

Introduction to the Special Issue — Social Media and Inquiry into Political Change

Collaborative Approaches to Confirmatory and Exploratory Research in the Digital Age

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The idea for this special issue came to me before the 2017 Annual Meeting of the Taiwan Political Science Association, in which I joined scholars across the globe in a discussion concerning their use of social media data. In the same year, I hosted a year-long workshop series on “thick data” versus “big data,” which allowed me to brainstorm alongside 20 or so Taiwanese social science scholars from a variety of disciplines as we deliberated over the epistemology behind and the value of exploratory and confirmatory research traditions. These two courses of life experience have brought me to the position of Guest Editor and given me the opportunity to present studies that reflect this debate. The three papers presented in this special issue by no means represent the entire spectrum of social media research, but they do present a picture of how authors from different perspectives perceive and make the best use of social media-related data. Before I address the two, it is worth providing a brief overview of what I witnessed during my year of interaction with these several dozen scholars that has led to this special issue.

Challenges from a Wave of Data-Driven Research

The emergence and prevalence of “bigger data,” particularly social media data, has forced empirical researchers to think more about how to make the best use of this

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data format as well as how such an endeavor can aid in our pursuit of knowledge in the field. Some have adopted and embraced this approach while others have rejected it, and still a good number of social scientists are now managing to gain an inkling of precisely why this trend is occurring. Instead of falling into division, the majority of researchers are fortunately aware of the fact that social media data have the potential to aid us in our investigation of new discoveries and even new areas of inquiry.

Narrowing the scope of our observations down to the realm of positivism, where scholars collect and use empirical data for research, it appears that the availability of social media data such as text data from Twitter or Facebook is making new analysis techniques necessary for researchers, leading a group of positivist scholars to revive older data and method-driven paradigms. Such positivists possess a strong understanding of the logic behind the generation of knowledge — a near-intact chain connecting epistemology, methodology (e.g., induction and deduction for causal inference) and methods (e.g., surveys and statistics for hypothesis testing) — moving them to quickly adopt big data (Bond, 2007; King, 2014; Lupia, 2014). Their arguments appear clear and confident; big data have aided in the development of supplemental theory and the drawing of causal inferences from the available data (e.g., Pietryka & Debats, 2017). That is, big data that help to facilitate the testing of hypotheses enhance the authority of causal inferences — to “design better experiments, make better comparisons between precise populations of interest, and observe theoretically relevant social and political behavior that was previously difficult to detect” (Monroe, Pan, Roberts, Sen, & Sinclair, 2015, p. 74).

Any critique or defense of the value of big data appears to be rooted in one’s methodological stance, which is guided by the scholar’s epistemological beliefs. Non-positivists who reject the adoption of big data (and any kind of numerical/quantitative data, for that matter) have expressed their doubts about the representativeness of big data and its potential to solve empirical problems. The debate at the level of data and methods will inevitably lead one to see that those who demonstrate better use of data own more power of persuasion (George, Osinga, Lavie, & Scott, 2016). Additionally, the meaning and value of knowledge generated through this analytical approach is still under question. Scholars who do not share the views of positivists regarding big data argue that researchers will never manage to advance knowledge with its use (Gleiser, 2015). Such thinking includes concerns that big data and its related analysis may even hurt the policy-making process (Dalton, Taylor, & Thatcher, 2016; Levy & Johns, 2016) and that big data research gets lost on an epistemological basis (Mulder, Ferguson, Groenewegen, Boersma, & Wolbers, 2016; Symons & Alvarado, 2016). This special issue cannot cover every one of these challenges originating outside the

discipline of positivism. Still, these critiques do help us to better understand what has been going on within positivism, which is a debate between exploratory and confirmatory approaches.

The Need for Collaboration between Two Traditions for Social Media

The debate about big data in the social sciences has been framed as “Does big data have value for research?” or “How does one criticize or defend the value of big data?” (Gray, Jennings, Farrall, & Hay, 2015). Such debates at the method and data level are no more advanced than the debates between quantitative and qualitative methodologists that have lasted for decades (Dryzek, 2006; Grant, 2005). Today, positivists have not only felt the need to discuss this division, but have also faced the need to choose sides. Those who emphasize confirmatory studies tend to label studies that make use of social media as “data-driven” or “method-driven,” implying that such studies have less value because of a lack of theory, while those who embrace new analytical techniques and believe that “we’ve got the population” harbor a certain disdain for those who still value sampling and theoretical reasoning.

I see these three papers as supplementing each other in various ways. The first paper, entitled “*Attribute-Priming Effects on Presidential Approval: The Role of Risk Perception and Trust in Government Regulation*,” is authored by **Yue TAN** and **Ping SHAW**. Representatives of the confirmative research tradition, **TAN** and **SHAW** analyze a survey sample to test a series of hypotheses regarding whether the perception of risks, benefits, and trust in government regulations influences the Taiwanese public in their evaluation of presidential performance from 2012 onwards. This study is unique in its methodologically pluralist approach, combining survey data analysis, content analysis, and sentiment analysis based on Facebook posts. It demonstrates how confirmatory studies interact with social media data and utilize the format of data as a supplement in hypothesizing test results.

The second paper by **Jaе Mook LEE**, **Youngdeuk PARK**, and **Gi Dong KIM**, entitled “*Social Media and Regionalism in South Korean Voting Behavior: The Case of the 19th South Korean Presidential Election*,” is not about the direct use of social media data, but rather examines how the use of social media influenced regionalist voting behavior in the 2012 and 2017 Korean presidential elections. The authors employ several analytical tools from a conventional confirmatory approach, resulting in a more exploratory purpose. They aim to observe and explore how the role of social

media use has evolved over time between the two elections. Readers may wish to pause and rethink the value of such studies as this conducts a series of regressions without specified hypotheses. That is, they should reconsider the question of whether to reject this contribution from the perspective of the tradition of confirmatory studies or appreciate the effort of the authors in telling a story by way of regression.

The third paper, authored by **Kah-Yew LIM**, is “*An Exploration of the Use of Facebook by Legislators in Taiwan*.” Standing alongside an exploratory tradition which embraces the value of describing and searching for patterns, this study depicts how Taiwanese legislators (January 2015–January 2017) have made use of social media in their pursuit of reelection. This observational study, based on Facebook fan page data analyzed through tools frequently used by data scientists, summarizes several types of language used on Facebook fan pages. **LIM** also adopts a similar strategy to **LEE**, **PARK**, and **KIM**, extending his observations to exploration by way of regression, the tool conventionally used for the testing of hypotheses. Through several different methods, **LIM** constructs a pattern of how Taiwanese legislators establish communication styles for their specific campaigns.

The three papers presented in this special issue address social media from a variety of perspectives. I suggest the reader to take heed from these papers that the exploratory tradition is now seeing a revival among the younger generation of scholars, and that more deliberation and effort is required to go beyond the confirmatory stage. Exploration should precede confirmation; the formation of theory should be built upon both solid reasoning and exploratory efforts. Positivists will benefit from this conceptualization and see that there is room for collaboration in this new era of social media and big data research.

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