The Role of Face-To-Face Ties in Voting Behaviour in Requests for Adminship

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Abstract

Wikipedia features administrators who have special duties and privileges. These administrators are democratically elected in requests for adminship processes. This study explores the role of offline interactions in shaping election participation within these processes. Using fixed effects models and observational data from the German-language Wikipedia spanning twenty years of offline and online actions, this study finds significant effects of offline meeting participation on editors' voting behaviour.

Keywords: requests for adminship, Wikipedia, Germany, voting, offline meetings

Introduction

Voting serves as a fundamental pillar of democratic institutions and societies, allowing people to voice their opinions. From large-scale anonymous voting processes to smaller public assemblies, voting takes place in various forms. Online communities often also feature online polls and elections to negotiate and decide on new rules, as well as new platform moderators or administrators. Wikipedia is no exception to this: Wikipedia features so-called Requests for Adminship (RfAs) where registered users express their vote in a public space to decide whether nominated others should be granted special rights.

Previous research on these processes has largely focused on predictive modelling (see e.g. Burke and Kraut, 2008; Leskovec et al., 2010). However, beyond prediction, understanding the factors shaping citizens' voting behaviour is a classical task of political science, dating back to landmark studies like Lazarsfeld et al. (1944). Social networks have been shown to play a significant role in explaining voting behaviour, as confirmed by ongoing research efforts (Campbell, 2013).

This study examines the influence of social networks on voting behaviour in RfAs. While Wikipedia is primarily an online encyclopedia, offline interactions, such as local meetups, also play an important role. These offline meetings, often overlooked in research, enrich online relationships and fulfil a user's social needs (Richter, 2020:132-136). This aspect is crucial in the context of voting, as these meetups are rather selective in their attendees (Schwitter, 2022) which might skew the democratic balance.

This study will focus on the two following questions within the context of the German-language Wikipedia: *1) To what extent do offline social ties of Wikipedians affect whether they vote in a RfA?* and *2) To what extent do offline social ties of Wikipedians affect whether they vote supportively in a RfA?*

Methods

This study makes use of different strands of publicly available data from the German-language version of Wikipedia to study whether offline networks affect whether and how editors vote in RfA. The research process involved web-scraping election information from archived RfA pages, totalling 1213 elections which took place between 2001 and March 2020 (for the data, see Schwitter, 2023a). These RfAs had remained active for two weeks during which eligible users cast their votes in the support, oppose, and neutral sections of the page. The first election recorded took place on 9 April 2003, without any recorded voters, and the last one ended on 16 March 2020 after 257 users voted. Both elections led to a new administrator. The number of voters per election varies between 0 (in the early days of Wikipedia) to 533 with a mean of 168.35 (standard deviation 110.91).

To make meaningful comparisons, the pool of potential voters must be known; they are assumed to consist of everyone eligible. Using the Wikipedia data dump and thus tracing the activity of users across time, a list of all eligible users was created for each RfA (on the basis of tenure and activity). Bots and users that were blocked at the time of the RfA for at least two weeks were excluded (information on this was retrieved through Wikipedia logbooks). Sock puppets are not flagged, and it is thus not possible to identify them from the list of eligible users.

To address voting participation in meetings, all eligible users were observed at all RfAs they were eligible at; this led to 6'791'107 observations belonging to 30'004 different users who were eligible to vote in at least one of the 1191 elections (22 RfAs were excluded as they seemingly did not feature an eligible candidate). While some users were only eligible to vote in one of these RfAs, others were eligible for all 1191

RfAs taking place (median 131, mean 226.30, standard deviation 232.90). I observe 200'852 instances in which users used their right to vote. To answer the second research question, the data includes all users who have voted in RfAs; i.e. the 200'852 instances in which users voted. Like most previous research, I exclude users who have cast a neutral vote. The data then consists of 183'263 instances in which users voted (with 135'230 supporting votes). These votes refer to 5022 different users who voted; some once, others up to 807 times (median 7, mean 36.49, standard deviation 74.53).

To capture the offline network, data from Schwitter (2023b) on meetups organised within the German-language Wikipedia between 2001 and 2020 was used, covering 4418 gatherings.

To isolate the effect of the offline network, several control variables are incorporated: I control for different online network measures (focusing on collaboration and communication ties), total level of activity up to the time of the election as well as recent activity before the election, tenure, reverting behaviour, and year of RfA.

To analyse the data, the regression framework will be extended to include network statistics as covariates. Specifically, I will include whether direct ties exist between voter and candidate and different measures of centrality (degree, Eigenvector centrality). I will focus on offline activity in the previous twelve months and online activities in the previous two months to calculate network measures.

Fixed effects (FE) linear probability models (LPMs) with robust standard errors will be employed. FE models concentrate on within-cluster differences, thus limiting biases in estimating causal effects (nevertheless, effects discussed do not measure causal relationships).

Results

I find that personal voting decisions are influenced by a user's ties to the candidate and to other voters: An eligible user is much more likely to vote if they have met the candidate, attended more meetings, have met a larger proportion of other voters and are more central in the offline network than the candidate (see Figure 1).

Offline ties also affect the direction of votes: Eligible users who have met a higher proportion of supportive voters, a smaller proportion of opposing voters and who are more central in the offline network than the candidate are more likely to vote supportively (see Figure 2). Knowing an additional percentage point of pro-voters in an election leads to a 1.5 percentage point increase in the probability to also vote supportively and similarly, knowing an additional percentage point of anti-voters in an election leads to a 1.8 percentage point decrease in the probability to vote supportively (see Figure 3 for the predicted probabilities).

Discussion/Conclusions

Wikipedia is based on a strongly democratic foundation which fosters inclusivity and diverse perspectives. However, the influence of offline meetings introduces a variable that has the capacity to skew this democratic balance. Put differently, the study also highlights the importance of personal contacts and the significance of fostering robust networks and engagement strategies in RfAs. The findings are in line with a large body of literature in political science and extend these findings to the digital realm.

In a next step, it is further important to ask why the offline network matters and to improve our understanding of the causal relationships behind the associations uncovered.

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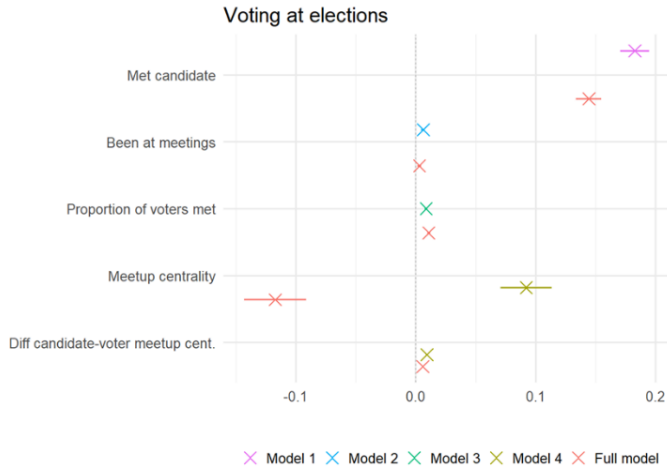
Figure 1: Modelling voting behaviour. Models 1-4 refer to models which include all control variables, but only the displayed predictors of the offline network. The full model includes all offline network predictors simultaneously.
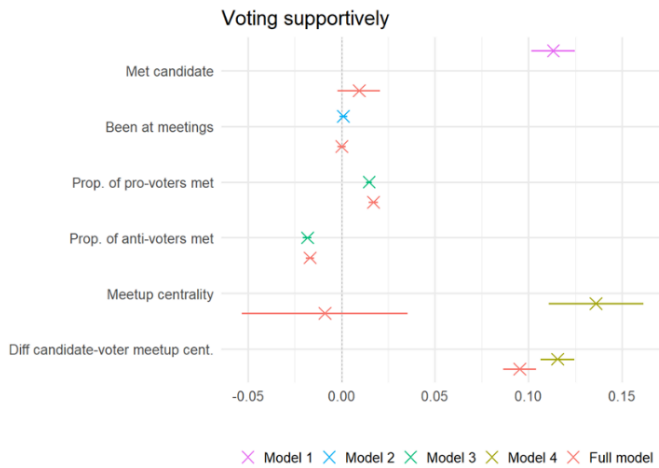

Figure 2. Modelling supportive votes. Models 1-4 refer to models which include all control variables, but only the displayed predictors of the offline network. The full model includes all offline network predictors simultaneously.
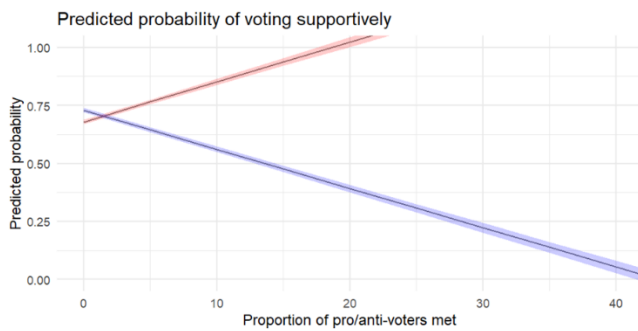

Figure 3: Predicted probabilities of voting supportively (based on full model).