inability for elites to prevail more

effectively than other users in contested cases, also complicates the hypothesized dynamics of editor activity predicting the outcomes of consensus decision-making.

Taken together, our findings suggest an asymmetric gatekeeping process in which elites call upon their latent expertise and knowledge of past precedents to effectively block inappropriate nominations, but their position does not improve their supported nominations' chances for promotion. This "one-sided gatekeeping" may reflect a crucial stasis existing in participatory environments in which the community has to balance the expertise of its elite users while also constraining them in order to motivate contributions and activity from non-elite members.

The particular social or design mechanisms that constrain elites from implementing their agendas remain unclear. A possible mechanism implied by networked gatekeeping suggests deliberators, rather than replacing or challenging traditional gatekeepers, are instead emulating them. Thus, exogenous factors such as agenda setting on the part of professional organizations may effectively render elites in these online communities "big fish in small ponds" reproducing others' gatekeeping decisions.

LIMITATIONS AND FUTURE WORK

The present analysis makes no accommodation to the actual substance or content of the arguments made nor to the structure and flow of the discussions that ensue. Future work incorporating automated content analysis could attempt to measure individual arguments as well as the discussion thread as a whole for coherence and linguistic markers of psychological states. Similarly, an analysis of the structure of the discussion may extend findings from previous research on online conversations on discussion boards like Usenet and Slashdot to other online communities where discussions have discrete outcomes like open-source software development and policy-making. Taken together, these other proposed explanatory variables may have better predictive power than status alone.

In the future, it is important to keep in mind that the dynamics of gatekeeping and agenda-setting is of profound import to the online world as a medium for communication, deliberation, and collaboration. Because the authority and authenticity of user-generated sites popularly categorized as "Web 2.0" is predicated on democratic ideals of equality, accountability, transparency, and empiricism, it is critical to examine whether the utopian rhetoric of these new technologies merely belies a changing of the gatekeeping guard or a true shift in how information is produced and disseminated.

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