Studying the Role of Elites in
U.S. Political Twitter Debates

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ABSTRACT

Because of their ever-growing importance, elite actors from the political sphere and news media have integrated social network sites and especially Twitter into their communication strategies. However, the extent of these adaptation processes is not yet fully understood. This article presents lists of U.S. actors from politics, news media and government. As an exploratory analysis, the influence of elites in U.S. political Twitter debates is investigated by applying basic measures of Twitter influence to two test datasets.

Categories and Subject Descriptors

• **Applied Computing** • **Law, social and behavioral sciences** • **Sociology.**

Keywords

online political communication; Twitter; politics; news media; government

1. INTRODUCTION

Oftentimes it is assumed that the power and agenda-setting role of established political and media elites are severely weakened on the less hierarchical social web that promotes a collaborative production of content [8]. Yet, elites still have a relative advantage on the web in terms of political and economic resources, thus profiting from economies of scale in the production and dissemination of web contents [4].

Previous studies analyzed the influence of elites in political Twitter debates ex post, based on the most retweeted messages or centrality metrics [e.g. 2, 3, 7]. However, such inductive procedures miss important communication in the long tail of elites on Twitter that can only be captured by defining actors ex ante. The contribution of this article is twofold: First, it presents lists of twitter handles of actors from the U.S. government, news media and politics [9] and compares these elites in terms of their follower count, which is the most basic metric of importance. Second, the actor lists are applied to the political Twitter debates on net neutrality and the State of the Union Address 2015 to estimate the influence of elites in these discussions. The article concentrates on the U.S., since Twitter use of political actors is most advanced in this illustrative case.

2. THEORY

2.1 Conceptualization

The present study concentrates on political and news media actors who traditionally occupy the most powerful positions in representative democracy. The definition of actor groups is the most critical question when estimating the impact of elites on Twitter. As elites from political parties, I defined the sitting members of U.S. congress, incumbent governors, national party accounts and presidential candidates. In light of the constitutional separation of powers in the U.S., the group of government actors is classified separately and is comprised of the President and his social media accounts, the government departments as well as their respective secretaries.

The definition of news media actors is the most intricate conceptual challenge, since the production and dissemination of news is becoming increasingly fuzzy on the social web. Clay Shirky, who is an often-cited source with regard to collaborative news production, proposed definitional boundaries between "a mass amateurization" of news production on the social web and a "professional class" that "implies specialized functions, minimum tests for competence, and a minority of members" [8]. The practical application of this definition here therefore includes the various forms of professionalized online media like Mashable or VOX that can be regarded as "online social elites" [4].

2.2 Expectations

Studies have shown that elites still have considerable influence in political debates on Twitter [3, 7]. However, it became apparent that their influence varies according to different metrics [2, 3, 6, 7]. First, a large number of followers does not guarantee an influential role in topic specific Twitter debates [2]. Second, @-mentions display the perceived importance of actors in debates without necessarily signaling an intention of endorsement, whereas retweets can be regarded as the best available predictor of ideological homophily [6]. We should be able to observe similar patterns when differentiating these metrics in the political sphere.

The structural characteristics of debates and the specific roles of political actors should also be reflected online. Actors who are involved in the policies or political events to which Twitter debates relate should be referenced most often, since expectations are directed towards them, also from users who do not agree with the political positions taken by elites. From a reversed logic, retweet shares to some extent also reflect elites' own level of activity and the importance of the medium Twitter as perceived by them. Previous research indicates that especially the U.S. executive tries to achieve political goals by influencing public opinion [5]. Since the legislative competencies of the Presidency are limited, its actors aim to set the political agenda via direct communication and "going public" strategies.

3. METHODOLOGY

3.1 Operationalization of actor lists

I extracted publicly available Twitter lists from @gov, @cspan and a collection of influential news media accounts from Daniel Romero[1] as a starting point for generating the actor lists [9]. These were significantly cleaned and expanded by hand in order to cover every member of U.S. congress with a Twitter account, all governors, party accounts as well as accounts belonging to the U.S. government and its officials. To add additional data of lawmakers, the politics list was matched with a database of GovTrack. To restrict the category news media to elites, only media accounts officially verified by Twitter were included, while individual journalists were excluded.[2]

3.2 Measures of influence on Twitter

The estimation of actor importance and the identification of influential users are recurring topics in web science [1, 2]. For the exploratory analysis, I use follower counts as the most basic measure of influence. The subsequent empirical application of the actor lists relies on @-mentions and retweets.

3.3 Datasets

In order to generate empirical test datasets, I extracted tweets containing the main debate hashtags on two political topics. #SOTU was the main hashtag accompanying Barack Obama's State of the Union Address in front of U.S. Congress in January 2015. #NetNeutrality refers to a policy discussion on the regulation of data traffic on the internet. The debates differ with regard to the time period covered and the tweet volume generated.

Table 1. Test datasets

Topic	Period	Number of tweets	Number of users
#SOTU	1/20/2015–1/21/2015	1,271,474	413,832
#NetNeutrality	1/14/2015–3/6/2015	503,839	174,371

As the data mining was based on Twitter hashtags (Table 1), issue-related tweets without these particular hashtags were not captured. This could be problematic if the use of hashtags varies systematically across actor groups. These limitations are discussed in the empirical section.

4. RESULTS AND DISCUSSION

4.1 Follower counts of elites

Figure 1 is a log-log plot displaying the number of followers plotted by the rank of an actor in its respective group.[3] In all three groups, the follower distribution is heavily skewed. The decay of the tails resembles a linear pattern until the curve drops steeply at the lower ends of the distribution. The unequal distribution of attention is a typical phenomenon on the web in general and especially in the political sphere, as Hindman, among others, showed in his study of power laws in the political blogosphere [4].
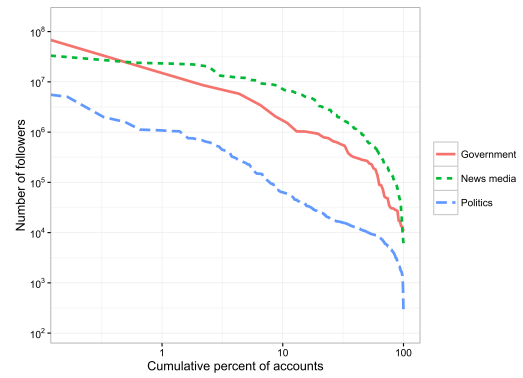

Figure 1. Follower distributions by elite actor group

This finding needs to be taken into account when assessing the role of elites, especially when studying the diffusion of political information. In terms of aggregate follower counts, especially the government and news media should be able to distribute their contents to a significant portion of the U.S. political Twitter sphere, either first-hand or via two-step-flow processes. But, as the next section highlights, this potential depends on their own propensity to utilize their potential outreach on Twitter [2].

4.2 Case studies: #SOTU and #NetNeutrality

The present chapter applies the actor lists to the two test datasets. Figure 2 shows the influence of elite actors according to the two most important conversation practices on Twitter. Displayed is the share of elites in the aggregate number of retweets and @-mentions. The most evident pattern is the influential role of the government with a mention share of 29% in #SOTU and 56% in #NetNeutrality. In both debates, government actors were the central political figures. President Obama as the speaker attracted the highest share of attention during the #SOTU, whereas in the #NetNeutrality debate the FCC and its chairman Tom Wheeler were the accounts to which most users referred.[4] The high number of mentions reflects their perceived importance in the two debates. However, this does not equal an endorsement. Government actors get retweeted, which is a stronger signal of political homophily [6], with a lower frequency than @-mentioned.

Deviations from the preceding analysis that focused on follower counts are evident when looking at the relatively sparse attention share of news media and actors from politics. When inspecting tweet contents and URLs, it becomes apparent that this is mostly due to their own restrained tweeting patterns. The main event hashtags were rarely used by these groups, although they regularly commented on the events. Further qualitative research should investigate the social media strategies of those in charge of the Twitter accounts in America's newsrooms and politics.

Figure 3 amplifies the skewed distribution of attention on the web by showing the retweet per tweet ratios of actor groups in the two debates. The relative outreach that elites generated per tweet is considerable when compared to non-elite users. Non-elite users had a retweet outreach per tweet below zero, even though this category also includes a multitude of influential accounts like NGOs. This urgently points towards the need to further disaggregate the residual category of others. By adding more lists, political Twitter debates can be analyzed in even more detail.

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[1] Available online: http://memeburn.com/2010/09/the-100-most-influential-news-media-twitter-accounts.

[2] The updated version of the group news media also includes influential individual journalists [9]. The category politics features information on political offices and party affiliations.

[3] The ranks of actors are standardized by the diverging lengths of actor lists and thus reported as cumulative percent of accounts.

[4] The FCC is a regulatory agency. Its five commissioners are appointed by the President.
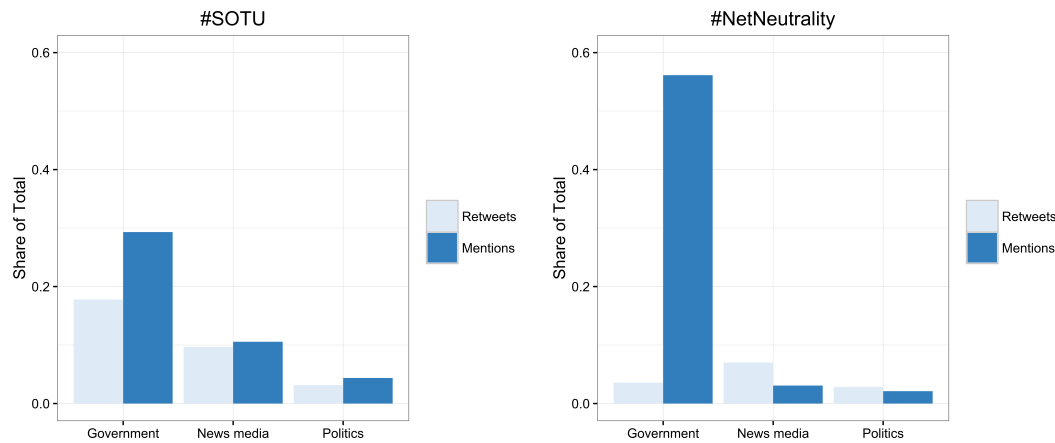
Figure 2. Share of Twitter conversation practices by elite actor group

The varying results for government actors in the #NetNeutrality debate underline the diverging political and social meanings of Twitter metrics. The total share of retweets originating from government accounts is relatively marginal (Figure 2). However, when the government used the hashtag #NetNeutrality, it generated 492 retweets per tweet (Figure 3). When central figures in political events intensify their efforts to influence hashtag communities, they have success in doing so.

Figure 3 confirms that the most influential actors in the two debates were affiliated with the government, while tweets from news media and politics diffused less widely on the web. This finding depicts "going public" strategies by the government [5], but is also a result of the political characteristics of the two case studies. Future studies should investigate these exploratory findings by including structurally heterogeneous Twitter debates.

5. CONCLUSION

This paper presented lists of elite actors enriched with additional information that enable researchers to investigate a broad range of research questions related to the activity of U.S. elites and non-elites in online political communication, such as: Are politicians from the Democratic Party more successful in framing political debates on Twitter than Republicans? What can we learn about the dynamics of communication between elites and between elites and their audience when looking at conversation patterns?

In an empirical application of the actor lists, government and news media were most influential according to their number of followers and also when assessing retweets and @-mentions. Yet, within these groups and throughout the study, the skewed distribution of influence on the political web became apparent.
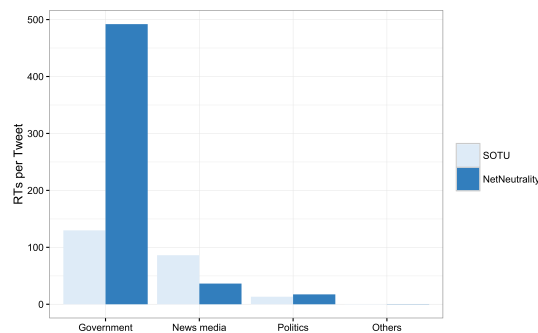

Figure 3. Retweet per tweet ratios by user groups

Party politicians in particular played a minor part in all of the analyses. Their role needs to be contextualized by analyzing Twitter communication on additional political topics.

Methodologically, the analysis remained at a basic level of analysis by focusing on distributions of Twitter metrics. There is a great potential to further elaborate on these preliminary results by applying the toolkit of network science. Subsequent applications of the actor lists should include topically relevant hashtag populations and keywords as well as information diffusion via URLs [1]. Lastly, the typology could be expanded by widening the conceptualizations of the existing groups and by classifying politically influential actors like celebrities or NGOs.

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