Reshuffling Political Influencers on Twitter

Keywords: political influencers, political information, dynamics, media, Twitter

Extended Abstract

Influence has been a key topic in the fields of sociology, communication, and political science, because it explains the spread and adoption of ideas, innovations, and trends in society (Rogers, 1962; Watts & Dodds, 2007). While the rise of social media such as Twitter has enabled some individuals and agents to disproportionately impact the spread of information online (Bakshy et al., 2011), little attention has been paid to the role of political influencers in online political discussion. This study examines the dynamics of political influencers on social media, with particular attention to the interaction between news outlets and individual users.

There has no systematic evaluation of political influencers on social media, as multiple definitions and metrics are used. Early studies emphasized node properties (e.g., followers), whilst others considered conversation engagement (e.g., mention) (Cha et al., 2010), whereas others highlight the multiple facets of influence suggesting that social media users can exert influence in different ways (Dubois & Gaffney, 2014). In this study, we argue that political influencers should be examined from a dynamic perspective. As such, influence refers to the degree to which a social media account could facilitate information flows in political discussion. While some influencers start a conversation by offering original content (i.e., initiators), others focus on distributing information of others (i.e., amplifiers). Initiators start political conversations by posting a large number of content, whereas amplifiers shape online conversations primarily by enlarging the attention paid to a given account or message as well as diffusing information in online networks. However, a research gap in previous studies is that most studies relied on single event and thus it is unclear how influence changes over time. Thus, the goal of this study is to examine to what extent political influencers maintain their influence in different events: *How do political influencers vary across political events (RQ1)? How do information sources of political influencers vary across political events (RQ2)?*

This study focuses on the discussion of two China's political events on Twitter: the 2017 and 2022 National Congress. While Twitter is blocked in mainland China, it offers an alternative space for discussing Chinese politics. Individual users are using Twitter to discuss authoritarian politics, and state-supported media are also increasingly employing Twitter to improve soft power and compete with Western mainstream media. To collect the data, we compiled a list of keywords and hashtags for each event and then used Twitter APIs to gather English tweets containing at least one of these keywords and/or hashtags. To reduce noise, keywords focused on either the event (e.g., #19PartyCongress) or key actors (e.g., Xi Jinping), and constrained the data collection during the time frame of the events. The final data contain 609,239 tweets ($N_{2017} = 218,834$, $N_{2022} = 390,405$).

We operationalized influence using the number of retweets that a given account obtained and then distinguished influential users into two categories based on their behaviors: those who offered original tweets were *initiators*, whereas accounts that retweeted others' content were categorized as *amplifiers*. Among all the initiators and amplifiers defined, we selected the top 1% to visualize their key attributes and the top 30% to calculate the Spearman Rank Correlation

across two events for addressing RQ1. Next, we examined the sources of *amplifiers* to explore RQ2.

Table 1 suggests that most initiators are individual users, whilst media outlets also play roles in providing political information (RQ1). Importantly, individuals do not maintain their influence over time, as only 4.35% of 2017 influencers are still the top influencers in 2022. By contrast, one third of media accounts still attract user attention in 2022 (Table 1). Moreover, we find similar patterns for amplifiers: individual users are the dominant players retweeting political content during the two events and only 2.22% of them can maintain the influence across events. We further compare the coherent influencers using Spearman Rank Correlation test. The results of pairwise comparisons show weak to moderate associations, suggesting that influential users are rarely to be initiators or amplifiers across events.

To address RQ2, we first visualize the retweeting networks of amplifiers in Figure 1. The two network graphs illustrate that the role of media outlets has dramatically declined in 2022, as amplifiers are less likely to retweet content provided by media accounts. In Figure 2 and Figure 3, we further compare the three types of sources. The findings suggest that individual accounts have become the main sources for amplifiers.

To conclude, this study examines the dynamics of political influencers on Twitter by focusing on two Chinese political events. The findings demonstrate that political influencers are largely reshuffled, as their impact may fade over time. The study provides novel ways to understand the contextual nuances of political influencers.

References

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Table 1. Coherent initiators and amplifiers (top 30% users)

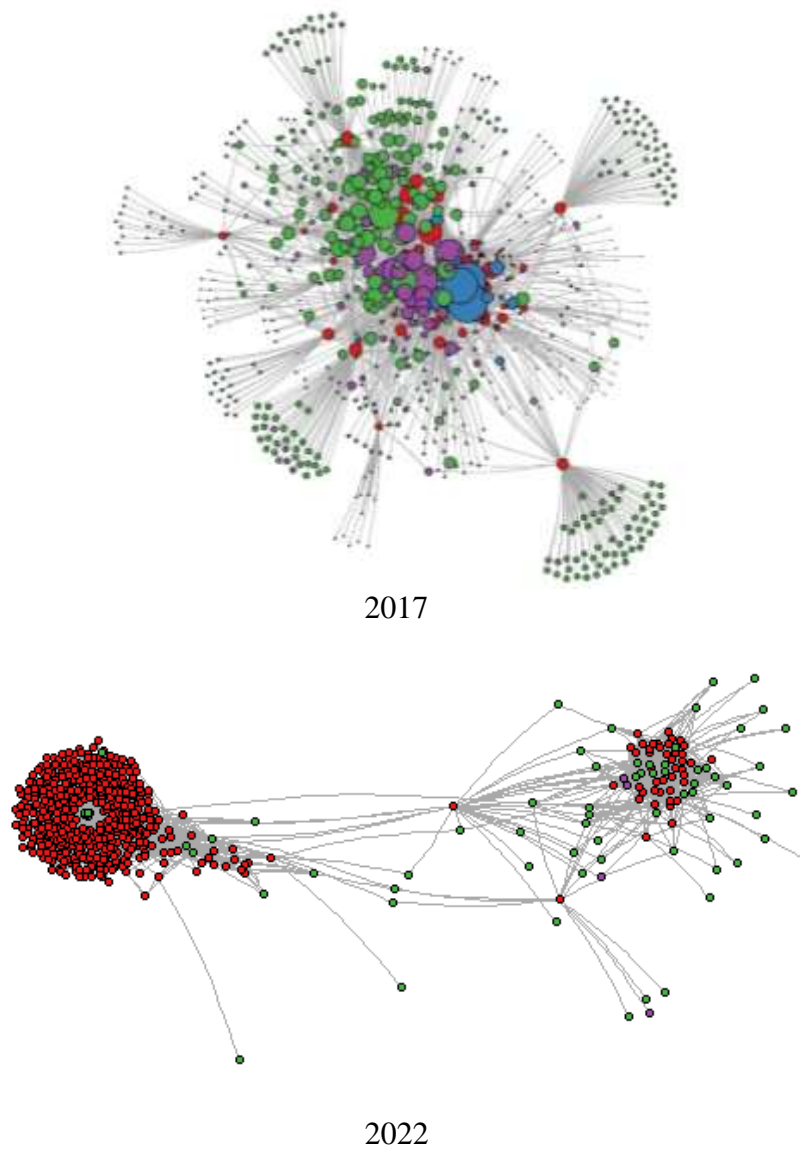| Accounts	Number initiators in 2017	Number initiators in 2022	Number of duplicates	Number of amplifiers in 2017	Number of amplifiers in 2022	Number of duplicates
Chinese Media	12	5	4 (33.33%)	6	2	1 (16.67%)
Western Media	6	2	2 (33.33%)	2	1	1 (50%)
Individuals	1,057	1,157	46 (4.35%)	9,007	15,097	200 (2.22%)

2017

2022

Figure 1. The retweeting networks between sources and amplifiers

Note: nodes represent Twitter accounts and edges represent retweeting. Red nodes = amplifiers, blue nodes = China's media, purple nodes = overseas media, green nodes = non-media accounts.
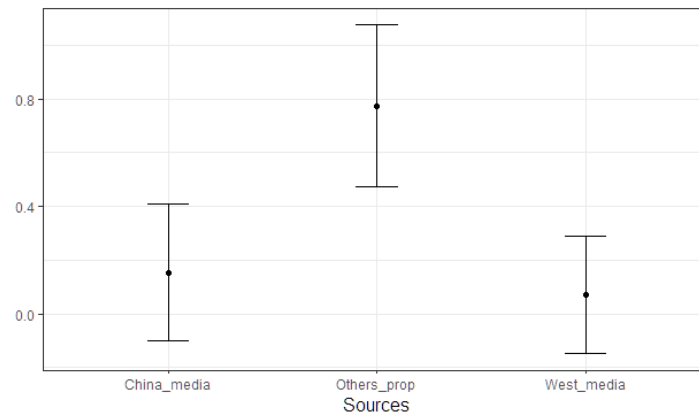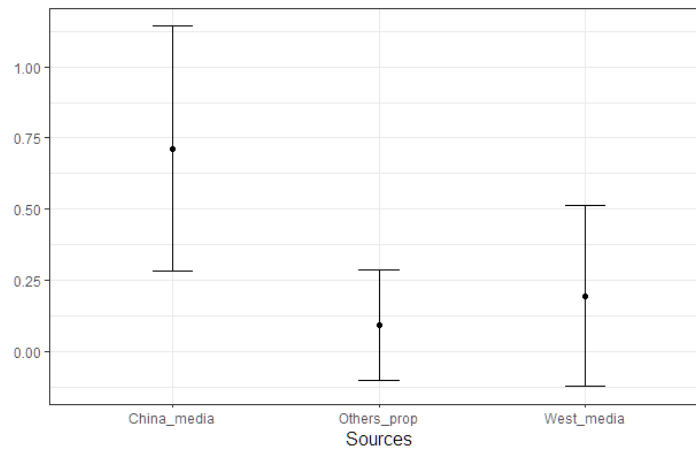
Figure 2. Retweeting sources in 2017

Figure 3. Retweeting sources in 2022