Rationale Sharing in Large-Scale Online Deliberations

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Abstract
In online deliberations, shared rationales can contribute to raising awareness of others' experiences and domain knowledge. We present preliminary findings on the role of rationale sharing in large-scale online deliberation, as represented by Wikipedia's Articles for Deletion process. Participants were surveyed on their experiences in this and other deliberation environments. We found that they supported the use of rationales as key to the consensus-forming process, considering them in their own decision-making, and that certain types of rationales were more convincing than others. Some concerns regarding online discussions were probed. We conclude with a means to potentially enhance discussion using language techniques.
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1   Background

Large-scale online deliberation has become an increasingly common phenomenon (Coleman & Gøtze, 2002; Forte & Bruckman, 2008; Xiao & Askin, 2014). Here we present preliminary results of a questionnaire study on the role of rationale sharing in one such case, Wikipedia's Article for Deletion (AfD) process. Wikipedia's AfD process relies on a system of votes combined with rationales for deciding whether articles are to be kept or deleted. In the final decision, the article under review is kept or deleted based not simply on the votes, but on an analysis of the strength of provided rationales.

There have been several studies of AfD discussions (e.g., Taraborelli & Ciampaglia, 2010; Joyce, Pike, & Butler, 2013; Xiao & Askin, 2014). However, the influences of shared rationales in the decision making process have not been studied sufficiently. Beyond Wikipedia, previous studies have shown the effects of shared rationales in small group activities (Xiao, 2013) and large-scale idea generation activities (Xiao, 2014). Addressing this research gap, we surveyed the Wikipedia community through an online anonymous questionnaire to understand the perceived influences of shared rationales in AfD discussions.

2   Data Collection and Data Size

To recruit participants, an email invitation was sent to four Wikipedia-related mailing lists: wiki-research-l, Wikimedia-l, wikiEN-l, and Wikipedia-l. Subscriber numbers are not publicly available for these lists. As indicated in the information letter, we stated that we would donate CAD$2 to the Wikimedia Foundation for each completed questionnaire. Over one month, we received 62 responses. 19 either did not answer any question or only answered the first question ("Have you participated in Wikipedia's Articles for Deletion discussions?"), while 2 respondents had never participated in AfD discussions. Therefore we focused on analyzing the remaining 41 responses.

3   Preliminary Findings

3.1   Respondents' Relevant Background

Six have participated in AfD discussions "five to ten times", four "ten to twenty times", and the rest (73%) "more than twenty times". 15 were Wikipedia administrators at the time of the questionnaire, 2 have previously been administrators, and 24 have never been administrators. Most respondents have been a Wikipedia editor for over 5 years (59%), while only one had less than a year of experience. 8 of 41 respondents were female, 28 were male, and 5 chose "prefer not to say". The Wikipedia "gender gap" is well established in the literature (Antin, Yee, Cheshire, & Nov, 2011; Lam et al, 2011), and our questionnaire data support this phenomenon.

3.2   Potential Concern of Sharing Rationales in an Online Deliberation

Like any other content in Wikipedia, rationales in AfD discussions can technically be changed or removed by others. When asked whether they were concerned that somebody would change or remove their

rationale, 40 of the 41 respondents answered "No" but with different reasons. Most explained that "No, this is not allowed in Wikipedia" (23 responses), 15 acknowledged that "No, we understand that rationales are a personal opinion and respect their expression", and only 1 respondent chose "No, my rationales are always correct". This implies that rationale sharing in this open environment is a norm that is well respected by the community. Note though 1 respondent answered "Yes" to this question but did not give an explanation. Also 1 respondent chose not to answer this question and noted that he/she has changed or removed someone else's rationale before but did not explain. 3 more respondents noted that they have changed or removed others' rationales in the past: the vote was a duplicate (1 response), or represented "grossly offensive" comments or other violations of site policies (2 responses).

3.3   Pros and Cons of Sharing Rationales

35 of the 41 respondents agreed that in AfD discussions "editors try to persuade others using rationales". Other influences of the shared rationales are acknowledged as well, that is, "people understand other votes better by knowing rationales" (29 responses), "sharing rationales helps control of the quality of the discussion outcome" (25 responses), and "the shared rationales help educate participants about Wikipedia's policies" (24 respondents). These benefits about sharing the rationales in online deliberation environments were also acknowledged in a previous study in which members of small student groups shared rationales in their course learning activities (Xiao, 2012). A few respondents also noted the downsides of sharing rationales – 4 respondents felt that "sharing rationales makes it more challenging to propose different opinions", and 5 commented that the rationales are not useful. These 5 respondents explained that sometimes "lengthy debates are a waste of time" because of misuse of policy or processes. Interestingly, in Xiao's study (2012), similar negative aspects of rationale sharing in a small group were noted. The respondents' answers to the question "do you read the other rationales in the discussion before you participate?" also validated their choices of these statements about the rationales to some extent – most respondents read other rationales in the AfD discussions before they participated. 24 respondents' "Always" did so, 15 answered "I read every rationale in the discussion", and only 2 respondents said "a few times". Also, all 15 respondents explained why they "read every rationale in the discussion". Reasons provided include a desire not to repeat what has been said, or conversely to respond to what has been said already; a desire to understand all viewpoints and appreciate the merit of their arguments; a need to confirm their own opinions or see if "someone may have caught something I missed"; or a need to better understand the topic area.

3.4   Members' Rationales and Their Background Information

In Wikipedia, each member has a personal user page to provide background information about themselves and a talk page for direct communication with them. This design is common in online communities. To probe the connection between the members' shared rationales in the community discussion and their background, we asked whether and why the respondents, while in an AfD discussion, would check the user or talk pages of participants. We provided several situations and they could choose all that apply. 12 responses noted that they checked backgrounds because they were impressed by the rationales, 16 responses had "no special reason, I was just curious", and 2 said "I liked their user names". However, it seems that often a member's background information would be checked when the other members started to question his/her rationales, either because they felt the rationales "were inappropriate" (17 respondents) or they wanted to understand the rationales better and believed that background information would help (6 respondents). There are also other reasons, e.g., to see whether the user was a "sockpuppet" (a second account for the same individual, which is not permitted), or to see whether they had a potential bias or conflict of interest.

3.5   Shared Rationales and Final Decision Making

The person who closes an AfD discussion by policy should consider the rationales in making the final decision, as opposed to counting votes. To better understand the actual role of shared rationales in the closing, we asked several questions about this process. 4 of the 41 respondents did not remember whether or not they have closed an AfD discussion before, and 18 respondents have not done so. Table 1 shows the remaining 19 respondents' experiences on closing the discussions, and Table 2 shows whether or not they read the rationales before closing. These results suggest that majority of these respondents had extensive experiences in closing AfD discussions and used the rationales to help make final decisions. Also, majority of them noted that the identity of the editor affected how they interpret the editor's rationale (11 responses) with 5 said "No, I give all rationales equal weight regardless of the editor".

Number of respondents	Number of times closing an AfD discussion
4	3-6 times
1	6-10 times
12	More than 10 times
2	Did not respond

Table 1. Responses on the number of times one closed an AfD discussion

Number of respondents	Do you read the rationales in the discussion before making the final decision?
15	Yes and I mainly used the rationales as the basis for my decision
1	Yes, I read the rationales but my decisions are still based on the majority of the votes
3	Did not respond

Table 2. Responses on whether one reads the rationales before making the final decision

When asked "in general, which three types of rationales were most influential in your judgment", 1 respondent felt that influential rationales can vary significantly from one to another. Nonetheless, he/she cited rationales about the article's notability as the most influential. In fact, all but 1 respondent chose this type. The second and third most influential types of rationales, based on the number of respondents who chose them, are rationales that cite Wikipedia's policies (15 responses) and those from established Wikipedia editors (7 responses). These responses suggest a healthy online deliberation environment in the Wikipedia AfD discussions – Wikipedia's policies (e.g., notability and credibility) are highly regarded, and editors' experiences and knowledge are well respected. This finding is consistent with that of a previous study that used a content analysis approach to study shared rationales (Xiao & Askin, 2014). When asked whether they agreed that "by reading the rationales, I can tell who is most knowledgeable about evaluating Wikipedia articles", 11 of 17 respondents agreed or strongly agreed, 5 remained neutral, and 1 strongly disagreed. This indicates a connection between rationale sharing and knowledge awareness in this forum. Such a connection was also acknowledged in Xiao's study (2013) of small-group rationale sharing.

4   Discussion and Conclusion

In online deliberation environments, awareness of others' knowledge is important in the decision process yet can be difficult to achieve. This study shows that in online deliberations, shared rationales can contribute to raising members' awareness of others' experiences and domain knowledge. This implies that online deliberations could be enhanced through good design for rationale sharing. We also probed possible strategies of organizing the rationales in order to make the final reading process more efficient than the current organization in the Wikipedia AfD pages. To our surprise, the strategies we suggested were not considered very useful by respondents, e.g., providing a policy repository to show all policies that have appeared in discussions (1 response), grouping rationales according to their type (e.g., notability) (2 responses), according to their votes (4 responses), or according to the users and their levels of editing experience (1 response). One respondent specifically commented on the idea of grouping the rationales – "There's no grouping. Read the page and don't be lazy." and another said "I think the existing process is as good as it's going to get". This implies that although there have been recent attempts to use computational linguistic techniques to help make the rationale reading process more efficient in online deliberation (Mao, Xiao, & Mercer, 2014), such an approach might not be that beneficial to Wikipedia's AfD process. On the other hand, we noticed that some respondents read the rationales in other AfD discussions when deciding on the current article (9 of the 17 respondents), mainly for the purpose of "looking for similar rationales to the ones I encountered in the current article's discussion") (6 of the 9 respondents). This indicates that language techniques that help improve rationale reuse processes have the potential to benefit members.

5   References

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