MORE LIKES MORE VOTES?:

THE POLITICAL USE OF SOCIAL MEDIA IN EAST ASIA

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Abstract

This thesis focuses on East Asia, which constitutes eight countries and regions: Mainland China, Hong Kong, Japan, Macau, Mongolia, North Korea, South Korea and Taiwan. This thesis contributes to the study of cyberpolitics and computational social science in this populous and economically prosperous region where the widespread adoption of social media at all levels of society is one of the most profound changes in the new millennium. As the most developed non-Western region in the world, East Asia shows unique characteristics in many fields, including social media. Social media has played just as great a role in East Asian politics as it has in the Middle East, North Africa and the United States. Most obviously, with general political instability in the 2010s, social media has played a key role in almost every protest, and massive online campaigns have also played a role in almost every major election in East Asia.

This study investigates four major areas in the political use of social

media in East Asia, leading to a number of research questions.

First, this thesis reviews the current situation of social media use in political campaigns across East Asia (Chapter 3). There are three research questions in this area:

RQ3.1: What are the common and different features of social media usage in East Asian states?

RQ3.2: To what extend do East Asian politicians use social media in their political campaigns?

RQ3.3: Does the political use of social media in East Asia exhibit similar features to that in the West?

Second, this study investigates the relationship between candidates' popularity on social media and electoral outcomes. Taiwan, which has perhaps the most competitive online political environment in East Asia is used as the case study in this part (Chapter 4). Using both online and offline predictors, three Taiwanese elections— the 2014 local election, the 2015 legislative by-election and the 2016 general election—will be discussed in order to answer a further three research questions:

RQ4.1: Does more likes on Facebook mean more votes?

RQ4.2: Does social media play a similar role in campaigns for both high-profile and low-profile elections?

RQ4.3: Does popularity of candidates on Facebook correlate with their vote share in the election?

RQ4.4: Can Facebook data help us forecast the results of elections on a district-by-district level even in the absence of reliable opinion polls?

Third, this thesis investigates politicians' posting strategies on Facebook during election periods, this time using the March 2018 Hong Kong legislative by-elections as a case study (Chapter 5). Because of Hong Kong's election system and its special status as a Special Administrative Region of the People's Republic of China, a change of ruling parties is almost unthinkable, and the pro-democracy camp is consigned to eternal opposition. This makes Hong Kong a very good case for exploring the difference between ruling and opposition camps in fair direct elections (Baum, 2000). Given the special features of Hong Kong elections, namely fixed opposition (pro-democracy) and ruling (pro-establishment) camps, two research questions are addressed:

RQ5.1: Are candidates from the opposition camp more likely to use the local language and address local topics on social media?

RQ5.2: Do candidates from ruling parties and opposition parties adopt significantly different strategies in their online campaigns?

Fourth and lastly, this thesis turns to voters' behavior, and investigates the social networks of Facebook users in political campaigns and the clustering of communities with different political orientations. Once more Taiwan is used for the case study because of the huge amounts of participants and contents in Taiwanese online political communities compared to other East Asian states (Chapter 6). Three research questions are addressed:

RQ6.1: Do political communities on Facebook in East Asia perform as echo chambers like political blogs or display cross-ideological interactions similar to the Twitter mention network analyzed by Conover et al (2011)?

RQ6.2: Do factors other than ideology, such as electoral district, affect the structure of political communication on Facebook?

RQ6.3: Do hyperlinks shared on candidates' Facebook pages show significant differences in information sources between different political coalitions?

This thesis consists of seven chapters. Chapter 1 provides an overall introduction about the present state of political use of social media. Section 1.1 outlines the main research questions are explained. Section 1.2 explains the significance and contributions of this thesis. Section 1.3 presents chapter structure in detail.

Chapter 2 reviews previous research in a number of fields relevant to this thesis including: studies of online political campaigns, and research on forecasting election results using social media data, and communication research on online political communities. Compared to this existing body of literature, this thesis provides a comprehensive study of political use of social media in East Asia rather than in one single state. It also offers answers to some unique research questions like predicting elections in the absence of reliable opinion polls or explore the common and difference in online campaigning strategies between fixed ruling and opposition camps.

Chapter 3 reviews the current situation of social media in East Asia and

discusses the role it plays in politics. In answer to RQ3.1 thru 3.3, first the history and present situation of social media use in East Asia will be introduced. Then the political use of social media in each state will be discussed in more detail. Finally, I will return to the research questions and draw some conclusions about the similarities and differences between states within the region. I will then offer a brief comparative study of cyberpolitics between in East Asian and Western states. Due to lack of reliable information, North Korea will not be discussed in most parts in this chapter. Conclude the findings in this chapter to answer RQ3.1 thru 3.3, states in East Asia share many common features regarding the general development of social media. All states have good telecoms infrastructure and rapidly increasing numbers of social media users. East Asian states are also marked by their tendency towards monolinguisticism and monoethnicity. We can say that generally, East Asian people are using social media for campaigning in elections and organizing social movements just like people in other parts of the world. But many unique characteristics also can be found in East Asia.

Chapter 4 contains two studies about Taiwanese elections. Using regression models to measure the relation between candidates' popularity on social media and the election outcomes. Section 4.1 focuses on the 2014 Taiwanese Municipal Mayors Election and 2015 Legislative By-election. I collect candidates' basic information and real-world election predictors like opinion polls and the results of previous elections. I also collect the number of likes for candidates' Facebook pages, average number of likes, comments and shares for each of their posts during

the election period, as well as their Google Trends score for measuring their

popularity on the Internet. I introduced one key original variable, the Like Ratio (i.e.

proportions of all likes on Facebook posts obtained by candidates in their district), in

order to avoid interference from the huge difference in the number of voters in

different electoral districts. I use Pearson correlation coefficients and regression

analysis to explore the relationship between all these variables and the election

results. I also look forward to predict the difference between a high-profile election

(the Municipal Mayors Election) and lower-profile elections in remote districts (the

Legislative By-election). Section 4.2, which focuses on the 2016 General Election

also investigates the relationship between candidates' online popularity and their

election results, as a step towards creating a model to forecast the results of Taiwanese

elections even in the absence of reliable opinion polls on a district-by-district level.

Hypothesizing that the relative popularity of candidates' Facebook posts will be

positively related to their election results, I once again calculate each candidate's Like

Ratio. Furthermore, in order to have a measure of online interest in candidates without

the influence of subjective positivity, I calculate each candidate's Wiki Ratio, as the

proportion of daily average page views for the candidate's Wikipedia page. I run a

regression analysis, incorporating the results of previous elections and available

opinion poll data, and find that the model describes the result of the election well.

　　　　To answer RQ4.1 and 4.2, more likes on Facebook does mean more votes

for major candidates in this election. In my regression model, the like ratio even

shows comparable predicting power with opinion polls, which are usually regarded as

the most reliable predictor of election outcomes. On the other hand, popularity on

social media clearly shows more predicting power in the higher-profile 2014

municipal election than in the 2015 by-elections which attracted less public interest.

To answer RQ4.3 and 4.4, My findings suggest that, social media can help us forecast

the results of Taiwanese elections on a district-by-district level even in the absence of

local opinion polls. I conclude that my models can be used to predict election results

in districts without local opinion polls with a predictive power approaching that of

traditional opinion polls. This supports other research suggesting that social media can

be a powerful indicator when predicting election results, especially when used in

combination with 'real-world' predictors.

Chapter 5 explores online election campaign strategies adopted by

different camps. This study focuses on the March 2018 Hong Kong Legislative

Council By-election. I collect all Facebook posts made by the six main candidates

supported by pro-democracy camp or pro-establishment camp in three geographical

seats. I use content analysis and keyword splitting, establishing a classification

scheme based on the potential roles that social media play during electoral campaigns.

I analyze the share of different varieties of posts and topics during different periods

before the election, and also the frequency of negative posting towards rival

candidates or the opposing camp.

My finding suggests that, in answer to RQ 5.1, both camps focused on

local affairs as a matter of course in their Facebook posts while the pro-democracy

camp heavily focused on resisting the central government. In this sense, the pro-

democracy camp does show more local awareness during online political campaigns. Addressing RQ5.2 regarding online campaign strategies, my findings showed that all candidates from both camps put a lot of energy into negative campaigning, while pro-democracy candidates additionally used many Facebook posts to criticize local (Hong Kong) and central (Beijing) governments. Both camps also showed a similar chronological development in their Facebook campaigns. However, there were also some differences. Pro-democracy candidates tended to focus more attention on a narrower set of topics. The pro-democracy camp also had significantly more posts reporting or announcing the live situation or information for campaigns (electoral or not) while the pro-establishment camp had relatively more posts about support from other politicians, elite bureaucrats or social celebrities and sharing information from other sources. These findings reflect the advantage of electoral resources enjoyed by the pro-establishment camp, and underlines that the pro-establishment camp is favored by professional or special interest groups with an interest in the election results of functional constituencies.

Chapter 6 investigates the social networks of Facebook users in political campaigns and the clustering of communities with different political orientations. In this study I examine the networks of political communication on candidates' Facebook pages during the 30 days prior to the 2016 Taiwanese general elections. I build two networks, a one-mode commenting network and a two-mode community network, and examine the influence of political ideology, party supporting and electoral district on the structure of the two networks. I also investigate the shared

URLs on candidates' pages, in order to identify whether those commenting on pages belonging to different parties refer to different sources. I build and analyze the structure of a two-mode URL network, defining shared URLs events and public pages as actors.

To answer RQ6.1 thru 6.3, Taiwanese political communities on Facebook are indeed acting as echo chambers on the whole, with users segregated into different communities according to political ideology. My findings also suggest that the Taiwanese political conversational network on Facebook is highly polarized by traditional blue-green ideology while candidates' electoral district also has a limited influence within candidates supported by the same party. On the other hand, the URL analysis shows a rather different result. I found no significant differences in hyperlinks shared on the pages of candidates belonging to the two main parties. This finding therefore does not support the idea that selective exposure is occurring in Taiwan's online political communities. This study finds a somewhat complex situation in Taiwan: while online political communities themselves on Facebook are highly polarized by traditional blue-green ideology, users of opposing political orientations are using rather similar information sources.

Chapter 7 offers a general discussion and conclusions for this thesis. Section 7.1 provides conclusions by answering the research questions. Section 7.2 outlines the major contributions made by this thesis. Section 7.3 discusses the limitations and threats to validity, and topics for future research.