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Social (Media) Construction of Public Opinion by Elites

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Social (Media) Construction of Public Opinion by Elites

by

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Dedication

For Finnegan.

Acknowledgements

When I applied to study in PhD programs some five years ago, I wrote a cover letter about wanting to study social media, politics, and news. Though so vaguely defined as to now be embarrassing, somehow, here I am – submitting a dissertation that reflects the culmination of my knowledge about social media, politics, and news. There are so many important people to thank in this brief space, but I will start with those at the University of Texas whose scholarship and mentorship has been invaluable in my academic pursuits.

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Social (Media) Construction of Public Opinion by Elites

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For most of the last century, surveys have dominated the measure of public opinion. But public opinion, as necessary a concept it is to the underpinnings of democracy, is a socially constructed representation of the public that is forged by the methods and data from which it is derived, as well as how it is understood by those tasked with evaluating and utilizing it. I theorize social media as an emergent representation of public opinion. Social media have shifted the social climate, technological milieu, and communication environment, bringing new possibilities for understanding and representing the public and producing public opinion.

Taking up the case of the 2016 U.S. presidential election, I examine how elites use social media and their data to construct representations of public opinion. Analyzing in-depth interviews with professionals from presidential campaigns, I mapped their use of social media to understand and convey public opinion to a theoretical model, accounting for quantitative and qualitative measurement, for instrumental and symbolic purposes. Using both content analysis of election news and in-depth interviews with journalists, I document how journalists use social media to report on the public, classifying uses along the type of data (quantitative, qualitative) as well as its function (partisan scorekeeping, public opinion storytelling). Journalists used individual social media posts as new sources

of vox populi quotes, especially to showcase public reaction to media events like debates. Social media firms actively marketed quantitative metrics as public opinion to journalists, who reported these metrics mostly in service of positioning candidates or parties in the horserace.

Social media data provide a means to expand conceptions of public opinion, particularly along the lines of publicness, relationality, and temporality, but also introduce new challenges for understanding the public. Elite actors tap public political expressions, made available to them by social media companies, to shape what public opinion looks like, in ways that appear to highlight the power of the public, but in practice grant legitimacy and political power to social media companies (as purveyors of public opinion), while also allowing these elites more control over the substance of public opinion to their advantage.

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Chapter 1: Introduction

"How can we, in formulating theory and research projects about public opinion, learn from those who work in the thick of American political life?" – Herbst, 1998, p. 148

For most of the last century, surveys have dominated the measurement of public opinion. Scholars, journalists, and political professionals all use polls to gauge public opinion on a variety of issues, yet Zaller (and others, see Blumer, 1948; Key, 1961) are skeptical they measure individuals' so-called true preferences: "…Most of what gets measured as public opinion does not exist except in the presence of a pollster" (1992). These criticisms call into question an individual's nascent opinion, particularly when prompted in response to a pollster. In essence, public opinion has to be called into existence by some outside force. If public opinion is "a contested and malleable concept" (Herbst, 1998, p. 2), then understanding the ways in which it's constructed, particularly by the elites[1] who reflect our opinion(s) back to us (via electoral communication and strategies or news coverage), is of utmost importance to the practice of democracy. As Herbst argues (1998), the meaning of public opinion is contingent: "The social climate, technological milieu, and communication environment in any democratic state together determine the way we think about public opinion and the ways we try to measure it" (Herbst, 1998, p.1). The rise of social media is a significant aspect of today's hybrid media system (Chadwick, 2013), which focuses on the interactions between political actors, the media, and the public. These shifting dynamics, and the communication technologies that enable and support them, necessarily reorder the social, technical, and communication contingencies upon which public opinion is constructed. If survey methods helped to form a mass public, what type of public do social media and their metrics form? Do they stand to put community, and relationships, back into conceptions of public opinion? And with what impacts?

In this dissertation, I theorized social media – and their analytics – as an emergent representation of public opinion. I argued that the rise of social media has changed the way that

[1] For my purposes, and especially because my research concerns elections, I define political elites as journalists and campaign professionals.

elites, specifically political professionals and journalists, think about and measure public opinion. Social media have shifted the social climate, technological milieu, and communication environment, bringing new possibilities for understanding and representing the public and producing public opinion. Scholars have long documented how public opinion is socially constructed through means of measuring, generating information about, and representing the public (e.g., Bauer, 1930; Herbst, 1998; Igo, 2007). In this case, I conceptualized elites as political professionals and journalists who transmit these representations of the public *to* the public through campaign communication and news coverage.

As I documented here, social media and their metrics provide an emerging means of measuring and representing the public. Social media do not stand to supplant or replace surveys as a means to measure public opinion, but rather provide a different representation of the public that political elites turn to. In fact, this representation of public opinion through social media is flawed in different ways than surveys are limited. Yet, social media as a form of public opinion is impossible to ignore. Increasingly, political professionals understand political expression through social media, along with various metrics used to quantify it, as a new form of public opinion. Additionally, journalists draw on social media in various ways in the course of their reporting on political contests, from documenting public reaction to media events to evaluating the performances of candidates. Through two studies, I provided empirical evidence of the ways elites use social media to craft a representation of the public, which informed campaign strategies and communication, as well as political news content. Through these various media content, elites reflected particular representations of public opinion back to the public itself. As I argue in this dissertation, these representations are more *public, relational,* and *temporally oriented* than public opinion derived from surveys, addressing some critiques regarding the use of polling to measure public opinion. At the same time, certain aspects of social media problematize their use to represent the public: Its users are not representative of the American public, and quality of political discussion across platforms is often lacking.

Social and digital media firms have created new ways of representing public opinion, informed by their design and production of social media metrics, which in turn influence how elites represent and imagine the public. Social media firms package data on how citizens use their platforms into consumable metrics for political professionals and journalists alike (Kreiss & McGregor, 2017). My idea for this project began to take shape as I informally observed journalists take up social media metrics in the course of their reporting on the 2016 U.S. presidential election. On TV, journalists noted the number of Twitter followers a candidate gained during debate broadcasts. Debate moderators referred to public sentiment on social media, particularly during the four primary debates co-sponsored by Facebook. During the general election, I spoke with staffers from primary campaigns about their use of social media for communication. In these conversations, the staffers spoke of using social media to communicate with but also to make sense of what the public thinks.

My overarching argument is that public opinion is socially constructed – a "contested and malleable concept" (Herbst, 1998, p. 2). The process by which elites come to construct public opinion has important implications for democratic theory and practice. As the notions of what constitutes public opinion shifts, so too does our notions of the public itself. For so long, polling has dominated these understandings of public opinion, but the entrance of social media – and its data – to the political scene has disrupted these practices. In documenting to what extent, and how, political professionals and journalists turn to social media data to understand the public, I chart the important implications for the practices of campaigning and journalism, as well as the study of public opinion itself. This examination links micro and macro levels of analysis – campaign professionals and journalists do the work on institutions: political parties and the news media. Those charged with reporting on and governing the public must make sense of the public – and so it's important for us to understand the data, methods, and processes used by these elites.

My dissertation documented how elites use social media and their analytics to understand and represent public opinion. I explicate public opinion as a socially constructed representation of the public that is shaped not only by the methods and data used to construct it, but also by how

elites conceive of and model the public in various communications. Next, I discuss how social media and their data may be used by elites to represent public opinion in particular ways, especially as compared to polling. Building from this, I consider in further detail how the two groups of elites I examined, campaign professionals and journalists, conceptualize and utilize public opinion and how, and why, social media stand to potentially shift these conceptions. Next, I turn to two empirical examinations of the ways elites use social media and their data to construct representations of public opinion. In the first, I analyzed in-depth interviews with 13 campaign professionals from 2016 U.S. presidential campaigns to gain insight into their use of social media for understanding public attitudes in the course of the election. In particular, I focused on how social media shaped what campaigns view as public opinion and how these understandings influence campaign communication and strategies. I mapped campaign use of social media to understand and convey public opinion to a theoretical model, accounting for quantitative and qualitative measurement, for instrumental and symbolic purposes. In the second empirical chapter, I performed a quantitative content analysis of election news (n = 385) to document how journalists use social media to report on the public, classifying uses along the type of data (quantitative, qualitative) as well as its function (partisan scorekeeping, public opinion storytelling). In consideration of the practices that inform news content, I supplemented the content analysis with in-depth interviews with 18 journalists to shed light on how, and why, journalists take to social media to understand and report on public opinion. I reflected on the potential influence of the news media featuring this distinct representation of public opinion on the role of the press in politics, as well as potential impacts on journalistic routines and, finally, on the public itself. Finally, I used my studies as evidence to theorize social media as an emergent representation of public opinion and take up the implications of this particular form of measurement and representation of public opinion on political and communication processes. Social media data differ dramatically from that generated from surveys – for example, social media data are problematic in terms of encompassing traditional ideas of representativeness. Notwithstanding this, social media and their data avail a more public and relational construction

of public opinion, ushering in different, though not less mediated, routes for the public to shape democratic processes like campaigning and reporting.

Chapter 2: Representations of Public Opinion

"… the meaning of public opinion is often dictated by the tools we have to measure it at any given historical moment" – Herbst, 2001

One of the central tenets of democracy is elected officials' understanding of, and responsiveness to, the public. In service of this ideal, public opinion can be understood, according to V.O. Key, as "opinions held by private persons which governments find it prudent to heed" – though even Key noted the potential for political elites to distort true public attitudes (Key, 1961). But who is tasked with representing public will – and how should it be determined? The answers to these questions have, along with conceptions of public opinion, shifted over time. But as of late those tasked with representing public opinion – political actors and the news media (as well as academics) – have primarily utilized survey polls to represent a mass public opinion. But the necessarily mediated process of crafting citizens' actual opinions into a consumable product is of course malleable and selective. Public opinion, as necessary a concept it is to the underpinnings of democracy, is a socially constructed representation of the public that is forged by the methods and data from which it is derived, as well as how it is understood by those tasked with evaluating and utilizing it. As Herbst outlines, the social construction of public opinion is driven by four main factors: the shared democratic model of a community or nation, the methodologies or technologies available to assess opinion, the rhetoric of political leaders, and the evaluation of public opinion by journalists (Herbst, 1998). In order to understand how public opinion is socially constructed, we must interrogate the methods and data sources as well as elite understandings and representations of public opinion.

Sarah Igo's *Averaged American* (2007) charts the development of contemporary representations of public opinion via social scientific polling. She argues that polling is a distinct technological practice that represents the public in particular ways (and not others) (see also Herbst, 1993, 1998; Krippendorff, 2005) that was legitimated in part due to a set of political claims in relation to democracy. Igo reveals how, beginning in the 1940s, George Gallup and Elmo Roper dismissed straw polls, ushering what we now see as standards in public opinion

polling: generating representative samples and surveying individuals about their opinions, including on candidates running for office. This practice of public opinion polling was, and is, a representational act that encoded a set of ontological claims about what public opinion is, representing the public in distinct ways (Herbst, 1993, 1998; Law, 2004). For instance, surveys rest on an implicit model in which opinion is an individuated, measurable, and private phenomenon that pollsters can access (see Graber, 2006) and aggregate to represent the public as a whole – to paint a picture of the average American (Igo, 2007).

These approaches root the modern study of public opinion but have not gone without criticism. As public opinion polling swiftly rose to dominance in the 1930s and 1940s, scholars questioned the extent to which the concept of public opinion became nearly analogous to polling. As early as 1947, sociologist Herbert Blumer argued that survey methods couldn't possibly assess the nature of actual public attitudes, as they ignore the social and indeed the *public* aspects of public opinion (1948). As a function of their anonymity, surveys privilege private attitudes as opposed to what might be publicly expressed by individuals. Furthermore, as Blumer (1948) and others have noted (see also, Fishkin, 2006; Entman & Herbst, 2001; Key, 1961; Lewis, 2001; Price, 1992; Krippendorff, 2005), surveys reveal individual not social opinion, obfuscating the societal and collective components of public opinion. Claims that mass public opinion represents the public (e.g. Zaller, 1992) have been called into question by critics who assert that interactions between groups within the public mold public opinion (e.g. Blumer, 1948; Fishkin, 2006). Critiques have also noted that using surveys to measure a mass public doesn't account for the hierarchical nature of society and the role of elites (Blumer, 1948; Herbst, 1998) in opinion formation, in which different groups and individuals wield different influence. Methodological problems with survey polling are discussed further below, but the practice broadly rests on the assumption that people have attitudes that can be retrieved and accessed by surveys (see, for example, Krippendorff, 2005; Krosnick, et al., 2002). These critiques, which arose nearly simultaneously with polling's dominance in measuring public opinion, have not made significant dents in the perceived legitimacy of surveys to gauge public opinion.

Gallup and Roper (along with others) envisioned survey-generated public opinion as a tool for enhancing democracy, by giving citizens a "voice" to enhance responsiveness from officials. To achieve broad legitimacy among potential audiences for survey research, as Igo (2007) details, Gallup and Roper worked with journalists and academics to fashion surveys into a source of social authority (see also, Krippendorff, 2005). As Gallup saw it, elites would now have to take account of and even contend with the public's attitudes (Gallup & Rae, 1940) – survey data bore the promise to increase politicians' responsiveness to the public. The concept of public opinion plays a pivotal role in elite (and lay) theories of democracy (e.g. Herbst, 1998). And, as Igo (2007) shows, public opinion polling has legitimacy in the eyes of journalists and the public and is also used by officials and campaigns to understand the public, and these elites in turn craft strategies based on that understanding.

Public opinion polls are plentiful, but this has not necessarily led to increased accuracy when used to predict citizens' behavior, a function prized by political actors and journalists alike. Polls leading up to the 2016 presidential election routinely showed Democratic nominee Hillary Clinton with a 1- to 7-point lead over Republican candidate Donald Trump (Pew Research, 2016), which did reflect the popular vote outcome. However, statewide polls, especially in key swing states, were scant and did not perform as well in predicting Trump's eventual victory in those states. Models of public opinion that aggregate, and weight, a multitude of polls in attempts to be more accurate are increasingly popular. These sophisticated models are prominent in journalism, where political reporting is often about predicting election winners. However, three of the most popular poll aggregates – *FiveThirtyEight*, *Huffington Post's* Pollster, and *The New York Times*' The Upshot – all predicted that Clinton had the greatest likelihood of winning the presidency. The *Huffington Post's* Pollsters model aggregated 377 polls from 43 pollsters.[2] The Upshot model differed, but used the same polls deemed accurate by HuffPollsters methods[3]. *FiveThirtyEight* bases its poll ratings in part on historical accuracy, examining 7,977 polls since

[2] http://elections.huffingtonpost.com/pollster/2016-general-election-trump-vs-clinton
[3] http://elections.huffingtonpost.com/pollster/faq

1998[4]. Despite these rather rigorous attempts to improve on individual surveys to represent public opinion, the marked failure of polling, as it was reported, to predict the outcome of the 2016 election has renewed scholars' and journalists' criticism of surveys as a means of capturing actual attitudes held by the public (see, for example: Pew Research, 2016; Silver, 2016; AAPOR, 2016).

For all its popularity, public opinion polling was never the only way of representing public opinion, nor is it the only way that elites understand public opinion in the course of their political work. As Herbst (1998) showed, politicians understand public opinion based on polls, but also consider the news media, lobbyists and pressure groups, and direct contact with constituents as forms of public opinion. But, as Igo (2007) shows, surveys became dominant in part because they can be affordably and reliably produced, deployed, and represented by actors across the political system. Of particular interest here, political professionals and journalists both rely heavily on surveys to understand and represent public attitudes. Polling remains a paradigmatic representation of public opinion, despite evidence of a precipitously declining response rate, where fewer and fewer of those individuals contacted agree to participate in a survey. A typical response rate in 1997 was 36%, but by 2012, only 9% of those contacted completed the average survey (Pew Research, 2012). Cliff Zukin, former president of the American Association of Public Opinion Research (AAPOR), also notes that the marked increase in those who rely solely on cell phones (nearing a majority of the American public) contributes to the growing reliability problem because government regulations prohibit calling cell phones via automatic dialers, dramatically increasing the cost of contacting people via cell phones (Zukin, 2015). Internet polling has increased in popularity, in part due to its ease and low cost, but this method has not much improved accuracy in polling. AAPOR criticizes these non-probability samples in part because it is impossible to calculate a margin of error as the

[4] https://fivethirtyeight.com/features/the-state-of-the-polls-2016/

population is unknown, so the sample is not generalizable in the way that a random sample poll is (AAPOR, 2013).

Against the backdrop of a crisis in polling methodology and accuracy, new ways of representing public opinion have emerged. Social media platforms' sharp uptake by the public (nearly 70% of the U.S. public is on Facebook) (Pew, 2016) coupled with the availability of trace behavioral data available about users (see, for example, Jungherr, 2015) has led to consideration of social media as an emergent way to measure public attitudes. Studies attempting to predict election outcomes based on social media data have mostly failed (see Jungherr, 2015 or Schober, Pasek, Guggenheim, Lampe & Conrad, 2016, for overviews). The link between social media data and election outcomes has been criticized on two fronts. First, the user base of social media is not representative of any country's population, much less its voting population. For example, only 24% of Americans who are online use Twitter, and they are younger and more educated as compared to the general population (Pew Research, 2016). Yet, Twitter data is routinely used by scholars in part because it is easy to obtain (boyd & Crawford, 2012). Second, some have criticized work seeking to compare social media to election outcomes – or even survey-based polling – as under theorized (e.g. Jungherr, 2015), noting that there is little linking the motivations to tweet about a candidate with motivations to vote for a candidate. Jungherr, for example, argues that social media posts may be a better predictor of political attention than political support (2016). Similarly, Schober et al. (2016) call attention to differences between surveys and social media data along three lines: how individuals understand the activity, the nature of the data (and what can reasonably be inferred), and considerations around the practical and ethical use of data from social media. These ongoing debates and inquiries have mostly been methodologically focused. To date, little attention has been paid to the ways in which social media are already deployed as representations of public opinion.

I suggest that these debates are too narrow, obfuscating a broader question: *What role do social media play in how elites understand and represent public opinion?* As Herbst asked nearly two decades ago: "How do those who need to evaluate and shape public opinion (journalists,

legislative staffers, and political activists) define this rather slippery entity [public opinion] and define it on the contemporary political scene?" (p. 3, 1998). Since social media have clearly entered the ontology of public opinion, it is of increased importance to discern how this new understanding of the public shapes *elite* construction and representation of public opinion, a primary way the public understands itself (Zaller, 1992) and makes sense of perceived majorities (Entman & Herbst, 2001). Social media representations of public opinion matter because they shape the information provided to the public by elites. Zaller (1992) argued that individuals form opinions as a result of information provided through elite discourse (media or political actors), as well as individual predispositions (ideologies, values, attitudes). "To the extent that few like but none can avoid," (p. 6, Zaller, 1992) individuals are unable to experience everything firsthand, and, therefore, are reliant on others for most of their information about the world (Lippmann, 1922). These others are, for the most part, persons devoted fully to politics or public affairs – elite discourse is dominated by political actors and the news media (Zaller, 1992). The information these elites provide to us *about* public opinion, as well as communication *shaped by* public opinion, in turn influences actual opinions held by the public. In this dissertation, I document what that information looked like in 2016, when social media have necessarily shifted the social, technological, and communication ambience, as part of the broader shifts of hybrid media and political processes (Chadwick, 2013).

SOCIAL MEDIA AS PUBLIC OPINION

Social media representations of public opinion may take various forms based on the affordances – both technical and understood – of particular platforms (Nagy & Neff, 2015) and types of data gathered by these companies. For example, Facebook aggregates things such as the number of likes or comments a post receives and the number of friends one has, while Twitter aggregates retweets, favorites, and replies as well as the number of followers a user has. Furthermore, the words, images, and videos in social media posts are content that are analyzed to understand public attitudes by social media firms themselves, as well as by scholars, journalists,

and political professionals. I argue that these aspects of social media posts are measures of people's expressive behavior as it bears upon politics, which can be (and are) gathered or aggregated and distributed to represent public opinion. To the extent that elites incorporate these metrics into their understanding of the public, which shape communication strategies and election reporting, it's imperative to examine how these emergent representations of public opinion compare to those representations informed by more traditional measures, particularly surveys. I suggest that social media allow for a more *public*, *relational*, and *temporally sensitive* representation of public opinion, addressing some critiques of surveys while introducing other unique concerns.

Measurable social media metrics subvert some of the underlying methodological assumptions of surveys, as outlined above. There is no representative sampling, for instance; platforms, as well as practitioners who use sentiment, topic, content, or other computational analyses to study communication on them, use the sum total of available posts, tweets, or likes to draw conclusions about aggregate public opinion. These practices are not without their own critics. Analysis of social media is necessarily limited to available data. For example, because of Twitter's relatively open application program interface (API) access and publicness, its data have been more examined as compared to other social media platforms (boyd & Crawford, 2012). Although fewer than 25% of U.S. adults online use Twitter, representations of the public based on that platform have been extended to social media as a whole, culminating in a "model organism problem" (Tufekci, 2014, p. 2): Much of what we know about social media is based only on studies about Twitter, as the model organism. Furthermore, as Jungherr (2015) points out, opinion is inferred through visible trace data on social media – practitioners and scholars make inferences from these observed behaviors (i.e.: posting, liking, etc.) – but it is not at all clear that these inferences are rooted in reality. For example, following a candidate on social media is often assumed to be a measure of political support, though this mechanism has not been theoretically explicated or empirically documented (Jungherr, 2015; Schober et al., 2016). Voters follow candidates on social media to keep up with breaking news, access unmediated

information, and foster a sense of connection with the candidate or party (Pew, 2015), but political support is not a pre-requisite for any of these motivations.

For some, these deviations from survey assumptions may problematize social media data for understanding public opinion. On the other hand, using social media data to understand the public may address some lingering criticisms of surveys – specifically that surveys do not capture the conversational nature of public opinion formation (e.g. Blumer, 1948; Krippendorff, 2005; Larson, 1999) or that the operationalization of survey questions too narrowly defines public opinion (e.g. Blumer, 1948; Graber, 2006; Fishkin, 2003).

Political opinions expressed on social media are inherently *public* and *relational* in that they are expressed publicly to or for an audience. Given their conversational nature, social media represent a public and collective arena in which public opinion manifests, similar to public meetings or citizen groups (Anstead & O'Loughlin, 2015), other so-called "organs" of public opinion (Bryce, 1888, as cited in Anstead & O'Loughlin, 2015). As a criticism of the modern public opinion survey, Blumer (1948) argued that individuals form opinions through social interactions, which are not captured via surveys of individuals. If surveys measure anonymized attitudes expressed in isolation, then social media data offer a means to re-capture the relationality of public opinion. Quantifiable metrics such as likes and replies are measures of interactions between individuals, while posts like tweets or comments can be understood contextually (and textually) based on an individual's perceived audiences. Furthermore, opinions expressed on social media expand the *temporal* boundaries of socially constructed public opinion. To be sure, both surveys and social media analysis offer a snapshot of public attitudes in any given moment. However, social media offer more temporal sensitivity in gauging public sentiment because of their ability to capture public expression and reaction to political events as they unfold, literally minute by minute. Thanks to technological advances, these social media behaviors and opinions can be monitored, measured, and communicated in real time. This increased temporal sensitivity also allows further specificity in assessing particular publics: audiences for televised political events (Gil de Zúñiga, Garcia-Perdomo & McGregor, 2015;

Vaccari, Chadwick & O'Loughlin, 2015) or participants of a political convention or demonstration (Anstead & O'Loughlin, 2015).

Political Expression on Social Media

As such, social media offer a way to expand the boundaries of socially constructed public opinion (Anstead & O'Loughlin, 2015). But to what extent are individuals who discuss politics on social media actively engaged in a political debate – a pre-requisite for what Blumer (1948) conceives of as true public opinion? No doubt, the idea of incorporating conversational aspects into conceptions of public opinion stems from characteristics of deliberative democracy (e.g. Fishkin, 1991), particularly ideals of a public sphere (Habermas, 1989). Face-to-face discussions in politically heterogeneous groups form the basis for deliberative ideals, but these do not naturally occur very often. To study the actual phenomenon, Diana Mutz (2006) examines people's social networks (and their effects), focusing on crosscutting exposure and diverse political networks as measurable, and naturally occurring, aspects of deliberation. Early optimism about the ability of the internet broadly, or social media specifically, to avail a networked public sphere was quickly tempered. And yet, it would be rash to dismiss political uses of social media wholesale because they might fail to meet deliberative standards. Like Mutz, I am inspired by Robert Merton's call to formulate "theories of the middle range" – tying theory to empiricism, ideals to naturally occurring phenomenon (Merton, 1968, as cited in Mutz, 2006). By examining social media and their data as an expansion to the repertoire of public opinion measurements and representations, I seek to merge theories of public opinion with the practice of political expression on social media.

The focus of my inquiry is on how elites use social media in constructing representations of public opinion, but the implications of this beget an examination of the nature of political discussion on social media. The nexus of social media and political communication have spawned a multitude of studies, books, special issues of journals, and many a dissertation before mine. Drawing from this extensive literature, I focus on the nature of political discussion by the

public on social media, particularly as compared to deliberative ideals – wherein deliberation is a substantive, informed, reasoned debate in a group where members encounter (and contend with) political disagreement. To what extent can social media be a deliberative public space for politics?

As compared to face-to-face encounters, political discussions on social media may avail increased representation (Papacharissi, 2002) by extending the geographical (Stromer-Galley, 2003) and socio-economic (Wojcieszak & Mutz, 2009) scope of deliberative participants, even bringing non-traditional voices into political discussions (Freelon & Karpf, 2015). For some, online forums may supplement face-to-face discussions (Baek, Wojcieszak & Delli Carpini, 2011), but online forums are an imperfect stand-in for social media. For those who have examined the content of social media posts about politics, conclusions about their deliberative nature are mixed. Deliberative qualities like facilitating civic and political participation have been found in comments on the Facebook walls of politicians (e.g. Fernandes et al., 2010; Halpern & Gibbs, 2013; Robertson et al., 2010), but this may be contingent upon the extent to which they are moderated (Camaj & Santana, 2015), which extends to online interactions more broadly (Albrecht, 2006). However, a multitude of studies examining the nature of political discussions on social media more broadly point to a number of characteristics that seem in opposition to deliberative ideals. Individuals exhibit "spiral of silence" type behavior on social media (e.g. Hampton, et al., 2014), use uncivil language (e.g. Kushin & Kitchener, 2009), and engage in sexist behavior (McGregor & Mourao, 2016). Political discussions on social media may not meet deliberative standards, but yet – people increasingly use social media to talk about politics (Pew, 2016b). The mismatch between actual social media discussion and deliberative ideals informs the *nature* of public opinion representations that elites may draw from social media.

There is no consensus in academia about the extent to which social media networks are politically heterogeneous – studies demonstrating social media's propensity to create filter bubbles (e.g. Bashky, Messing, & Adamic, 2015; Himelboim, McCreery, & Smith, 2013) are

met by studies minimizing those effects (e.g. Messing & Westwood, 2014). Others suggest that political homophily online is contingent upon partisanship (Colleoni, Rozza, & Arvidsson, 2014), but there is evidence to suggest that individuals disagree about politics with people in their online social networks to a greater degree than people themselves believe (Goel, Mason & Watts, 2010). To the extent that individuals have politically heterogeneous networks on social media, these networks can increase one's likelihood of encountering political disagreement on social media (Barnidge, 2015; Choi & Lee, 2015; Lee, Choi, Kim, & Kim, 2014). As to whether people are likely to engage in political discussions with those they disagree with on social media, the collective scholarly evidence is inconclusive, but the studies discussed above do show that (some) people encounter (and even engage with) others on social media with whom they disagree about politics. In sum, social media should be considered a potential space for the public to engage in political debates and conversations, albeit ones that do not definitively meet deliberative ideals.

As part of these political debates on social media, individuals engage in active opinion expression, which combats a dominant critique of polling: "the artificiality of nascent opinion statements" (Karpf, 2016; see also, Zaller, 1992). In his book, *Analytic Activism*, Karpf argues that public opinion crafted from social media and their analytics is active, boisterous, and unrepresentative. "It is an entirely different constructed phenomenon than we are accustomed to in polling research, and it faces an entirely separate set of problems" (p. 42, Karpf, 2016; see also, Entman & Herbst, 2001).

Using Social Media to Understand the Public

As detailed above, others have examined how social media data differ from polling and have considered the implications along mostly methodological lines. There are larger issues at play, however, than the extent to which social media metrics correlate with traditional public opinion polls or electoral results. My aim here is to understand how elites use social media to *construct* public opinion, explicitly situating social media within the ontology of public opinion.

As Igo convincingly argues, modern polling techniques became dominant at least in part because their uptake by political professionals and journalists legitimized them in the eyes of the public (2007). Extant public attitudes take shape on social media differently that those captured by surveys, and campaigns and journalists use this different measurement of social media to represent public opinion. The analysis I conducted offered a framework of how elites incorporate social media and their metrics into their understandings of public opinion. As Herbst argued about elite constructions of public opinion "… these constructions matter very much, as they become embedded in journalistic or legislative habits and work patterns" (p. 123, 1998).

To the extent that elites use social media to represent and understand public opinion, this may have a legitimizing force on an emergent source of data in politics. Social media necessarily shapes a different representation of public opinion, especially as compared to the dominant paradigm of survey-based notions of mass opinion. Officials consult public opinion before issuing policy statements. Campaigns consider public attitudes when crafting messages, advertisements, and strategy. Journalists portray representations of public opinion throughout their political reporting, especially in the context of electoral campaigns. As elites consider social media when they consider public opinion, this may have broad implications for politics, as well as the role of the public in democracy.

CAMPAIGNS AND PUBLIC OPINION

Given my interest in the elite representation of social media as an emergent form of public opinion, my inquiry began with how political professionals incorporate social media into their definitions of the "slippery entity" of public opinion (Herbst, 1998). Like journalists, campaigns and elected officials convey a reflection of the public back to itself through constructions of public opinion (Herbst, 1998). Political professionals' conceptions of public opinion inform strategic decisions and campaign communication, such as television spots or targeted advertising on social media, which are consumed by the public. Furthermore, campaign communications from press releases to advertisements have been shown to shape press coverage

(e.g. Kiousis, et al., 2006; Kiousis et al., 2015; Tedesco, 2001) as well as public attitudes. To the extent that campaigns use social media to understand the public, their use stands to play a role in legitimizing social media and their data as a form of public opinion (Igo, 2007). I examined how political professionals think about social media and their metrics in relation to public opinion, through the lens of their work on the 2016 U.S. presidential election.

In her seminal work on elite construction of public opinion, Herbst (1998) also focused on political professionals, but deliberately steered away from electoral politics, instead analyzing interviews with state legislative staffers. In part because of this, she found that they conceive of public opinion *not* primarily as polling, but rather through special interest group sentiment, and more importantly, the news media. In another section of her book, Herbst (1998) surveyed and interviewed "party activists" – Republican and Democratic Party delegates. These decidedly more partisan subjects, while mostly not political professionals, conceived of public opinion along two lines: surveys and "interpersonal dialogue with their social networks" (Herbst, 1998, p. 133). These are of particular relevance to this study, reflecting not only reliance on traditional methods of polling to construct public opinion, but also a duality that may be at play with social media and their metrics. Some social media data are quantifiable and aggregated, similar to surveys, but also, they are represented in more qualitative ways – drawn from individuals' conversations with their online social networks. This duality reflects the quantifiable versus more qualitative vox populi - voice of the people - representations of social media as public opinion found in previous work (Anstead & O'Loughlin, 2015), which I extend here.

For the political professionals who run campaigns, conceptions of quantifiable public opinion fall along two lines – what Herbst (1993) terms *instrumental* and *symbolic*. Instrumental thinking ascribes the increased quantification and focus on statistics to the desire to "routinize processes of observation" (Herbst, 1993, p. 12). In this sense, public opinion data are collected and utilized with a particular end in mind. Instrumental uses refer to "… the straightforward, manifest use of numerical data" (Herbst, 1993, p. 29) as functional data for political professionals (and journalists). But Herbst argues that the quantification of public opinion may

also serve symbolic purposes, wherein public opinion data is used to symbolically evoke partisan identities and underlie emotional appeals. While public opinion measures may be designed in service of rationality, as political discourse develops around them, they may emerge as symbols of public opinion, utilized in service of emotional appeals or to convey authority. Quantified public opinion can be deployed rhetorically, for example to indicate that a political opponent is "out of touch" with the majority of the public. In fact, the concept of public opinion itself is a strong rhetorical device, which can be partially attributed to its personification[5], e.g. "public opinion *favors* one candidate" (Krippendorff, 2005). Simply put: Socially constructed public opinion is a powerful tool to deploy. Herbst concludes, "The ability to conduct polls and use them privately (instrumental uses) *and* the ability to manipulate these data once they are publicized (symbolic uses) should both be evaluated if one is to understand the alleged power of polls" (Herbst, 1993, p. 158). I examined social media metrics, as elites view them as quantified public opinion, for their instrumental and symbolic functions in campaigns and in campaign coverage. Furthermore, I examined more qualitative (or informal) methods political actors have used to measure public opinion, and where (and how) social media fit into these practices. Social media data may be used in *quantitative* and/or *qualitative* forms for *instrumental* and/or *symbolic* purposes by campaigns, as shown in Figure 1.

[5] Krippendorff (2005) asserts that personification is "the most pervasive metaphorical root of the social construction of public opinion" (p. 130).

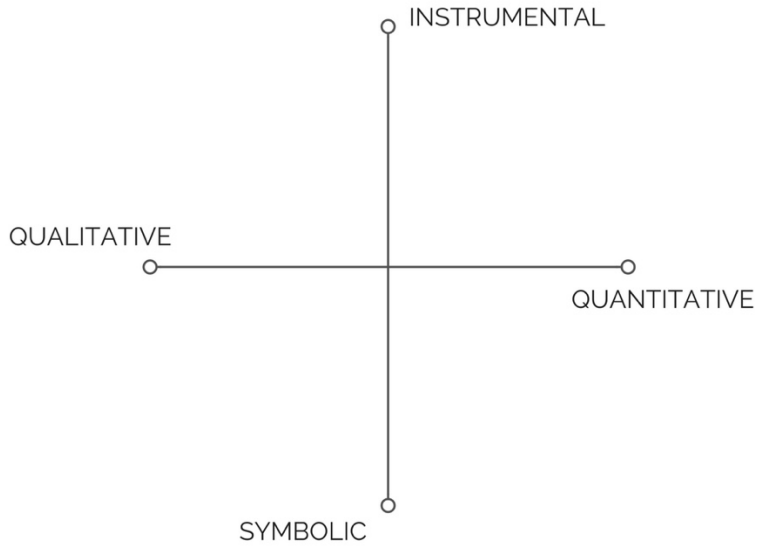

Figure 1: Campaign methods and uses of social media to represent public opinion

For campaign professionals, understanding the public – and its attitudes – is done in service of identifying supporters, predicting which of them will vote on Election Day, and, furthermore, identifying who among the public is persuadable (Fenno, 1978; Hersh, 2015). In *instrumental* ways, campaigns have long tested what issues are salient with the public as a means to improve the effectiveness of campaign communication. Early studies on persuasion and public opinion "set the stage" (Baldwin-Philippi, 2016) for campaigns to use quantitative measures of public opinion – through surveys and experiments – to test which messages might serve best to persuade and mobilize people (Berelson, Lazarsfeld & McPhee, 1954; Lazarsfeld, Berelson & Gaudet, 1948). In his popular account of the role of data in campaigning, Sasha Issenberg (2012) detailed some of this early history, noting that John F. Kennedy relied on data from polls to decide if, and how, to handle his Catholicism. As polling continued to rise in popularity and legitimacy (Igo, 2007), campaigns leveraged increased public opinion data alongside voter data to create sub-groups of the public, or microtargeting. Popular accounts documenting the success of personalized mobilization in the 2004 presidential campaign brought public attention to the

role of targeting data in campaigning (e.g. Hamburger & Wallsten, 2005). Alongside this practical work, scholarly evidence of the utility of strategies derived from microtargeting (Bergan, Gerber, Green & Panagopoulos, 2005; Gerber & Green, 2000, 2001) prompted a shift in the role of polling in campaigns. "Polls are now used to narrow rather than widen the appeal of candidates" (Jacobs & Shapiro, 2005, p. 639).

Less concerned with mass opinion, campaigns pressed on toward constructing individualized perceptions of the public, building multilayered databases combining public records, purchase histories, digital trace data, polling data, and more (Baldwin-Philippi, 2015, 2016; Hersh, 2015; Karpf, 2016; Kreiss, 2012, 2016; Nielsen, 2012). These databases primarily inform campaign strategy for instrumental uses such as resource allocation, but are more and more used in symbolic ways to shape campaign messaging. The increasingly sophisticated databases possessed by, or purchased by, campaigns ground what Hersh describes as "perceived voters" (2015), which in relevance to this study, might represent how campaigns understand the public. These accounts of what has been termed data-driven or "technology intensive" (Kreiss, 2016) campaigning demonstrate the shifting ways in which political professionals seek to understand the public. While Hersh (2015) focuses on the public records data in voter files, others (Baldwin-Philippi, 2015, 2016; Karpf, 2016; Kreiss, 2012, 2016; Nielsen, 2012) note the role social media, and similar technologies, play in shaping the data campaigns use to construct representations of the public and public opinion, mainly for instrumental purposes.

The use of polling by elected officials, and the campaigns that work to elect them, has not gone without criticism. Perhaps rooted in more pessimistic views about the role of the public to "meaningfully" engage in and be knowledgeable about politics (e.g. Lippmann, 1955), critics argue that officials should be guided more by independent judgment (Jacobs & Shapiro, 2005). Others have argued that in fact more polling is needed because politicians misperceive the actual distribution of collective preferences (Broockman & Skovron, 2013). But as Herbst (1998) shows, political professionals who work for legislators may generally avoid gauging public

attitudes via polls. And yet, political professionals do rely on special-interest groups as well as the news media, which in turn often depict the public through polls.

Though less well documented, campaign professionals also turn to more qualitative methods to construct representations of public opinion. As part of his examination into the behavior of elected officials, Fenno (1978) sought to understand how politicians perceive their constituents. In *Homestyle*, Fenno documents how members of Congress visit their home districts, interacting with their constituencies in service of constructing a sense of the public. Through these largely informal interactions, politicians intuit which voters are supporters or opponents, what issues they care about, and how they should present themselves to voters (Fenno, 1978). Similarly, Herbst (1998) finds that elites also use more informal and qualitative, forms of public opinion. Journalists cited party bosses as more accurate than polls, and political staffers relied on conversations with lobbyists as well as news media reports to understand the public (Herbst, 1998).

Although it has not been conceptualized in this way, political professionals understand and seek out social media in real-time as a form of instantaneous public opinion that they use to assess reactions to events on the campaign trail. Previous work (Baldwin-Philippi, 2015; Kreiss, 2014), without explicitly mentioning public opinion, reveals that this happens informally in elections, when campaign staffers (and even candidates) gauge their own work through the lens of their qualitative readings of social media sentiment.

Campaign's perceptions of public opinion shape the strategies, presentation styles, and persuasive communication that politicians employ in efforts to get elected – by the public. As part of a broader set of changes in the political environment, social media usher in the potential for the public to play a more direct role in shaping campaigns' perceptions of themselves. At this pivotal moment, I ask: *How do campaign professionals use social media to understand and represent public opinion?* Social media and their data are one aspect of data-driven campaigning, which has been well documented (Baldwin-Philippi, 2015, 2016; Karpf, 2016; Kreiss, 2012, 2016; Nielsen, 2012). But these studies have not closely interrogated social media data

specifically or dealt conceptually with how campaigns quantify this data to understand public opinion for instrumental or symbolic uses. Similarly, and as noted above, there is some evidence that campaigns use social media in service of constructing qualitative representations of public opinion (Baldwin-Philippi, 2015; Kreiss, 2014), but likewise, these questions have not been directly addressed. In my interviews and analysis of them, I draw distinctions between how campaigns use *quantitative* and *qualitative* means to assess social media when constructing public opinion, for *instrumental* and *symbolic* purposes. Thus, my overarching research question is:

> **RQ1: How do campaign professionals use *quantitative* and *qualitative* measurements of social media as public opinion for *instrumental* and *symbolic* purposes?**

In tying her conclusions about conceptions of public opinion to democratic theory, Herbst concluded "… professionals lean toward democratic models that emphasize the role of professionals. And citizen activists cling to our classical models that emphasize an informed and engaged populace" (p. 160, 1998). My analysis shed light on how campaign professionals perceive of the public – and its role in political processes – focusing on whether, and how, social media shape how elites model democracy. To the extent that campaigns take up social media data to understand the public, for both instrumental and symbolic purposes, this may indicate openness on their part to models of democracy that value input from the engaged public. A conception of public opinion by elites that values public political expression vis-à-vis social media has the potential to drive increased public engagement, as users of social media may more easily "see themselves" in this data (and the communication informed by it).

JOURNALISM AND PUBLIC OPINION

As Herbst points out, "public opinion is a contested and malleable concept, and the processes of [socially] 'constructing' public opinion have vital implications for democratic theory and practice" (p. 2, 1998). Journalists, and by extension the news media, have played an important role in shaping polling data into public opinion (Herbst, 1998; Igo, 2007). Like survey

data before it, social media data are given "force and form" by the news media (Karpf, 2016). *But how?* I examined how journalists mold social media and their metrics as new representations of public opinion, through the lens of coverage of the 2016 U.S. presidential election.

As many have noted before me, polls do not make their way to the public unmediated (for example, Igo, 2007; Herbst, 1998; Mutz, 1998; Searles et al., 2016). In fact, Gallup envisioned polling methods as improvements on political reporting. "In making polls possible, the media fulfilled their historic function as the guarantor of a free public opinion" (Gallup & Rae, 1940, p. 121). Though, as Toff (2016) summarized, little scholarly attention has been paid to quantifying increases in media attention to polls. From the 1940s to the 1960s, references to Gallup polls in *The New York Times* increased 450% (Wuthnow, 2015). The next two decades were marked by a shift towards news organizations establishing in-house survey operations, in part driven by the desire for more editorial control (Traugott, 2009). Wuthnow (2015) further shows references to Pew surveys rose by 600% in the aughts as compared to the 1990s.

But as polling relied in part on journalists need for legitimization and dissemination, so too did journalism come to rely on polling. News industry economics and journalistic norms both help explain the news media's increasing use of opinion polls in reporting. As newsrooms continue to shrink due to economic challenges, stories utilizing polls offer an easy (and compelling) storyline to orient political or breaking news (Goidel, 2011), require minimal editing or interpretation (Rosenstiel, 2005), fit with news values like timeliness and conflict (Shoemaker & Reese, 2013), and appeal to audiences (Iyengar, Norpoth, & Hahn, 2004). Furthermore, Dunaway (2011) shows that news organizations facing steep competition and in need of profits are more likely to rely on poll-centered horserace stories at the expense of more substantive stories, such as those focused on issues. Others have posited that political theories of news production may explain journalists' reliance on polls in reporting. In "negotiating newsworthiness," political journalists have been shown to rely heavily on their relationship with officials as part of their work routine (Bennett, 1990; Gandy, 1982; Lawrence, 2000). And yet, journalistic norms push reporters to employ what Zaller (1999) refers to as their "journalistic

voice," that is, to act as independent observers and interpreters of public affairs. In part as a reaction against politicians' attempts to stage events and control narratives, public opinion polls present a platform for political journalists to interpret the current political-electoral situation for their readers, using their "journalistic voice" and their expertise reporting on public affairs to explain the shifts in citizens' views (Matthews, Pickup, & Cutler, 2012; Zaller, 1998). Finally, reliance on polling may be attributed to "scientific journalism." Public opinion polls – presented in the news with the support of hard figures and obtained using presumably scientific methods – provide a veneer of objectivity and accuracy to journalists' interpretation of politics (Ginsberg, 1986; Lavrakas & Traugott 2000).

Social media data, especially in quantified form, stand to provide journalists with many of the same tools, and fulfill many of the same needs, as has polling. Social media data and metrics offer journalists an easy storyline against which to orient political news. To the extent that data are provided by social media firms for news outlets (Kreiss & McGregor, 2017), their presentation requires little editing. By the nature of their quantification, social media data also give journalists a near instantaneous metric by which to measure political winners and losers, meeting news values like timeliness and conflict, while working in favor of horserace-style coverage. Social media data, drawn from the public, can also be used by journalists to push back against politicians' attempts to control political narratives. Like polling, social media data are quick, easy, and newsworthy because they draw on conflict.

Based on this, I expected that journalists would be likely to report on social media and their metrics much in the same way they report on public opinion polls: as part of the dominant style of horserace coverage of elections. That said, I anticipated some key similarities and differences between journalistic reporting on polling and social media analytics. Political reporters have long sought to predict electoral outcomes, and polls provide data upon which reporters can base and tune their predictions, while enabling them to preserve their strategic objectivity. In fact, the rise of so-called "data journalism" has given birth to niche reporting in this area – sites detailed above like *FiveThirtyEight* and *Huffington Post's* Pollster aggregate

multiple public opinion polls in an attempt to make more sophisticated and accurate predictions. But the availability of trace data from social media sites has crept into this political reporting niche. For example, in 2016, *FiveThirtyEight* developed a feature called "The Facebook Primary" that mapped "likes" of a candidate's page across the nation[6]. Audiences are often keen to read about themselves, and journalists, well aware of this, use public opinion polls to enable "social comparison on a mass scale" (Herbst, 1998, p. 99). Likewise, social media and their metrics provide journalists with alternative means to paint a picture of opinion that audiences are wont to consume, especially during elections.

At the same time, the representation of social media – and their analytics – as a form of public opinion is different than those based on surveys. As noted earlier, I posited that social media representations of public opinion – whether defined in terms of conversations, shares, and likes on Facebook or posts, favorites, and retweets on Twitter – can be characterized as public, relational, and more temporally oriented. As such, journalists may represent and use social media and their analytics in different ways than conventional public opinion polls. For example, social media data are available immediately during – and after – media events such as conventions or debates, allowing journalists to access them in nearly real time as measures of things such as public attention and sentiment. Scholars have documented the rise of second screening during election media events (e.g. Gil de Zúñiga, Garcia-Perdomo & McGregor, 2015; Vaccari, Chadwick, & O'Loughlin, 2015), in which the public takes to various social media to participate in live discussions about debates or conventions or news. This behavior takes place primarily on Twitter, a social media platform where political journalists congregate (Coddington, Molyneux, & Lawrence, 2014; Lawrence, Molyneux, Coddington, & Holton, 2015; Parmlee, 2013). This provides journalists ready access to a multitude of public reactions to media events. For journalists, social media data may be more accessible than survey polls. Reporters can access what researchers at social media companies produce for them around media events: Facebook

[6] https://projects.fivethirtyeight.com/facebook-primary/

and Twitter have entire teams dedicated to doing so (Kreiss & McGregor, 2017). Reporters in many newsrooms also have access to analytics tools like Facebook's Signal, which Facebook created for journalists to discover trends and search Facebook and Instagram posts, and Dataminr, whose proprietary algorithm promises to create early alerts for breaking news by harnessing Twitter data. Finally, reporters can gather social media data themselves on the Facebook and Twitter pages of political candidates or by searching for relevant keywords or hashtags. Additionally, social media offer a never-ending stream of political communication. In contrast to polling, social media provide journalists a glimpse at the continuously unfolding phenomenon of opinion online, which they can draw from for their reporting.

Given the differences, but also the similarities, in traditional public opinion polls and social media data and metrics, I analyzed how the latter are taken up by journalists in the course of election reporting and as reflected in their reporting. I categorized the use of social media metrics in campaign coverage and analyzed the ways in which journalists take up social media to represent public opinion over the course of the 2016 election.

Survey organizations like AAPOR have established standards for reporting methodological information about polls (AAPOR, 2010). Studies have investigated the extent to which news media coverage of polls adheres to these standards, finding that stories rarely include the recommended methodological disclosures. Stories generally reveal the sponsor of the poll, but contain little information about statistical uncertainty, like margins of error (Andersen, 2000; Bhatti & Pedersen, 2015; Brettschneider, Donsbach, & Traugott, 2008; de Vreese & Semetko, 2002; Marton & Stephens, 2001; Miller & Hurd, 1982; Stromback, 2012; Traugott & Lavrakas, 1996; Weaver & Kim, 2002; Welch, 2002). These scholars have criticized this lack of methodological reporting in the news, arguing that this information is necessary for readers to accurately evaluate poll results. Some have argued that presenting all the recommended methodological details is unnecessary for average news consumers (Meyer & Jurgensen, 1991), and that these disclosures overwhelm readers, inhibiting their ability to recall poll results (Wichmann, 2010) or to understand them (Lordan, 1993). Even when these details are not

disclosed to the reader, scholars find that journalists themselves misinterpret polling statistics (Bhatti & Pedersen, 2015; Dunaway, 2011; Larson, 2003; Patterson, 2005; Searles, Ginn, & Nickens, 2016). Information about polls impacts voters, who may shift their support based on this information (Aalberg & van Aelst, 2014; Moy & Rinke, 2012). Methodological disclosures on polls may limit motivational biases in the credibility of the poll (Kuru, Pasek, & Traugott, 2016).

Given the relative lack of methodological disclosures in the press about public opinion data, and in light of the potential impacts of those disclosures, I asked:

RQ2: What types of methodological details do journalists reveal when reporting social media as public opinion?

As discussed earlier, social media metrics are accessible to journalists through a multitude of methods. But journalists can also access individual public posts on social media, which can be used in service of reporting. Especially in broadcast news, journalists have long featured so-called "person on the street" interviews to represent vox populi. These interviews can be used as a qualitative measure of public opinion on particular issues or to feature comments from bystanders of events like protests. In more recent years, journalists have also turned to social media to gather vox populi quotes (Anstead & O'Loughlin, 2015; Broersma & Graham, 2013; Knight, 2012). In particular, Anstead and O'Loughlin's study is worth discussing further as they conceive of social media as a means to expand the notion of public opinion. Based on a thematic analysis of reporting of the 2010 UK election, they categorized journalistic use of social media to conceptualize the public along two main lines: vox populi and quantified metrics. Drawing from their study and incorporating the use of qualitative versus quantitative methods that I investigated in regards to campaign professionals, I asked:

RQ3a: To what extent, and how, do journalists use individual social media *posts* as *qualitative* representations of public opinion in election reporting?

RQ3b: To what extent, and how, do journalists use social media *metrics* as *quantitative* representations of public opinion in election reporting?

In his detailed typology of the use of polls in election coverage (based on interviews with journalists as well as news media analysis), Toff (2016) identified two categories of public opinion representations that are relevant here. First, "partisan scorekeeping" is similar to the well-documented trend of horserace coverage (Cappella & Jamieson, 1996; Patterson, 1993), but Toff more broadly defined these stories as focused on "tracking the political fortunes of elected officials and the parties, using polls to make assertions about who is up or down in the political 'score'" (Toff, 2016, p. 120). This seems germane to the study of social media as public opinion coverage because sentiment is often (fairly or not, see Jungherr, 2015) ascribed to social media behavior. The second category Toff (2016) develops is "public opinion storytelling" – an aspect of contextual journalism (Fink & Schudson, 2014), wherein journalists used polling data to move "beyond" election results to uncover people's attitudes about certain issues. As social media offer a window into people's attitudes through their own comments, while also providing quantifiable data, I asked:

RQ4a: To what extent, and how, do journalists use social media to engage in *partisan scorekeeping* in election reporting?

RQ4b: To what extent, and how, do journalists use social media to engage in *public opinion storytelling* in election reporting?

Chapter 3: Methods

In the empirical chapters of this dissertation, I aimed to document and classify the ways in which elites use social media to craft representations of public opinion. As I noted earlier, for my purposes, and especially because my research concerns elections, I defined political elites as *journalists* and *campaign professionals*. This analysis spanned two chapters. In the first, I analyzed interviews conducted with 13 professionals who worked on 2016 U.S presidential campaigns to show how they used social media to understand public opinion. In the second, I documented how journalists used social media, as an object in their reporting, to portray public opinion throughout the 2016 U.S. election. I also conducted interviews with 18 journalists whose stories I analyzed to understand how, and why, they used social media to understand public opinion in the course of reporting about the election. As such, this methods chapter is structured in two parts: first outlining the examination of campaigns, and second, of the press.

Social Media as Public Opinion in Campaigns: In-depth Interviews

I conceptualized elites as journalists, but also political professionals, whom I anticipated were using social media to understand public opinion. Broadly, this certainly encompasses staffers and consultants working on a wide variety of campaigns and for legislative offices, including advocacy groups (see Karpf, 2016). For this study, I was interested in the way in which presidential campaign staffers used social media to understand public attitudes. I focused this analysis on 2016 presidential election campaigns to be analogous with my examination of the news media. To be sure, there are distinct differences between races at the presidential level and down-ballot races, especially in regards to their use of analytics or data (see Baldwin-Philippi, 2017), but by focusing on professionals working on the top-tier of campaigns, I drew on the combined knowledge of decades of work in politics on a multitude of campaigns. While others in similar pursuits have interviewed communication directors (e.g. Herbst, 1998), I mostly focused on professionals at the digital or social media director level for several reasons. First, previous

work shows that these teams increasingly work often in conjunction with communication teams on campaigns, with some not drawing an organizational distinction (Kreiss, 2016; Kreiss, Lawrence, & McGregor, 2017). In the past, communication directors may have been the sole arbiters of a campaign to the press – mediators in the ways that "public opinion is evaluated and communicated" (Herbst, 1998, p. 37). In today's hybrid political communication climate (Chadwick, 2013), staffers at all levels "speak" for the candidate and the campaign across a variety of outlets. Additionally, as my particular focus was on how social media and their metrics are understood as public opinion, interrogating campaign professionals who work directly in this area, and were, therefore, responsible for communicating insights up the organizational hierarchy, offered the greatest potential for meaningful insight. At the end of each interview, I asked if there were other people with whom the subject thought I should speak for my research. As such, additional subjects were added throughout the data collection process.

My experiences in the course of the 2016 campaign shaped how I began to understand social media and their metrics as an emergent representation of public opinion by elites. While watching presidential primary debates, I saw TV networks frequently feature social media metrics, often as an implied measure of a candidate's debate performance (for example, noting how many Twitter followers he or she gained during the course of the debate). In the wake of the primaries, I interviewed staffers from unsuccessful presidential bids about their use of social media in campaign communications.[7] Foregrounded by my subjective media observations, it was through the course of these interviews that the central questions in this dissertation began to take shape. These political professionals spoke of their use of social media to communicate with but also to *understand* particular publics. They described social media metrics as a way to gauge public reception to particular messages from the candidate, while some also indicated more

[7] From June 2016 to February 2017, I conducted interviews with staffers at the level of digital director, social media director, or an equivalent position, about their work on presidential primary campaigns as part of a series of related projects about social media use in campaign communication (McGregor, Kreiss & Lawrence, 2016; McGregor & Baym, 2016; Kreiss & McGregor, 2017).

informal methods, like reading comments on the candidate's Facebook page, to represent public opinion.

Because I have already obtained access to and spoken with these individuals, I began my interviews with them again for my dissertation project. Additionally, while the previously conducted interviews were not structured with this study in mind, I returned to the transcripts from those interviews and analyzed them for insights into the role social media play in constructing public opinion in campaigns.

Specifically for this project, in June of 2017, I conducted interviews beginning with digital and social media directors, or people in similarly relevant positions (especially as recommended to me by interviewees), about their work on the 2016 presidential primary and general election campaigns. I began with these individuals because of their knowledge about social media, but at the conclusion of the interviews, asked if there were others I should speak with about my project. In this way, I expanded by list of subjects, informed by people within the campaigns. These individuals are Christopher Georgia, digital director, and Tim Miller, communications director, for Jeb Bush's 2016 campaign; Chris Maiorana, digital strategist and chief technology officer, and Jordan Powell, deputy campaign manager, for Huckabee 2016; Jack Minor, deputy digital director, and Chris Wilson, director of research, analytics, and digital strategy, for Ted Cruz's 2016 campaign; Vincent Harris, digital director for the Rand Paul 2016 campaign; Matt Compton, deputy digital director, and Christina Reynolds, deputy communications director, for Hillary Clinton's campaign; Kevin Bingle, digital director for John Kasich's campaign; Hector Sigala, social media director for the Bernie Sanders 2016 campaign; and Gary Coby[8], director of digital advertising and fundraising for Donald Trump's general election campaign. I also drew on interviews I conducted from June 2016 through February 2017 with Georgia, Maiorana, Powell, Minor, Harris, Sigala, Compton, and Reynolds, as well as an interview with Caroline McCain, social media director for Marco Rubio's primary bid, and Jenna

[8] Coby is also the director of advertising at the Republican National Committee, a position he also served in during the primary period of the 2016 campaign.

Lowenstein, digital director for Hillary Clinton's campaign. All interviews were conducted on-the-record, although participants could declare any statement not for attribution (directly quoted but anonymously sourced), on background (not directly quoted), or off the record (not reported in any way) at their discretion. On average, the interviews lasted about an hour. See Appendix B for a table with the dates of the interviews.

I began these semi-structured, in-depth interviews by asking individuals about their role on the campaign for which they worked, asking them specifically about what their responsibilities were in understanding the public and voters. From there, I asked them about their approach to using social media to understand public attitudes. I asked explicitly about what specific methods they used, and finally, for what purposes the campaign used social media and their data to understand and represent the public. Additional questions were asked, given the nature and flow of each interview. I recorded the interviews and had the recordings transcribed – these transcriptions are the texts I analyzed. See Appendix A for the interview protocol.

An analysis of these interviews allowed me to understand how these campaign professionals make sense of their world (Lindlof & Taylor, 2010). In reading and analyzing the interviews, I inductively developed categories and concepts to document how campaign professionals used social media to understand and represent public opinion, looking for similarities and differences in their accounts. I followed an integrated approach to develop these categories – bridging inductive categories emerging from a textual analysis while integrating existing literature on theories of public opinion and political campaigns (Luker, 2008). In developing these categories, I focused on determining what specific patterns of social media usage by campaigns demonstrate *qualitative* and *quantitative* measurements for *instrumental* and *symbolic* purposes.

SOCIAL MEDIA AS PUBLIC OPINION IN THE PRESS: A MULTI-METHOD APPROACH

Through a quantitative content analysis of 2016 U.S. election coverage and a qualitative textual analysis of interviews with journalists, I documented how journalists draw on social

media posts and metrics in their reporting of public attitudes. First, I conducted a content analysis to assess the extent to which the stories that utilized social media to represent public opinion reveal methodological details (RQ2), and to what extent the stories can be categorized by drawing from previous literature on how journalists use public opinion in reporting (RQs 3-4). Drawing a list of subjects from the bylines of those stories, I then interviewed journalists about their use of social media to understand the public. A qualitative textual analysis of these interviews shed further light on the research questions above, illuminating behind-the-scenes professional practices of journalists that inform the production of news (e.g. Dupagne & Garrison, 2006; Toff, 2017; Usher, 2014).

News media data

These data stem from news media coverage of the 2016 U.S. election in order to assess how social media were used to represent public opinion. I began by accessing a database of nearly 2.1 million stories related to the election, as gathered by Media Cloud[9], a collaboration between the Berkman Center for Internet & Society at Harvard University and the Center for Civic Media at MIT. The full dataset from their initial study[10] was made available to me prior to its eventual public release. In order to focus the data on my specific inquiry, as well as to make possible hand-coding, I narrowed the data, limiting it along three lines: date, news media sources, and keywords.

On March 21, 2015 Ted Cruz became the first candidate to announce his bid for the presidency, and the MediaCloud data collection began shortly after that[11]. I queried the MediaCloud election database[12] for stories that were published between April 1, 2015, and November 8, 2016 (Election Day). Searching for these dates allowed me to hone in on the election period specifically. Next, I filtered by source type. Though the MediaCloud database

[9] http://mediacloud.org/

[10] https://mediacloud.org/election-2016

[11] Although, because of their spidering process, stories from before that date, as well as after the election, are included in their data.

[12] https://topics.mediacloud.org/#/topics/1404/summary?focusId&q&snapshotId=1628&timespanId=80252

contains stories from 70,166 media sources, I searched within these for sources identified by the Pew Research Center in its State of the News Media 2016 (Mitchell, Holcomb, & Weisel, 2016) report[13] (see their methodology section for more detail on the selection process, which was based on comScore data). I searched for cable news (3 sources), digital-native publishers (40 sources), magazines (14 sources), network TV (3 sources), newspapers (49 sources), and public broadcasting (2 sources). In sum, my data stems from 111 news outlets (see Appendix C for a complete list). Finally, I searched for keywords within the data to narrow in on the data outcroppings (Luker, 2008) that I was interested in – the use of social media to represent public opinion. Identifying the final keyword query was an iterative process, but I eventually settled on searching for the candidate's names, election keywords, social media sites, and other keywords identified by reading stories throughout the process. The final keywords I searched were:

((fiorina OR (scott and walker) OR (ben and carson) OR trump OR (cruz AND -victor) OR kasich OR rubio OR (jeb and bush) OR clinton OR sanders OR candidate OR election OR presidential) and (((comment OR reply OR "the internet" OR "twitterverse" OR retweet OR like OR follower OR favorite OR share OR interactions OR "top tweet" OR "top social moment" OR "most-liked" OR "most-mentioned" OR trending OR conversation OR users) AND (Twitter OR Facebook OR Snapchat OR Instagram))

The final query yielded 2,299 stories.

Quantitative analysis

A trained coder and I examined a random sample (n =150) of the initial 2,299 stories returned by my query, performing an initial reading of the stories to assess whether they represented my phenomenon of interest: social media or its metrics used to represent public opinion. Stories were coded as to whether or not they took up social media, posts or metrics, in service of public opinion. For example, a story featuring public reaction, via individual tweets, to Donald Trump's debate performance were coded 1, and was examined further to answer my

[13] https://assets.pewresearch.org/wp-content/uploads/sites/13/2016/06/30143308/state-of-the-news-media-report-2016-final.pdf

research questions. On the other hand, stories that focused on Donald Trump's use of Twitter (without featuring reaction from the public) also sometimes appeared in my data – but these stories were coded 0, and were not examined further. Intercoder reliability between the trained coder and myself was established based on the sub-sample of 150 stories for a 95% level of probability (Riffe, Lacy, & Fico, 1998). We reached 92 percent agreement, with a Krippendorff alpha of .848[14]. This coding process yielded 770 stories of interest for further coding, after removing duplicates. From this, I drew a 50% random sample of 385 stories, upon which the following analyses are based. See Appendix XX for a frequency table of the news outlets included in this sample.

In the end, the stories I examined further make up what Luker calls "data outcroppings" (2008), where my concept of interest was most apparent. I selected these data purposively, knowing that my findings are not statistically representative, relying instead on logical generalizability (Luker, 2008). I have no reason to think that the news media data I analyzed were different from other news media reports in systematic ways that might affect my findings about the use of social media to represent public opinion.

In order to answer RQs 2-4, I performed a quantitative content analysis, with the news story as the unit of analysis. After training another coder on the variables of interest (described below), intercoder reliability between the trained coder and myself was established and calculated based on a sub-sample of 94 stories for a 95% level of probability (Riffe, Lacy, & Fico, 1998). Krippendorff's alpha scores were used to calculate the intercoder reliability using ReCal (Freelon, 2010). The alphas demonstrated reliability, ranging from .80 to 1.

In order to answer RQ2, I documented the extent to which journalists revealed *methodological details* in the course of using social media data in reporting. Unlike with the reporting of survey data, there are no standards for which to code, so I at first attempted to identify to what extent any methodological details were disclosed. I intended to code for

[14] Intercoder reliability was assessed using ReCal (Freelon, 2010, 2013).

methodological details in part adapted from AAPOR standards related to surveys[15], including the presence of: a data source (e.g. Facebook, Twitter, Instagram or Snapchat), method of data collection (e.g. "Instagram data gathered using Facebook's Signal"), number of posts analyzed, date – and when appropriate, times – of data collection (e.g. ""number of tweets posted during the 3-hour debate"), and when appropriate, disclosure of methodological details relating to sentiment or issue analysis (e.g. to back up claims such as "53% of tweets during the debate were about immigration"). However, in the course of analyzing the stories and trying to code for the originally proposed schema, it soon became clear that this sort of detail would not be feasible with a quantitative coding scheme. In short, most stories did not include detailed methodological disclosures. To contend with the reality of the data, I adapted the coding to capture whether or not the story revealed any type of methodological detail. Stories were coded for the presence or absence of *any* methodological detail. A story was coded as having disclosed methodological details if any of the above details were disclosed, as well as if they noted that a hashtag was trending. Many of the stories in the data centered around a hashtag, and it seemed an important methodological distinction to note those stories whose reporting was driven by a trending hashtag (as opposed to stories focused on hashtags where it was not clear why the reporter chose to feature this hashtag). Along with a trained coder, we reached 92 percent agreement on this category, with a Krippendorff's alpha of .85.

In examining how journalists use social media to represent public opinion, Anstead and O'Loughlin (2015) suggest two categories. The first is *vox populi*, which they define as a quotation of an individual status update. These categories also align with my examination of campaigns' use of qualitative and quantitative methods to represent social media as public opinion. To answer RQ3a, stories were coded as to whether or not they took up individual post(s) as qualitative representations of public opinion (e.g. quoting or inserting a single social media post, or collection of posts). Along with a trained coder, we reached 100 percent agreement on

[15] http://www.aapor.org/Standards-Ethics/AAPOR-Code-of-Ethics/Survey-Disclosure-Checklist.aspx

this category, with a Krippendorff's alpha of 1. Additionally, Anstead and O'Loughlin (2015) discern between what they call "raw quantitative data" and "semantic polling"[16] via social media, but I combined the two into a second category, looking for *quantitative or metric-based* uses of social media data. To answer RQ3b, stories were coded for whether or not they present quantitative social media counts or metrics to represent the public (e.g. number of followers, likes, comments, favorites, etc.; number of posts about a given topic, issue; number of posts with a particular sentiment or favorability). With this category, we reached 90 percent agreement, with a Krippendorff's alpha of .80. Together, these categories discern the features by which journalists used social media to represent the public.

Next, I turn to categories that help us understand what journalistic function social media as public opinion serve. Drawing from Toff's typology of poll use in news media (2016), I documented journalists' use of social media, and its metrics, in service of *partisan scorekeeping* and *public opinion storytelling*. Toff's categories are relevant to this study as they capture modes of storytelling rooted in journalism and political communication theory (broadly: horserace coverage and contextual journalism)[17]. First, Toff describes *partisan scorekeeping*, which incorporates horserace coverage but broadens the concept to include stories focused on "the political fortunes" of politicians. In order to answer RQ4a, stories that used social media or their metrics in service of positioning a candidate (or party) in relation to others, be it winning or losing, rising or falling, ahead or behind, were coded as partisan scorekeeping. With a trained coder, we reached 95 percent agreement on this category, with a Krippendorff's alpha of .89. Toff (2016) also argues that journalists use polls in service of *public opinion storytelling*, in which public opinion data is used contextually to reveal public attitudes about certain issues. In order to answer RQ4b, stories that used social media or its metrics to explain or make sense of

16 They understand raw quantitative data as mere counts, such as reporting the number of tweets during an event. They conceptualize semantic polling as attempts to quantify social media posts with an eye towards evaluative statements, such as the number of positive comments about a candidate (Anstead & O'Loughlin, 2015).

17 Toff's categories are particularly robust are they are based on interviews with journalists as well as his analysis of a multitude of media outlets.

public attitudes towards a particular issue were coded as public opinion storytelling. In this category, we reached 97 percent agreement, with a Krippendorff's alpha of .94.

The categorizations of how journalists use social media to represent public opinion and in service of particular forms of journalism are not mutually exclusive. That is, a story containing individual status updates to convey the winner of a debate would be coded as both qualitative and partisan scorekeeping. Please see Appendix D for the codebook.

Qualitative analysis

The content analysis described above offers a chance to detail the ways in which journalists used social media to represent public opinion while reporting on the 2016 U.S. election. But, especially because social media is an emergent form of public opinion data, I wanted to understand how this relatively new data shaped the production of news. Hearing from journalists, in their own words, served the critical function of bringing into focus the role that social media played in their production of news about the 2016 presidential campaign. Qualitative data such as this highlights the "closed-door dynamics" that shape news production (e.g. Coddington, 2015; Dupagne & Garrison, 2006; Toff, 2017; Usher; 2014), allowing journalists to elaborate on the manifestations of public opinion evidenced in my content analysis.

Towards this end, I interviewed journalists whose bylines appeared in my data set. That is, I sought specifically to interview journalists who used social media data to represent public opinion. I created a list of all the authors in my data set, along with the news outlets for which they worked. I began by contacting journalists whose bylines appeared often in my data, while also taking care to represent the various types of news media in my data. I contacted journalists who worked for cable news outlets, digital-native publishers, magazines, network TV, newspapers, and public broadcasting. I initially contacted 40 journalists. At the end of each interview, if it had not already come up, I asked if there were other people with whom that reporter thought I should speak. Because of this, additional subjects were contacted and added throughout the data collection period.

In June and July of 2017, I interviewed 18 journalists about the role of social media data in their reporting about the 2016 U.S. presidential campaign. These individuals are Andrew Kahn, assistant interactives editor for *Slate*; Brian Lisi, a reporter for *New York Daily News*; David Jackson, a White House correspondent for *USA Today;* David Mack, a reporter and weekend editor for *Buzzfeed;* Derek Willis, a news applications developer for *ProPublica*; Eliza Collins, a congressional reporter for *USA Today;* Evan McMurray, a social media editor for ABC News; Greg Krieg, a politics reporter for CNN; Heather Leighton, a digital producer for the *Houston Chronicle;* James Hohmann, a national political correspondent for *The Washington Post*; Jason Silverstein, a national politics reporter for the *New York Daily News*; Josh Voorhees, a senior writer for *Slate*; Matt Conlen, a computational journalist for *FiveThirtyEight*; Mitch Thorson, an interactives graphics editor for *USA Today;* Paul Singer, a Washington correspondent for *USA Today;* Philip Bump, a national correspondent for *The Washington Post;* Rueben Fischer-Baum, a visual journalist for *FiveThirtyEight*; and YouYou Zhou, an interactive producer for *The Associated Press*. Like my interviews with campaign professionals, all of these interviews were conducted on-the-record, although participants could declare any statement not for attribution (directly quoted but anonymously sourced), on background (not directly quoted), or off the record (not reported in any way) at their discretion. On average, the interviews lasted about 45 minutes. See Appendix F for a list of subjects along with interview dates.

I began these semi-structured interviews with journalists by asking them about their role during the 2016 campaign (some had changed positions, even moved to different news organizations, by the time I spoke to them). I asked them what they relied on to understand public attitudes throughout the campaign, and what role, specifically, social media played. I asked them about how they gathered social media data about public opinion and for what purpose these social media data were used in reporting. Finally, I asked these journalists to reflect on the potential utilities, and downsides, of using social media to represent public opinion. See Appendix E for the interview protocol.

Analyzing these interviews allowed me to understand how journalists make sense of public opinion and how social media shaped those perceptions. These behind-the-scenes perspectives shed critical light on the production of the news stories I analyzed for this project. In reading and analyzing my interviews with journalists, I followed an integrated approach – bridging inductive categories emerging from a textual analysis while integrating existing literature on theories of public opinion and the press (Luker, 2008). In developing categories, I sought to determine specific patterns of reporting on, or with, social media data in both qualitative and quantitative ways. Furthermore, I aimed to understand how journalists viewed social media data's utility for reporting on public opinion about candidates, parties (partisan scorekeeping), and issues (public opinion storytelling).

The combination of a content analysis of news stories, as well as a qualitative analysis of interviews with the journalists who wrote them, allowed me to paint a more comprehensive picture of the ways in which social media informed reporting on public opinion during the 2016 campaign.

Chapter 4: Results

THE PULSE OF PUBLIC OPINION: REPRESENTING THE PUBLIC THROUGH SOCIAL MEDIA IN CAMPAIGNS

To answer my first research question, and to reveal how campaigns understand the public – and what role social media play in those understandings – I conducted on-the-record, semi-structured, in-depth interviews with 13 political professionals who worked on 2016 U.S. presidential campaigns. These individuals worked as digital directors, social media directors, deputy campaign managers, or communication directors. In my textual analysis of the transcripts, I focused on determining what specific patterns of social media usage by campaigns demonstrated *qualitative* and *quantitative* measurements used for both *instrumental* and *symbolic* purposes, indexing these uses to the theoretical model I developed earlier in the study (see Figure 1).

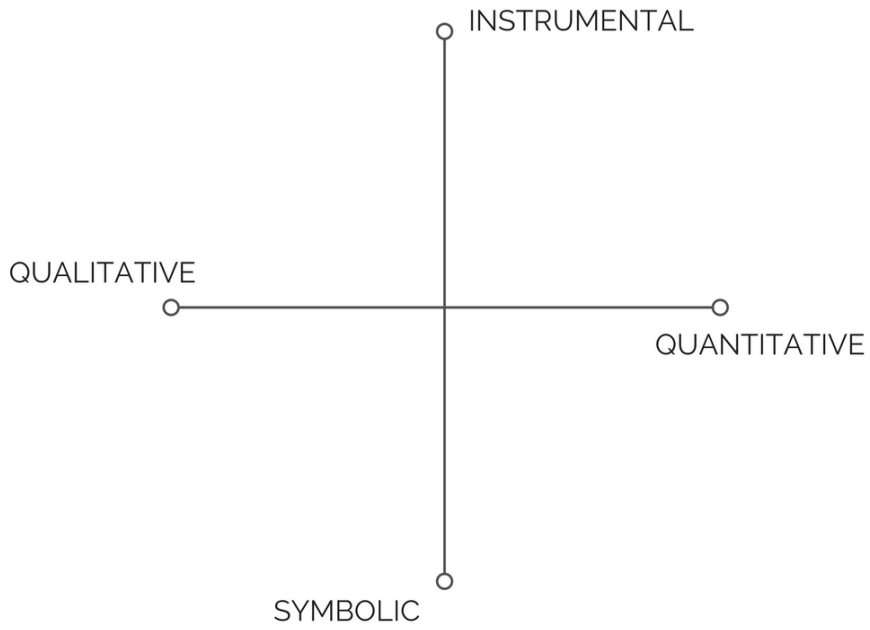

Figure 2: Theoretical model: Campaign use of social media as public opinion

Using both qualitative and quantitative data, campaigns made use of social media instrumentally to engage in regular campaign activities such as identifying persuadable likely

voters. Campaigns also symbolically deployed qualitative and quantitative measurements of social media as a form of public opinion. But the use of social media to gauge public opinion was not the same for all campaigns. Those that were under resourced, comparatively, tended to rely on it more. As Jordan Powell, deputy campaign manager for the Huckabee campaign said, "I think we probably relied on social as a barometer of taking the day-to-day public opinion and voter and electorate mood, probably more than other a lot of other campaigns if I would have to guess. Just because that was where we had a built-in audience ready to go communicate our message with to directly."

Quantitative data, instrumental uses

The upper right quadrant of my theoretical model looks at campaigns' use of *quantitative* social media data for *instrumental* purposes. These uses have been covered by scholars like Jesse Baldwin-Philippi (2015, 2016), Dave Karpf (2016), Daniel Kreiss (2012, 2016), Eitan Hersh (2015), and Rasmus Kleis-Nielsn (2012) – though rarely framed as public opinion and not focused specifically on social media. Social media data are part of data-driven campaigning, and social media platforms provide some of the structure for technology-intensive campaigning. While data from social media do make their way into complex voter files, simply considering them as trace data does not contend for the very social, and public, nature of people's political expressions on sites like Facebook or Twitter. Nor does this understanding account for the ways in which campaigns use social media data qualitatively to understand the public. As I argued, and demonstrated through my analysis below, political professionals conceive of social media data as public opinion, drawing different conclusions about and presenting unique representations of the public informed by these emergent conceptions of public opinion.

No matter how well-funded, campaigns are almost always strapped for resources – this means it is impossible to run costly polls to gauge public reception to most campaign messages. Through their organic and paid accounts, campaigns accessed engagement metrics from sites like Facebook, Twitter, and Instagram, which offered cost-effective alternatives to assessing public

opinion. Engagement metrics from social media sites were used as measures of public opinion, which in turn shaped campaign messaging and strategy. Use of these metrics to understand the public for instrumental purposes took two primary forms. First, campaigns used engagement metrics, such as likes or comments to assess public reaction to key moments in the campaign. Second, campaigns used social media's ability to rapidly deploy A/B message tests, wherein engagement metrics served as the marker of success.

Assess reaction to key moments

To the first use, campaigns looked to engagement metrics on social media to understand public reaction to media events like debates or campaign speeches. The news media have been criticized for their frequent use of opt-in online polls to determine which candidate the public thinks "won" a debate, but even these ill-conceived measures rarely shed light on what particular moments in an hours-long debate resonate with the public. In this context, campaigns learned from social media what notes struck a chord with the public – and adapted their campaign communication and strategy accordingly. Jack Minor, deputy digital director for the Cruz campaign, noted:

> One of the debates where Cruz had kind of been quiet … and then just came out of the gun. It's when he turned and- it was the CNBC debate. I think it's [Chris] Harwood, and [Cruz] just turned to him and be like "These questions are ridiculous. Ben Carson, are you a homophobe? Donald Trump make fun of Jeb Bush." When he went on that rant, that was like our pop of it for the campaign. That showed to Facebook … I think that was a good measure of, okay, bashing the media works. It was certainly a pivot for our campaign.

Of course, Facebook, like all social media platforms, is not representative of the electorate. Despite this, quantified reaction from engaged constituents on social media, via metrics, served as a tool to gauge public opinion for campaigns during media events.

A/B message testing on social media

Almost all the campaigns took to social media to engage in A/B message testing, where they tested multiple versions of messages on segmented audiences to determine the most

effective variation. Sometimes this was through organic posts on the candidate's Facebook or Twitter account, but campaigns also assessed engagement metrics around paid advertisements on social media sites. In particular, campaigns saw Facebook as a platform on which they could get reliable measures of public opinion, as compared to sites with smaller and more niche users like Twitter or Reddit. But Facebook changed over the course of the campaign. First, the algorithm that determines which users see which posts was updated. At the same time, the ability of campaigns to test multiple iterations of ads grew throughout the campaign (such that the Clinton and Trump campaigns had, in the general election, more access to this type of targeted testing). Engagement metrics on these ads were used to determine not only how best to connect with voters on Facebook, but also informed campaign communication more broadly. As Gary Coby, director of digital advertising and fundraising for Trump's general election campaign recounted:

> There was a time at the end of summer where the president [then candidate Trump] did four policy speeches in like a week and a half period, very short period. That was actually right after we just proved through our [Facebook] measurements that Trump talking about issues and vision and [how] he thinks these things are going, the whole message and positive approach, moved every single demo [demographic] in our direction versus talking about Hillary and talking negative. That immediately spurred the campaign to act and he went and did a bunch of policy speeches. I'm sure they were already working on those things. I don't think this was the sole decision to get that to happen, but I'm just saying that's one way that we saw the data was saying x and then we acted.

As Coby pointed out in the quote above, assessments of public opinion via Facebook were not limited to the blunt subject of that site's broad user base. These quantitative assessments of how Facebook users, across different groups of similar users, reacted to policy messaging informed campaign messaging strategy. Because of the data available about each user of the site, campaigns were able to see how messages resonated with *specific* audiences, which allowed them to create ads designed to appeal to particular groups of users. For example, campaigns might begin with particular groups as identified by Facebook (see Figure 2), further refining groups based on voter-file data, paying particular attention to geographic regions. Campaigns then targeted these groups of users, with ads or organic posts, and assess engagement metrics

from these segmented groups of users on Facebook. This shaped campaigns' Facebook communication, but also broader messaging appeals.

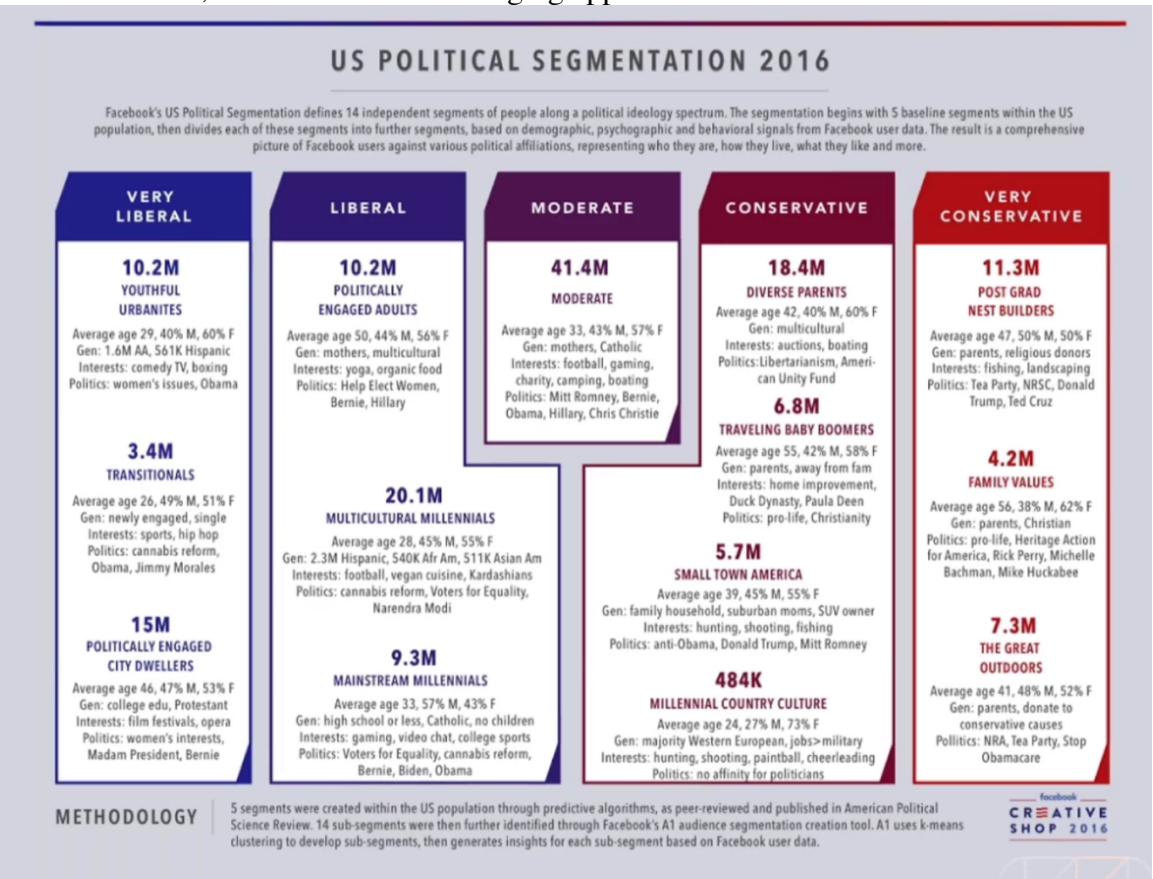

Figure 3: A political advertising sales pitch from Facebook, obtained by Buzzfeed News[18]

As part of this effort, campaigns also made use of Facebook's ability to build look-a-like audiences. This means that campaigns can upload their voter file to Facebook's ad platforms and specifically target users who "mirror" – or share key characteristics like age, location, and partisan preferences – selected individuals in the voter file. As Chris Wilson, director of research and analytics on the Cruz campaign noted, "You can get almost a 90% match on Facebook now through analytics. Even though I may not know that you personally got an ad, I know I'm serving to you. Facebook has expanded their platform enough that I feel very comfortable from a targeting perspective, whether I'm using either Facebook or Google." The use of this tool

[18] https://www.buzzfeed.com/alexkantrowitz/facebooks-2016-election-team-gave-advertisers-a-blueprint?utm_term=.ah10VXneR#.xkXqexJKr

allowed campaigns to make quantitative assessments about public opinion based on engagement metrics from Facebook, which were then exported and applied to similar types of voters outside Facebook.

As is obvious from the analysis so far, Facebook played a particularly key role in campaigns' ability to assess public opinion. Because of the wider audience, as well as the affordances of the site, campaigns' perceived Facebook as a way to reach the broadest swaths of the voting public (see also Kreiss, Lawrence, & McGregor, 2017). On the other hand, sites like Twitter and Reddit offered campaigns a way to tap into motivated supporter networks or users at a particular event, which allowed campaigns to learn from particular publics. As Wilson, a veteran pollster who worked as on the Cruz campaign noted:

> Anyone who is active on Twitter or active on Quora or active on Reddit is probably not a persuadable voter. They're a very specific type of voter that is on there for a reason. I think they have very different uses in modern politics. Our primary use for Twitter was geo-targeting around debates or geo-targeting around events, or targeting of specific individuals or entities …

Particular social media sites were used to assess certain publics, which makes sense given that we know campaigns engage in platform-dependent communication strategies (Kreiss, Lawrence, & McGregor, 2017).

Examining opponents' metrics

Campaigns used social media metrics around their own pages or communications to gauge public opinion, but they also monitored what worked for *other* campaigns by assessing opponents' social media metrics. Echoing what professionals from other campaigns said, Hector Sigala, social media director of the Sanders campaign, described auditing competitor's social media metrics:

> We probably used about, by the end of the campaign, we tried out like a dozen different analytic sites and we ended up going with one company called Quintly who provided a ton of stats for us. And not just for our platforms but for many candidates' platforms. So their profile on Facebook, on Twitter – we were just able to analyze dozens of people from the Democratic side, the Republican side and see what other people were doing that

> was working well that we weren't or what we were doing that was working well and try to find out why it wasn't working for other people so we can kind of stick with that.

This means that, in some cases, campaigns were not just engaging with attitudes and behaviors from their own supporters or networks. In looking at "what worked" for opponents vis-à-vis social media data, campaigns extended their measurement of public opinion beyond the reach of their own social following. What campaigns learned about the public through these metrics was also shaped by qualitative readings of opponents' social media posts.

Qualitative data, instrumental uses

As described above, campaigns certainly relied on quantitative social media metrics to understand the public, as part of their "straightforward, manifest use of numerical data" (Herbst, 1993, p. 29). But my interviews also revealed that campaign strategy was informed by qualitative readings of social media data. For instance, take the above example of campaigns using quantitative metrics to infer public reception to messages from other campaigns. This was paired with qualitative impressions about how these different strategies worked. "It's like, if Ted Cruz had a really good day, we would go and see … look at all of social media and see what he was doing that day,' said Sigala, of the Sanders' campaign.

"Taking the temperature of the room"

For all the metrics available to the campaigns, qualitative and routine readings of social media also shaped how campaigns understood public opinion. One theme, often repeated verbatim across interviews, was that social media allowed campaigns to "take the temperature of the room." Some of this was informed by the type of quantitative metrics described earlier, but campaign professionals also regularly read things like Facebook comments and Twitter replies to take the pulse of public opinion. "We would use social media, obviously, to take the temperature of the room," said Chris Maiorana, digital strategist and chief technology officer on the Huckabee campaign. The campaign professionals I spoke with described routine readings of social media posts. In some cases, these tasks were assigned to specific members of the digital

team, who produced reports that were shared with other teams on the campaign. As Vince Harris, digital director of the Paul campaign described:

> Most campaigns spend a lot of time looking and replying, and they will use their digital firms like my company to be replying back and communicating with people. I think a lot of times that the politicians get obsessed with the comments too, and they will disproportionately put emphasis in the campaign on how people are commenting back and what people are saying.
>
> Now that said, if you're actually bringing people onto your Facebook page who are tied to the voter file and they're your type of voters, and they're the ones commenting then you should care about what they're saying. If you built a Facebook page properly, and you know that the people commenting are real voters, and they're not trolls or something, then you should pay attention to what those people are saying as a form of public opinion.

Harris is a veteran in the field of digital politics and has worked on many campaigns, including briefly, Trump's general election campaign. His quote echoed what I heard from other professionals in campaigning: Often the candidates themselves read comments and replies, which shaped their understanding of public opinion.

Susan Herbst's *Reading Public Opinion* and in Richard Fenno's *Homestyle* both demonstrate how qualitative and impressionistic interactions with constituents shape what politicians view as public opinion. Almost all campaigns likened social media "listening" to these sorts of interactions, almost in a nostalgic fetishizing way. Campaign professionals read comments and replies daily, which shaped instrumental work like converting people to volunteers or garnering donations, but also overall impressionistic views of how their candidate was doing in the race. Many also mentioned that these readings informed, or reinforced, digital strategy. As Coby, of Trump's general election campaign said:

> So, [to find out] what [people] care about, honestly, one, you listen to the conversation and social plays a role in there. It's helpful to read through comments … That data is extremely helpful to inform what people care about, what they're worried about. We have staff where that's their whole job, to a) respond to those, b) receive those, and c) put together reports to help inform us.

Understandings of public opinion gleaned from reading posts, comments, and replies were shared alongside metrics up the campaign command chain in meetings, directly to campaign managers.

It's worth noting that campaign professionals themselves read posts, comments, or replies on social media. Companies that promised to automate "social listening" or provide sentiment analysis reached out to campaigns, but with few exceptions, these were not routinely favored by campaigns. "Those things were really cool, but we realized we just didn't need them because that was our job 24/7 to look at this stuff and just really be in tune with it," said Sigala, of the Sanders' campaign. "There was nothing scientific about the way we read polls and comments. There wasn't some cross tab on comments and stuff." The Clinton campaign, who did invest in social listening software, also described how staffers created "alter ego" Facebook accounts in order to access social media spheres to which they did not necessarily belong. Jenna Lowenstein, digital director for the Clinton campaign, described the campaign's approach to tapping into social media posts from the public: "So for [tracking social media posts] really technology and just human beings spending time trying to find conversations they weren't aware of where to track."

Listening to supporters

Like the listening tours or small meetings described in Herbst's and Fenno's accounts, my interviews revealed that social media provided candidates and campaigns access in particular to their *supporters'* opinions, which informed messaging strategies. As Sigala, of the Sanders campaign, said:

> You could [check in] on Facebook and Instagram and everywhere else and Reddit too, you can kind of engage how your supporters are feeling about stuff … And that was really one of the best gauges, now that I think about it. When we put something out, or we're getting feedback or even ideas or planning a big roll out of something. We gave them kind of the inside scoop there and were able to see what the reaction would be based on that.

Several campaigns reached out to groups of "hardcore" supporters on social media, via Reddit pages or Facebook pages or lists maintained by the campaign, to test messaging among their base. Campaigns also paid particular attention to conversations in those groups for indications as to what issues their supporters cared about deeply. For example, Maiornana worked on the Huckabee campaign in 2016, but has worked for the governor for years. He recalled how social media comments about Kim Davis, a county clerk in Kentucky who claimed "religious liberty" and denied marriage licenses to couples in the wake of the U.S. Supreme Court ruling on marriage equality, informed strategy:

> And we've done this for him since he's been on social media where we read the comments and we read all the messages, and it's exhausting, but it does give you a good finger on the pulse of what things are going on so that you could see things building in the messages back to us or the engagement rates about the Kim Davis issue, religious liberty. And so, we kind of reacted to that and tried to do like a religious liberty tour.

Campaigns perceived that by using social media to identify issues that were important to supporters, and then acting on them or communicating support, they could improve their standing in the race. As Maoriana of the Huckabee campaign recalled, social media readings were used "… to find the hot button issue that will allow you to move up in the field, really, on a daily basis." Reading social media messages from supporters informed campaign messaging, as well as strategy more broadly.

Candidates read social media

As noted earlier, candidates themselves, to varying extents, read social media posts, comments, and replies. For example, professionals from both the Sanders, Paul, and Cruz campaigns spoke of their candidates reading social media comments or replies frequently. While they noted that these readings might not necessarily shape a candidate's views of public policy, social media posts did inform candidate's impressions of public opinion. Throughout my interviews, it became clear that these social media readings extended to current office holders as well. I chose to interview professionals working at the presidential level because they have deep careers in digital politics, including outside campaigns: Many of them worked for office holders

as well. In particular, social media responses may influence politicians' individual impressions of public opinion more so than something as large and multi-faceted as a campaign. Jack Minor, deputy digital director for the Cruz campaign, noted:

> It's much different on the candidate level than it is on the campaign level … If you post something about the American Healthcare Act or healthcare reform, and all of a sudden you have 90% of your comments are people yelling for single-payer healthcare system, you might not post about healthcare reform again. Right?

Consistently, the professionals I spoke with noted the close attention elected officials, removed from the campaigning process, paid to social media posts from the public. But the professionals also noted the potential danger in officials having quick access, vis-à-vis social media, to opinions gleaned narrowly from supporters. As Harris, who worked on the Paul campaign in 2016, noted:

> It can also create some sort-of echo chamber where politicians get this instant gratification back from their own Facebook followers, "Oh, you did this bill. Congratulations," and if it's not a popular situation and you just see your own fans propping you up, that's a very dangerous situation. That can be dangerous for democracy, but it's good for vanity.

As my interviews revealed, campaigns added to their understandings of public opinion through routine, qualitative readings of social media posts, comments, and replies. It's clear that campaigns valued this measure of public opinion – they dedicated resources these understandings in the form of time, staff, and in some cases, software. Aside from the view that social media allowed campaigns to "take the temperature" of public opinion, campaigns also relied specifically on feedback from supporters, in the form of social media posts, to refine messages and inform campaign strategy more broadly. Insights about public opinion gleaned from reading social media posts were shared up the campaign ladder alongside other measures of public opinion. Candidates themselves read social media posts, which shaped their view of public opinion – a practice that extends beyond the campaign to elected officials' time in office.

Qualitative data, symbolic uses

This chapter so far has shown how campaigns understand social media using quantitative and qualitative measures for instrumental purposes – as functional data to inform campaign and communication strategy. But public opinion is a powerful rhetorical force as well. The next two sections focus on the ways in which campaigns deployed public opinion constructed from social media data. Qualitative forms of social media data – in the form of individual posts, comments or replies – were shared by campaigns to indicate their popularity or their focus on or success with certain issues.

Communicating support and enthusiasm

As noted earlier, campaigns were well aware of their ability to reach loyal supporters through various social media outlets. From these groups of supporters, campaigns identified "influencers" – those supporters with a large social media following and/or influential network – to amplify messages of support. Chris Georgia, digital director of the Jeb Bush campaign, spoke about the campaign's deployment of this form of public opinion: "We had a guy during the debates that was his only job. He would pull the best social media posts whether it was from us or others about us, and then we'd send it to our team, our digital volunteers to have them echo it, retweet it, share it, all that." Campaigns routinely re-shared, or signal boosted, these positive posts from the public, gathered across various social media, to symbolically evoke their candidate's popularity.

But in the same way, campaigns had to push back against news coverage that was based on social media posts. In the following chapter, I show how journalists use social media to represent public opinion in their reporting. This sometimes took the form of stories based around a hashtag or featured a series of individual social media posts as evidence of a particular sentiment in public opinion. For example, journalists used social media posts to bolster the claim that Bernie Sanders had a particularly enthusiastic base. But the Sander's campaign actively worked to influence their supporter's social media posts. In particular, people who worked on the

Clinton campaign expressed frustration about how this impacted press coverage. As journalists used social media to bolster claims of voter enthusiasm for Sanders in the primary period, Clinton staffers perceived election coverage to then convey that these voters were *not* enthusiastic for their candidate and that people voted for her only out of obligation. Christina Reynolds, deputy communications director for the Clinton campaign, describes the dynamic:

> But, all along our supporters were told, "You don't really like her," her supporters aren't as enthusiastic and so on, and I don't believe that came from specific polling. I believe that came from social media. Because, the truth is both Hillary Clinton and Donald Trump had equal disapproval numbers, right? If you look at their numbers you can't just say, "Oh, we decided because the polling says that people hate her." Well, yeah, she's a polarizing figure. There's a lot of the country that just has, after years of the hammering that she takes, has decided they don't like her.
>
> That's not the same thing, and that's not the argument they made against Donald Trump. Donald Trump supporters were thought to be enthusiastic. Ours were not. I always found that frustrating, and I think some of that comes from social media ... I don't think it comes from being on the ground.
>
> Yes, our crowd size was not always the same, although interestingly, we had a bigger rally ... The biggest rally on the campaign was ours, not Trump's. We had targeted some things where we weren't always looking to do big rallies, but they used anecdotal stuff and their view of what was happening online to throw this at our supporters that I always just felt was sad and not fair.

Reynolds goes on to say that the Clinton campaign actively worked on social media (mostly Twitter) to push back against what they perceived as journalists' rhetoric about the lack of enthusiasm among Clinton supporters gleaned from social media. These tactics involved sharing posts from supporters, but in the end, Clinton staffers expressed frustration that they were not able to convey this effectively. On the battlefield of public opinion, campaigns deployed social media posts from their supporters to influence the public, oftentimes through attempts to shape press coverage.

Managing public comments

Campaigns also actively worked to manage what replies or comments looked like across social media platforms. For some campaigns, this meant deleting comments – some for outright

incivility, but also sometimes for not being supportive. Georgia, who worked on the Bush campaign, related that digital team averaged about 200 engagements a week with people in Facebook comment sections, in the form of replies and likes. He explained:

> First and foremost, whenever you do that [like a comment from a supporter] it pops that comment up to the first one at the top of the comments so that way there was no negative comment that was going up there. There was something positive. Second, we would hunt through and try to find folks that were from the early states who we felt like we could build more of a personal relationship with them and make them more endeared to Jeb.

Campaigns engaged in replies or comments to shape the nature of social discussions about the election. Campaigns inserted counter-points, especially to negative comments, in attempts to steer the conversation substantively, but also because they perceived that a comment with a reply from the candidate's own Facebook page would be prioritized by the Facebook algorithm, such that more people would then see it. As Coby, of the Trump campaign said, "…social media is just where the conversation is happening now. Being a part of that, listening to it, and helping to stimulate it are just must haves for a campaign." Beyond these individual replies or comments, campaigns also actively worked to shape what quantitative measures of public opinion, derived from social media, looked like.

Quantitative data, symbolic uses

Shaping public opinion

In part because of the extent to which journalists relied on social media to report public opinion, campaigns sought to actively shape what public opinion on social media looked like. Sometimes the battle to influence journalists' perceptions involved re-sharing tweets from supporters, as described in the previous section. Recall that campaigns maintained extensive lists of their supporters on social media, especially those who were influential in certain networks. Campaigns also used those networks to manipulate what quantitative public opinion looked like. For example, the Sanders' campaign had a strong working relationship with the large sub-Reddit group of Sanders' supporters. If the campaign wanted a particular hashtag, or issue, to trend, they would reach out directly to these influential and active supporters. As Sigala, from the Sanders'

campaign, noted, "And that's one of the instances where we were able to tap into the network of supporters and be like, 'Hey guys, I know this really big thing happened and there's a lot of hashtags that are trending right now about Bernie and how we're are still with him, but let's get back to the issues and let's talk about this Cost of Living Adjustment.'"

The Trump campaign adopted a similar method during the general election period. From their extensive text message list, people's phone numbers were matched with their social media profiles. The campaign then identified the top 10% of users with the highest influence in terms of follower counts and their ability to drive social media conversations. These users were invited to join the campaign's rapid response team, "The Big League Trump Team." As Coby, of the Trump campaign, said:

> Basically, during the debate we were sending a text out to this small group every three to five minutes. Because text is the fastest most direct way to communicate, it was extremely powerful. Those pieces of content we sent out, were getting up to 500% additional increase in reach [on social media] relative to everything else. Trump had a big footprint, but then we were behind the scenes kind of putting gasoline on all of that. When you are multiplying from 10 rather than one you are going to be able to really grow exponentially.

The use of social media to shape public opinion is particularly important, as the next chapter in my dissertation details how the press relied on social media metrics – like a hashtag being trending – as an indicator that a particular issue was important to the public. Hashtags motivated news coverage, yet these metrics were often directly influenced by the campaigns themselves and did not organically materialize among groups of voters, as press coverage intimated.

Communicating popularity

Campaigns also communicated social media metrics of indicators of popularity, especially in the wake of media events like debates. During these events, campaigns perceived that more of the public was engaged on social media. This made campaigns more confident in what they could derive from this data for instrumental purposes, but the broader public engagement during those events lent added symbolic weight to metrics. Tim Miller, deputy

director of communication for the Bush campaign, explained the role social media metrics played in shaping evaluations of debates:

> Around the debates, there also was a kind of interest in this data, and pushing positive data points out to the media, social media data points out to the media, impacted the post-debate who won, which was just as important as the actual debate itself. Right? Where we would see, you know, sometimes the evening of the debate, where you're asking voters what they thought about it, it could change dramatically 48 hours later, right, and to who was having a good debate, and who didn't based on what the pundits on Fox [News] were saying about who won. We were able to quickly turn around information that said, hey, the biggest moment of the night on Google was when Jeb said this. That gave these pundits, who were just looking for anything, to justify their opinion, and sound smart, a data point that they could use. That was another way that we used Google, and Facebook, and Twitter.

These metrics shaped how journalists evaluated candidate performances, and campaigns sought to influence that by highlighting metrics that were favorable to their candidate. Sigala of Sanders campaign said, "I remember our first debate, and it turned out that everyone was like, Bernie didn't exactly win this debate, but he definitely won the internet … We had the most Twitter retweets and most Twitter questions and most Twitter mentions and Facebook and our website just took off – this happened every single debate." But public opinion on social media did not match electoral preferences – Bernie Sanders may have "won" the internet, but Hillary Clinton won the Democratic primary. As Reynolds, of the Clinton campaign, noted, "You use it [social media metrics] as sort of an indicator. It's still a bit of an artificial indicator, and it was sometimes frustrating for us, because certainly during the primary Bernie supporters were generally speaking more active on Twitter than some of our supporters. I think it sometimes skewed the views of, or at least cooked the books a little bit."

All of the campaign professionals I spoke with described the work that went into building a strong following for their candidate on social media. Even though they found it more helpful to target whom they perceived to be persuadable voters, the raw follower counts on social media were important in their ability to symbolically communicate popularity among the public. As I detail in the next chapter, journalists reported quantitative metrics such as the number of people who liked a candidate's Facebook page and the number of people who followed a candidate on

Twitter or Instagram as indicators of popularity. So while campaigns used social media to target specific groups of voters in order to persuade or motivate them, they also understood the importance of these metrics, especially as they were taken up by the press. But, as Minor, of the Cruz campaign noted, these numbers are subject to manipulation:

> For the candidates, [having a large social media following] is a huge messaging point. It's something to be boastful about. A lot of them had the number right there on their homepage. They used that as a count of "their movement," their universe, their audience when they were doing media hits. I think it certainly is about the quantity, but it's also about the quality of those folks. You can fudge those numbers quite a bit, especially on Twitter.

None of the campaign professionals I spoke with talked about artificially swelling their raw follower counts, though it is possible to "buy" followers, made up of fake, or bot, accounts. Bot accounts are not associated with an actual human, and generate automated posts on social media, usually in support of a particular idea or political figure or movement. During the 2016 election, researchers estimate that nearly half a million bot accounts sent about 3.8 million tweets (Bessi & Ferrara, 2016). In campaign speeches and during debates, Trump often touted his Twitter following, though reports have indicated that a significant portion of those are fake, or bots[19]. In addition, follower counts may not accurately represent their political popularity. For example, both Trump and Ben Carson had healthy large social media followings long before they began their political careers with a bid for the nation's highest office.

Despite the ability to artificially inflate follower metrics with bot accounts or to build on follower metrics based on pre-political social media presences, these metrics were used by campaigns to communicate their candidate's popularity, especially after media events, like in this post from Carson's Facebook page (see Figure 3).

[19] https://fivethirtyeight.com/features/everyone-has-fake-twitter-followers-but-trump-has-the-most-sad/

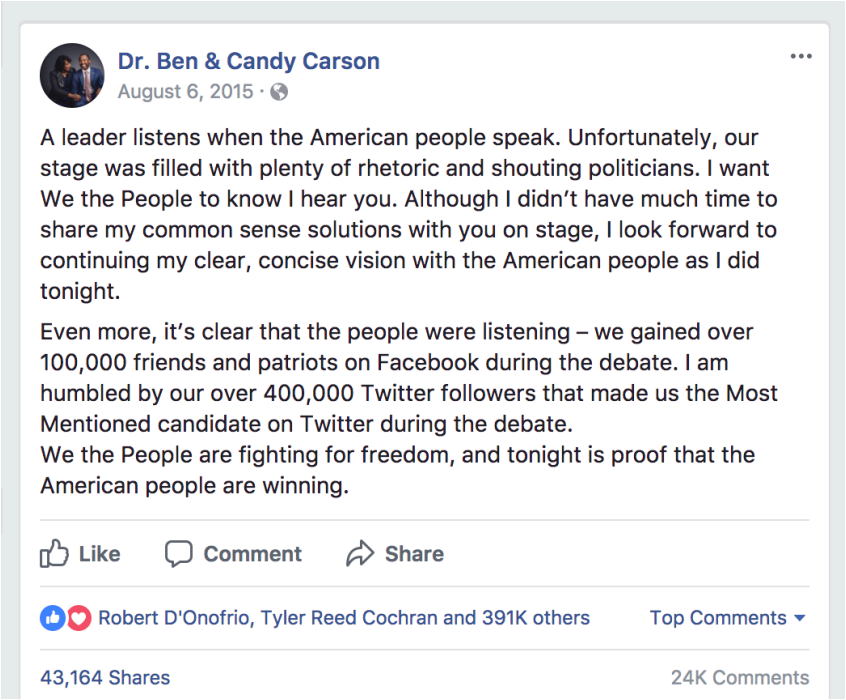

Figure 4: A post on Ben Carson's Facebook page after one of the Republican debates.

Reconciling social media data with polls

Survey-based polling is paradigmatic in elections – those campaigns that can afford it conduct in-house polls, and all campaigns rely on surveys done by polling firms and news media outlets to gauge public opinion. During my interviews with campaign professionals, I asked how social media data fit in with other sources of data about public opinion. Several themes stood out. Campaign professionals perceived that social media offer a window into what motivates voters, revealing something about the electorate that surveys cannot capture. They also noted the ability to learn about public opinion in near real-time from social media. But despite these potentials,

campaigns have not come up with a systematic way to incorporate social media data with survey data to paint a more complete picture of public opinion.

First, these professionals perceived that social media data offered the ability to learn about what motivates people to vote a certain way. "There's the power of numbers and physical analysis, and I don't think that ultimately the polling was wrong, but I do think that the trends that you can pick up on social can be helpful for understanding all of the various motivations that informed the way our country voted," said Matt Compton, deputy digital director for the Clinton campaign. This also played out in the emphasis that was placed on the promise of "psychographic" voter profiles based on Facebook data, as touted by Cambridge Analytica (CA). During the primary period, the Cruz campaign worked with CA, and campaign professionals credited Cruz's primary win in Iowa to the use of CA to target specific voters. Minor, of the Cruz campaign, reflected on what social media data capture differently as opposed to polling data: "By tapping into that kind of subconscious thinking and appealing to a deeper emotion that they might not even be aware of is much more effective than any other kind of voter contact you can do." CA purported to use Facebook data to assign people to one of 32 psychographic categories, largely based on the "Big Five" personality traits. Campaigns, like Cruz's, used this information to craft differential appeals designed to target people in these categories[20]. For example, posts about gun rights might broadly appeal to people interested in Cruz, but the most effective message or image could differ based on users' psychographic profile. The Trump campaign also contracted with CA during the general election but have since reported that they did not make use of the company's psychographic targeting[21].

The campaign professionals I spoke with, veterans of the political world, recognized that social media offer an imperfect measure of public opinion, but one that may reveal aspects of

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[20] For a history and overview on CA, see this story on Vice:
https://motherboard.vice.com/en_us/article/mg9vvn/how-our-likes-helped-trump-win
See also the important contextual skepticism about CA from Dave Karpf: https://civichall.org/civicist/will-the-real-psychometric-targeters-please-stand-up/

[21] https://www.nytimes.com/2017/03/06/us/politics/cambridge-analytica.html?_r=0

public attitudes that surveys struggle to capture. Conversations on social media, especially about politics, tend toward the negative. “I would say that the downside again, are that there's a silent majority I think a lot of the times,” said Harris, of the Paul campaign. “You see this with internet reviews on Yelp. You see this with the people commenting on Facebook that there's a more negative bent towards it. You would never think that Donald Trump would be President if you were just going off of Twitter, right?”

And yet, if the 2016 election taught us anything about the public, it’s that they were in fact motivated by anger. Alongside this, the political science term, identity politics, has made its way into mainstream rhetoric, often in attempts to explain the increasingly divided electorate. One place where people build and communicate their identity is on social media. Compton, of the Clinton campaign, spoke at length about how social media may be especially equipped to inform public opinion in an era of social identity:

> I think it is important for us to engage and work in the public sphere to recognize the tendency for conversation on social media, conversation on the internet writ large, to become overheated more quickly than conversations that happen in real life, or even conversations that happen on the phone. But I do think that there's a really important set of trends that have emerged for our politics over the past few decades where the importance of identity and the way that people conceive of their public self has become the most crucial thing that we can understand in terms of getting people to support an idea, support a candidate, show up to vote, take any sort of action. One of the places where they do that kind of expression, one of the places where people are claiming that identity, is through the social media channels. I certainly have a degree of apprehension about using internet conversations as a measure … but I do think that, to be effective in the work that we do, we need to recognize that that sort of identity thing is crucial, and that people are perhaps more open about their true sense of self on some of those channels than they are in public where they will endeavor to be sometimes more collegial, sometimes more polite.

Social media does not offer a representative sample of the U.S. electorate, and as these campaign professionals pointed out, political rhetoric on social media may be particularly negative. And yet, campaigns perceived that social media provide valuable data about how people construct and conceive of their political identity on these platforms. This data informed campaigns about whom to target and how best to target them with particular communication.

As highlighted earlier in this chapter, campaign professionals also noted the particular ability of social media data to relay near instantaneous public opinion – especially during debates or speeches. Harris, of the Paul campaign, spoke of the temporal utility of using social media data to measure public opinion:

> It's a quick snapshot if you are in a crisis communication situation or there's a big event like a debate or something. I say getting public opinion back instantly versus traditional surveys and whatever, which take hours and days to weeks. This is a very instant thing so it's very helpful.

In a variety of forms, social media provided campaigns – and the press, as covered in the next chapter – speedy access to public opinion. Also, to specific opinions – as described earlier, campaigns shifted strategy based on social media reactions to particular moments in debates. This provides more nuance than many survey polls are able to assess.

And yet, for all the promises that social media bear for understandings of public opinion, campaigns had no systematic approach for incorporating social media data into other forms of public opinion data. As detailed in this chapter, every campaign used social media, in a multitude of ways, to understand and represent public opinion. As many professionals noted, an increasing share of campaign resources were dedicated to social media data and analytics, perhaps none more so than the Cruz campaign. Wilson, a veteran pollster who worked on the Cruz campaign, said:

> Most of the money that we invest in R&D is for the purposes of scraping social media. It is because you can learn more about a person through that than anything else … but I believe that you can get pretty close to knowing who a person is down to who they're going to vote for, what kind of car they're going to drive, or what kind of lettuce they're going to buy when they go to the grocery store just by with the data that exists on the market. At some point, you get to over-learning, and you have to guard against that anyway. I think, how many more pieces of data can we put on before we get to minority report and start figuring out and predicting to arrest you because you're going to murder somebody in a year?

To be clear: Campaigns, as well as consultancy firms, are spending millions of dollars on researching how to understand the public through social media. But for all the popularity in public opinion studies of poll aggregation and sophisticated models, none of the campaigns that I

spoke to had come up with a method to formally incorporate this valued data from social media. These emergent forms of public opinion were considered alongside stalwarts like focus groups and survey polls, but not in a systematic way that might be possible, especially with quantitative data. "So you have these sort of, different streams of ways to assess what the public is thinking: traditional polling, the data pulling, partially from social and also Google search," said Miller, of the Bush campaign. "I haven't yet come up with a good way to unite those together, although every campaign seems to use them together right?"

Modeling campaign uses of social media as public opinion

Throughout the course of the 2016 presidential election, campaigns used social media in a variety of ways to understand and communicate public opinion. These emergent forms of public opinion informed strategy and outreach, and shaped candidate communication that reflected representations of the public back to itself. I mapped these uses onto the theoretical model that I developed (see Figure 4). The upper-right quadrant represents the use of *quantitative* social media data to understand public opinion for *instrumental* purposes. This includes practices like using social media metrics to: assess public reaction to specific moments in the campaign, gauge the success of different messaging appeals through A/B testing, learn from look-a-like audiences, and examine opponents' strategies. Campaigns used quantitative social media data to further individualize communication and target increasingly narrow groups of voters, amplifying the trend of microtargeting. The upper-left quadrant of the model represents the *qualitative* use of social media data for *instrumental* purposes. Campaigns consulted social media posts to get a general sense of public opinion – to "take the temperature of the room" – as well as to hear specifically from supporters. The lower-left quadrant of the model shows how campaigns used *qualitative* social media data to *symbolically* represent public opinion. Campaigns shared social media posts from supporters to communicate support and enthusiasm for their candidate, often in attempts to garner favorable press coverage. In re-sharing social media posts from individuals, campaigns put a more personal – and public – face on

public opinion as compared with anonymous polls. Campaigns also managed public social media comments to shape the nature of conversation about their candidate. The lower-right quadrant of the model shows how campaigns used *quantitative* social media data to *symbolically* portray public opinion. Campaigns engaged in efforts to actively shape what public opinion on social media looked like, tapping their networks of influential supporters to do things like get certain hashtags trending and communicate popularity. Especially in the wake of debates, campaigns communicated favorable social media metrics in efforts to influence whom pundits declared "won" the debate.

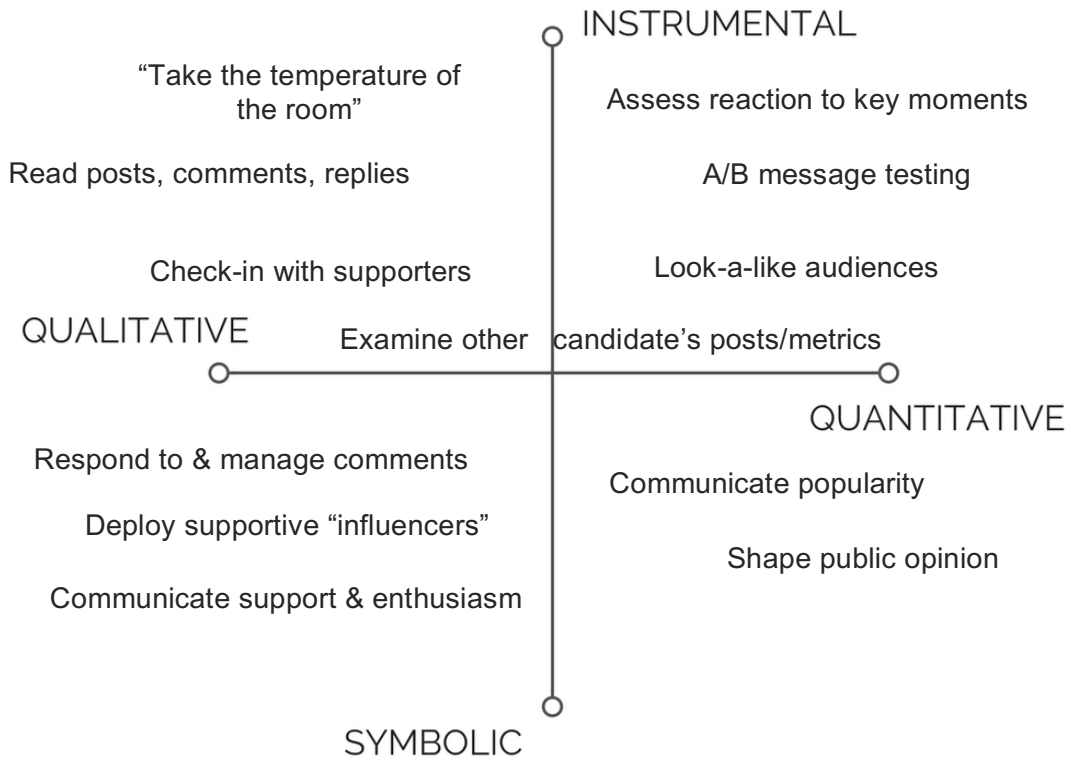

Figure 5: Campaign use of social media as public opinion

As my model shows, campaigns made use of social media to understand and communicate public opinion in a myriad of ways. "It [social media] is useful for figuring out what's going to motivate your most passionate supporters," said Compton, of the Clinton

campaign. He continued: “It is useful for understanding what is driving the support of your opponents, and for that reason it can become a really important barometer that helps with the tone and strategic choices and the tactical day-to-day for any number of campaigns.” Political elites’ use of social media to understand and communicate public opinion means that the public stand to play a more direct role in shaping campaigns’ and politicians’ perceptions of the public. Furthermore, the use of social media data to represent public opinion by politicians and the campaigns that work to elect them helps to legitimize social media as a source for and a form of public opinion.

Chapter 5: Results

"The Internet" speaks: Representing the public through social media and metrics in the press

Journalists have come to rely heavily on public opinion polls in their political reporting, and yet, news organizations may be ill-equipped to deal with the "increasingly complex landscape of opinion data" (Toff, 2017, p. 1). Further muddying this landscape is the proliferation and availability of social media data. In this chapter, I examined to what extent, and how, journalists use social media data to represent public opinion in their reporting. In analyzing news stories about the 2016 U.S. presidential election and capturing in their own words the routines and practices of journalists who take up the essential task of communicating public opinion to the public, I revealed these emerging dynamics with the aim of informing and improving future public opinion research and journalism.

In service of answering each of the following research questions, I turned first to a content analysis (n = 385) and then to an analysis of transcripts from interviews conducted with 18 journalists whose bylines populated the stories I analyzed. The content analysis stemmed from a random 50% sample of stories about the 2016 U.S. election in which social media was used, in a variety of ways further described below, to represent public opinion. In addition to this, I conducted interviews with journalists across multiple news organizations, to shed much-needed perspective on exactly *how* social media data came to inform their reporting on public attitudes in the election. I analyzed these two data sets in conjunction – news stories about the election and transcripts of interviews with journalists – across several dimensions.

First, in recognition of the relative novelty of social media data, I examined to what extent journalists disclose *methodological details* in their stories, and then turned to an analysis of the interviews, examining how journalists understood the challenges in analyzing and taking up these novel forms of opinion data. Next, I analyzed the news stories to uncover what types of social media data, categorizing along *qualitative* versus *quantitative* lines, informed public opinion reporting. In addition, my interview analysis sheds light on the newsroom practices that

inform the use of both qualitative and quantitative social media data in reporting. From this, I turned to an examination of how social media data is being used in political coverage, categorizing its use in service of *partisan scorekeeping* and *public opinion storytelling*. This analysis is complimented by a return to my interviews with journalists about how they understood social media data informing their reporting across these two aspects. Finally, I turned exclusively to the interviews to understand, through their own words, how today's journalists position social media data within the uneven and uncertain landscape of public opinion data.

Methodological details

My second research question asked about what types of methodological details journalists revealed when reporting social media as public opinion. My approach was to code for the presence of *any* methodological detail. I adapted the codebook to reflect that the mention of a hashtag being "trending" counted as a methodological detail. Many stories centered around a hashtag, but absent the note that they were trending, there was no indication in the story as to why this particular hashtag merited coverage.

In all, just over half of the stories in the sample (50.4%, n = 194) disclosed *some* methodological detail. This ranged from noting that a hashtag was trending to disclosing the source of the data (i.e. "according to data provided by Facebook"), or the source of the analysis (i.e. "according to analysis by Zignal labs"). In rare instances, journalists included a note like the one in a CBS News story:[22] "The numbers, of course, provide only one data point - and it's one which doesn't indicate whether the Facebook interactions were positive or negative, and there is no concrete evidence that social media stardom will translate into votes." However, this type of nuanced distinction was not common. Many stories focused on numbers released by social media companies in the wake of a debate, and while these stories often disclosed the source of the data, they did not take steps to caution readers against relating quantity of likes, follows, or mentions with electoral support. In fact, some stories doubled down on what might be inferred from social

[22] http://www.cbsnews.com/news/low-numbers-for-jindal-in-facebook-engagement/

media data, like this story from MSNBC[23] "While these numbers aren't a perfect way to measure activism, they seem closer than most."

There was a sharp divide in methodological details across stories that used social media in qualitative versus quantitative ways to represent public opinion. Of those stories that included some methodological disclosure, more than 75.3% used social media, or their metrics, in quantitative ways. One example of this was a story from *The Washington Post*, with the headline "Trump is all the talk on Twitter in battleground states, but the focus on issues ranges widely[24]," which included a comparatively full reveal of methodological details, with a link to a full methodology from the lab:

> The data come from the Laboratory for Social Machines, part of the MIT Media Lab, which uses machine-learning algorithms to categorize U.S. election-related tweets into issues. The lab is providing state-by-state analysis on hundreds of thousands of publicly available election-related tweets for the first time. (More on their methodology here.)

On the other hand, 39.7% of stories that revealed methods used qualitative, vox populi style social media posts in service of reporting public opinion. Stories using qualitative representations didn't count social media metrics, instead featuring individual social media posts as vox populi reaction to political events, like this *USA Today* story: "Melania Trump says her husband was 'egged on' by Billy Bush[25]." The story revealed that the hashtag #BillyBushMadeMeDoIt was trending, explaining why it was featured, before showing a series of posts using the hashtag:

> Twitter users jumped on Melania Trump blaming Billy Bush for her husband's sexually aggressive comments about groping and kissing women. A #BillyBushMadeMeDoIt hashtag began trending soon after excerpts from the interview were made public.

A chi-square test revealed a relationship between stories disclosing methodological details and those stories that used quantitative representations of social media as public opinion

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23 http://www.msnbc.com/msnbc/the-pope-may-drop-political-bombshell-climate-change

24 https://www.washingtonpost.com/news/the-fix/wp/2016/10/19/trump-is-all-the-talk-on-twitter-in-battleground-states-but-the-focus-on-issues-ranges-widely/?utm_term=.16ec2964c9f6

25 https://www.usatoday.com/story/news/politics/onpolitics/2016/10/17/melania-trump-interview-cnn/92315100/?utm_source=feedblitz&utm_medium=FeedBlitzRss&utm_campaign=usatoday-newstopstories

as compared to those with qualitative representations: $\chi^2(1) = 52.47, p < .01$. More than 70% of stories that used quantitative social media data to portray public opinion disclosed methodological details, as compared to the roughly third of stories using social media qualitatively to represent the public (35.62%): $\chi^2(1) = 58.49, p < .01$.

While methodological details may not have been abundantly present in news stories, interviews with journalists, especially those whose jobs were dedicated to polling, social media, or data in some way, reflected the need for caveats in stories based on social media metrics. For example, as Evan McMurray, political social media editor for ABC News, noted:

> I don't see any sort of direct link between social media interest around a candidate and that candidate's actual performance at the polls, and I'm always careful to put that asterisk whenever we're talking about social metrics on an editorial level. Just because there have been a hundred thousand tweets about this person in the last 24 hours does not in any way mean that they're going to do well at the polls or they're going to end up mattering a way they don't right now.

As shown in the content analysis, many news stories did not reveal methodological details alongside the reporting based on social media. There were some exceptions, including *FiveThirtyEight*'s Facebook Primary[26], which disclosed the data source (Facebook) while also noting the limitation of Facebook data for electoral purposes. In February 2016, *FiveThirtyEigh*t launched the Facebook Primary (see Figure 5), a feature that mapped, primarily at the county level, users' "likes" of candidate Facebook pages. The Facebook Primary was a stand-alone interactive feature (it is still live), but it also spawned at least five stories on the site that parsed different aspects of the data. Below is a quote from the stand-alone feature on methodology:

> Anything seems possible this year, but, still, be careful how you interpret these numbers: Facebook likes are not votes. According to the Pew Research Center, 58 percent of American adults use Facebook. But this share is not a representative sample of the country — Facebook users are disproportionately young (although not as young as users of other social media networks), low-income and female. And the sample may be even more skewed because only some people on Facebook have liked a presidential candidate's page and because those pages haven't existed for the same amount of time. As "The Literary Digest" taught us in 1936, large but biased samples aren't so effective.

[26] https://projects.fivethirtyeight.com/facebook-primary/

Despite this careful disclaimer in the narrative, as one of the authors of the piece, Matt Conlen noted, colored political maps inherently bring to mind electoral maps, stemming from representative polling data or actual voting data. Conlen said:

> I think that there is something about having state level aggregation that as soon as we do that, you color a state one color or another, then it really gets to look like an electoral map. That's something that we ... The whole point of the article was like we're playing towards that idea, but we want to stay on the side of, 'Look, this is Facebook data. It's not anything about the election, and so all of these things need to be taken with a grain of salt too.'

The Facebook Primary still harkened to electoral maps, potentially visually undercutting the careful methodological disclosures within the narrative.

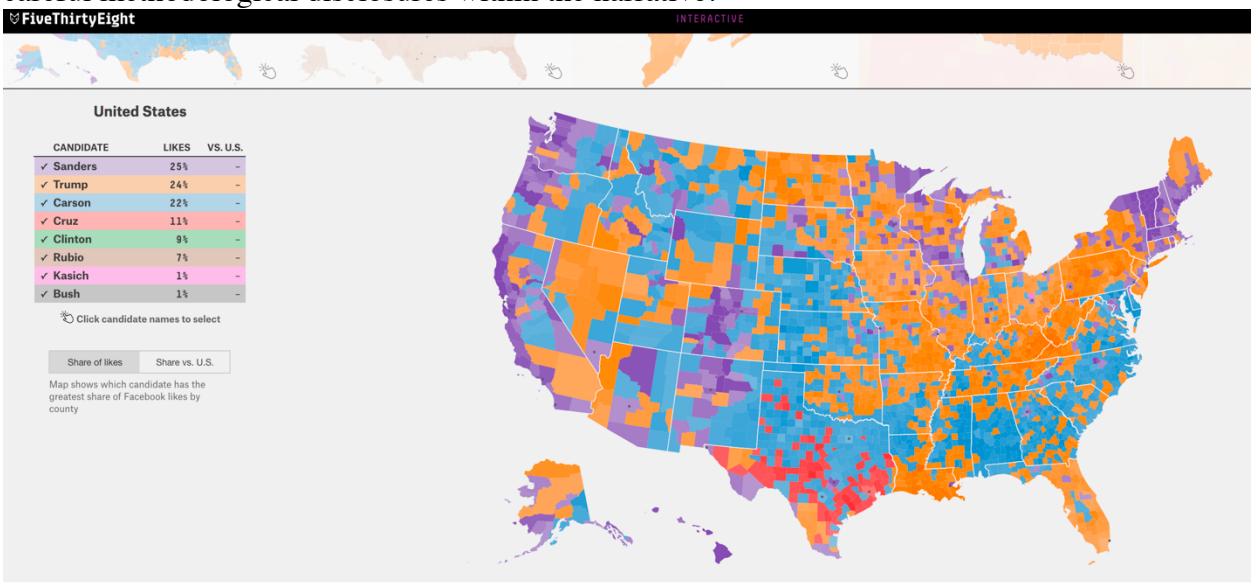

Figure 6. A screen shot of FiveThirtyEight's Facebook Primary. Each candidate is represented by a different color. The feature is interactive – users can click to examine to various states and cities. Using the table on the left, users can also select, or de-select, certain candidates.

Many of the journalists I spoke with used DataMinr to identify social media trends, quantitatively, as well as to pull individual social media posts to represent vox populi quotes. DataMinr is a company whose algorithm filters Twitter data into alerts, and it's pitched as a way to identify breaking news. According to its web site, DataMinr is used in over 350 newsrooms, including CNN, *The Telegraph, AlJazeera*, and *Mashable*. Despite its widespread use, none of

the articles I analyzed disclosed the use of this proprietary tool in their reporting. Jason Silverstein, of the *NY Daily News*, spoke about its utility and ubiquity:

> You basically just leave it [DataMinr] up all day, and it sends these alerts directly to you when something has been tweeted, that either has immediately started getting a lot of attention or seems like it starts to get a lot of attention, so in a way it's like DataMinr becomes like its own assignment editor for you, when something comes up, you know that all of your competitors are seeing it and you know that it's something to pay attention to. It sounds incredibly lazy when I say it now to another person, but a lot of it was one of the first things you do when you get in, in the morning is you open DataMinr and just leave it up and wait to see what comes up, so that was part of it.

In terms of its ubiquity, journalists worried about DataMinr's outsized influence, given how many news outlets use it in their newsrooms. Because it's algorithm is proprietary, it's not clear how exactly tweets are identified as being important or growing in engagement.

My interviews with journalists revealed a wide array in the extent to which they were skeptical about using data over which they did not have control. In the initial attempt to examine the methodological details disclosed related to social media, I aimed to parallel AAPOR's recommendations for transparency in reporting polls. For example, AAPOR recommends disclosing details such as the survey sponsor, the population being surveyed, the sampling frame, the sample size, as well as the method or mode of data collection[27]. I initially hoped to analyze stories for disclosures such as the source of the data, the method of data collection (e.g. how did the journalists get the tweets or Facebook posts), the number of posts analyzed, as well as the dates (or times) during which the posts were collected. But simply put, methodological details were not disclosed at a level anywhere near the way in which is standardized with respect to polling.

Some journalists, like James Hohmann at *The Washington Post*, were comfortable using analysis from a third-party company like Zignal. Zignal bills itself as a "media intelligence company"[28] offering real-time analysis of multiple media sources, including social media. During the 2016 election, Zignal partnered with *The Washington Post's* Daily 202 (edited by Hohmann)

[27] http://www.aapor.org/Standards-Ethics/AAPOR-Code-of-Ethics/Survey-Disclosure-Checklist.aspx
[28] http://zignallabs.com/

to provide social media analysis and graphics around the election. But other journalists were not as comfortable relying on analysis from private companies. Analysis from third-party vendors, like Zignal, is opaque – they do not make available raw data to back up their analysis, and the analysis itself is based on proprietary algorithms. But even journalists who did have access to data or analysis directly from social media companies were aware of all the things they did *not* know about the social media data with which they were working. Some journalists worked with data from Facebook and Google, neither of which provided journalists access to the site's Application Programming Interfaces, or API, by which to gather data themselves. These journalists especially expressed skepticism at data that came pre-packaged from the technology firm themselves. As Reuben Fischer-Baum, of *FiveThirtyEight*, said:

> One trick of using Facebook data is it's a private company's private data and everything we have, we're at the mercy of them. Traditional polling ... sometimes people get in trouble for it and then they all get scolded, but it has these industry norms and methods of transparency that make it so people can really dig into the polling and figure out what are the assumptions they're making, what choices they make. And that's a really important part of the polling history and those norms don't exist for Facebook data.

This sentiment highlights one of the central motivating ideas for my dissertation: moving social media into the ontology of public opinion so that norms and methods of evaluating and reporting social media data can be established. I found that methodological disclosures were shallow and inconsistent, appearing in just half of the stories that featured social media data to report public opinion about the 2016 election. As my interviews with journalists revealed, this failure to disclose methodological details might be due in part to the relatively recent accumulation of, and access to, social media data as a source of public opinion data in the newsroom.

Qualitative representation

In research question 3a, I asked to what extent, and how, journalists took up individual social media posts as *qualitative* representations of public opinion in their election reporting. The content analysis results showed that more than half of stories (56.9%) about the election that used social media to represent public opinion did so in qualitative ways – meaning that

journalists featured individual social media posts to provide examples of public opinion. I found that the press used social media as another method of representing vox populi representations of public opinion, confirming what Anstead and O'Loughlin found in their 2015 study of the UK press. In coding, quotations of individual social media posts to represent the public were coded as qualitative. For example, a story in the *Los Angeles Times*[29], was coded as qualitative. It featured individual Twitter posts responding to then-candidate Trump's rather infamous tweet of him eating a taco bowl[30], and also the impressionistic note "The Internet was not impressed." Qualitative posts were also used in a story on the second GOP candidate debate on September 16, 2015 in the *NY Daily News*.[31] The story featured individual Twitter posts to generally deride the debate, and in one case, to emphasize Republican primary candidate Carly Fiorina, one of 17 hopefuls at the time, as the winner. Most stories featuring qualitative uses of social media did not also report quantitative metrics (73.5%): $\chi^2(1) = 155.12, p < .001$.

In revealing the ways in which they chose posts to be featured as vox populi in their reporting, journalists often spoke of culling from their own Twitter feeds. For example, in mid-October of 2016, the *NY Daily News* published a story centered around Hillary Clinton's debate attire, which Twitter users noted looked awfully similar to outfits worn by Death Row Records artists like Tupac, Suge Knight, and Snoop Dogg (see Figure 6). The article played this up as a feature of her relatability – and electability. Brian Lisi, who wrote the story for the *NY Daily News*, said, "That was also starting to trend. Once you start to see that coming out more and more just on Twitter and Facebook, it looked to be that this was something that was worthwhile to write a quick story up on. I think literally this just came up in my own feed."

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[29] http://www.latimes.com/politics/la-na-trailguide-05052016-latino-twitter-to-donald-trump-a-taco-bowl-is-not-1462488203-htmlstory.html

[30] In the tweet, Trump wrote "Happy #CincoDeMayo! The best taco bowls are made in Trump Tower Grill. I love Hispanics!" The twee also featured a picture of him at his desk in Trump Tower, with a taco bowl in front of him. https://twitter.com/realdonaldtrump/status/728297587418247168?lang=en

[31] http://www.nydailynews.com/news/politics/twitter-reacts-gop-debate-article-1.2363683

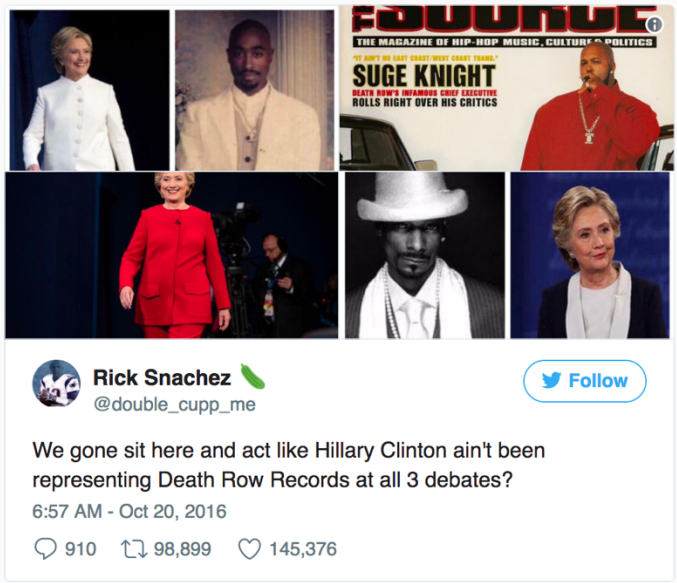

Figure 7. One of the tweets featured in news stories that compared Hillary Clinton's style to Death Row Records artists.

Many of the more well-resourced newsrooms used social media analytics tools like DataMinr or Facebook's Signal, which gives journalists access to a highly sorted newsfeed of public content from Facebook and Instagram, with the purpose of making those properties more central to journalists' reporting[32]. But even with these tools, some reporters found benefit from taking impressionistic readings of social media comments by the public. "We did a lot of analytics on Facebook and YouTube and Twitter and social media in general. But I didn't take as big a look at that as other reporters that were into that stuff," said David Jackson of *USA Today*. "Like I said, I took a non-scientific approach, I just read the comments and tried to figure out where people were coming from."

Almost across the board, journalists spoke of trying to represent multiple viewpoints when choosing individual social media posts to embed in a story. Some journalists only used tweets from verified users (those with a blue check mark next to their name), while others tried to identify particularly popular posts. "I might look for the one that has the most likes or I might

[32] https://media.fb.com/2015/09/17/introducing-signal/

simply look for the one that is phrased the most clear," said David Mack, of *Buzzfeed*. But journalists did not choose posts without rationale. They nearly uniformly spoke of reading many posts or replies, trying to get a holistic idea of the conversation (or reaction), and then choosing individual posts that they felt best represented the larger conversation.

Social media posts provided not only another way to quote people, but also, like polls, contributed to the norm of objectivity (e.g. Lavrakas & Traugott 2000) while still allowing journalists their "interpretive voice." In using social media posts from the public within their stories, journalists themselves did not have to criticize any candidate directly. This same dynamic is apparent in other analyses of news coverage of the 2016 election. "Adhering to the unwritten rules of American journalism, reporters typically refrained from criticizing Trump directly, relying instead on the voices of others," writes Thomas Patterson, in a recent report from the Shorenstein Center (2017). In my interviews, many journalists spoke of the need for having a "theory" for the story – for the reason these particular social media posts were embedded in a news piece. In this way, social media posts provided easy evidence to journalists' "meta-narratives" about a candidate: Trump as a joke, Sanders with grassroots support.

Stories in the wake of a debate tended to feature individual posts as vox populi in conjunction with social media metrics culled from the debate period. Journalists used social media in qualitative and quantitative ways to indicate public evaluation and reaction to media events, like the debates and conventions. Others have noted the power of social media (particularly Twitter) to set the news agenda (see Parmalee, 2014), as well as the ways the use of social media by journalists may shape media narratives. The journalists I spoke to acknowledged the power of social media – and the particular representation of public opinion that they saw on it – to shape news coverage and evaluations of political performances and fortunes. As Hohmann, of *The Washington Post* noted:

> And because everyone's talking on social media and there's this conversation on social media, it speeds up what used to take like three days. Sort of like have some definitiveness about who had won or lost the debate or what the key moment had been. I really do feel like this cycle, we knew it. Certainly by the next morning. But, I think by

> that night it was very clear. And so, I would lean in much further than anyone else at the Post. Like, the next morning, I would be able to say definitively, 'Bernie Sanders won the debate because of these online mentions and the focus was on this and the focus.' ... you know, like it's bad for Hillary Clinton for these three reasons and then I could aggregate, you know. Here are 30 really good tweets and use the tweets to bolster the argument.

In the previous chapter, I relayed how campaign professionals also saw social media as the new post-debate spin room. Campaigns actively worked to communicate their candidate's success, in part by sharing tweets from supporters in the space they understood journalists to be: Twitter. In turn, journalists took up these tweets, along with metrics, as markers of a candidate's success.

Journalists noted that, especially during high-attention events like debates, many more members of the public were engaged on social media, particularly Twitter, as they second screened. People second screen, or use an additional device while they're watching TV, to get more information about the news program they're watching but also to participate in a discussion and share their opinions (Gil de Zúñiga, Garica-Perdomo, & McGregor, 2015). One journalist described Twitter in particular as another extension of the public sphere. As Greg Krieg, of CNN, said:

> Again, if somebody's out there live-tweeting the debate, they're into it. They have some interest that's probably slightly above average. But you are getting less engaged people so you are getting a broader sense of the electorate on those big event nights, like the way you have more people watching the Super Bowl than there are typically of football fans on a random Sunday. So you have your cross-section. It's a good way of checking things.

Journalists perceived that social media roundups, particularly after media events like debates, did well in terms of engagement. Heather Leighton, of the *Houston Chronicle*, described following event hashtags on Tweetdeck, a social media dashboard that allows users to access Twitter, but also to organize their feeds into different columns. In this case, Leighton used Tweetdeck to search for tweets with the debate hashtag and then further filtered those by selecting only posts that were in English, were from verified users, and contained some type of "meme-style reaction" like a GIF (Graphics Interchange Format)[33] or video. "We like to screen grab them and put them into a slideshow, because that gives us page views … It takes a lot more

[33] GIFs can take many forms, but especially on Twitter, are most shared as short video clips that loop in repetition. For more on the cultural significance of GIFs, see Milter and Highfield, 2017.

time, but it's just monetization, and they [the newspaper] like to have money," she said. As she and other journalists noted – many of their readers are *not* on social media themselves or don't have particularly political social media feeds. Journalists saw featuring a collection of individual social media posts as a way to engage with those members of their audience. As Hohmann, of *The Washington Post* noted, "And, in fact, our market research, our focus groups and, informally, the people who actually were most excited and into our use of social media were older people. The older someone is and the less they used social media, the more likely they were to say that it was very helpful." Journalists perceived that stories containing a curated collection of social media posts were of interest to their readers, while also, in some cases, allowing them to structure the story in such a way as to increase revenue.

Not all journalists were positive about the use of social media as a source for vox populi quotes. And yet, journalists who engaged in this practice themselves saw a greater chance of misuse in the hands of other journalists – a sort of third-person (journalist) effect. Third-person effect is when people perceive media messages have a greater impact on others than themselves (Antonopoulos et al., 2015; Davison, 1983). In this case, the journalists I spoke with did not express concerns about inferring public opinion from their own potentially narrow Twitter feeds, but worried about that impact in the hands of other journalists. For example, many journalists noted that they mostly followed other journalists and political players in Washington, D.C., yet they still used their own Twitter feeds to "take the pulse" of public opinion.

Especially for purposes of drawing qualitative understandings of public opinion, journalists favored Twitter predominantly over other social media sites. In reflecting on the apparent favoritism toward Twitter, as opposed to other social media, particularly for vox populi quotes, Mack, of Buzzfeed, said, "I think there's a few reasons why people look to Twitter, and as I said it's because it's probably the place where journalists are the most comfortable and but also because of the quantity of content that comes through there as well. It's a much easier platform."

Quantitative representations

In addition to asking about qualitative representations, the second part of research question 3 asked to what extent, and how, journalists used social media metrics as *quantitative* representations of public opinion in their reporting on the 2016 presidential election. The use of social media metrics as quantitative representations of public opinion was common, appearing in 54% (n = 208) of the sample. Stories in this category featured quantitative or metric-based representations of social media as public opinion – the focus in this category is on the use of numbers. For example, a story on Mashable.com[34] reported quantitative data from Twitter (about candidate mentions) and Facebook (the amount of conversation about a candidate), both featured in visual graphs as well as in the narrative, to "predict" the outcome of the Iowa caucus, with the headline "In social media's Iowa caucus predictions, Twitter nails it." Another typical use was a story in *The Washington Post*[35] that reported Twitter data to show tweet metrics declaring Hillary Clinton the winner of a town hall debate on January 25, 2016, with the headline "Clinton Beats Sanders on Twitter during CNN Iowa Town Hall – barely." Stories using social media data to feature quantitative representations of public opinion were not likely to also feature qualitative representations. Only 27.9% of stories with quantitative representations also featured qualitative ones: $\chi^2(1) = 155.12, p < .001$.

The fact that social media data can be quantified played a role in its adoption among journalists. "One reason I think that [social media] gets written about as much as it does, is that it's quantifiable. When you have something quantifiable, it seems objective," said Andrew Kahn, of *Slate*. "People have a bias toward believing that a number, no matter what that number is, reflects some eternal, Platonic truth, and not the quirks of some weird technological situation." But some journalists perceived that quantified social media data may paint too simplistic a picture, obfuscating the complexities of what can be reasonably inferred from such data. Philip

[34] http://mashable.com/2016/02/02/social-media-iowa-caucus-twitter/?utm_campaign=Mash-Prod-RSS-Feedburner-All-Partial&utm_cid=Mash-Prod-RSS-Feedburner-All-Partial#QYxohi5Ez5qZ

[35] https://www.washingtonpost.com/news/morning-mix/wp/2016/01/26/clinton-beats-sanders-on-twitter-during-cnn-iowa-town-hall-barely/?utm_term=.1f628ca18034

Bump, of *The Washington Post,* was quite skeptical of the use of social media data in understanding and reporting on public opinion:

> I get it. I get why people find this appealing. It seems concrete. It's an actual number that you can point to, but then I think the aftermath of the election, in the extent there was people who disparaged the polls despite the polls being broadly accurate, particularly at the national level, shows that people [journalists] don't really understand how this data can be used to actually understand politics and what people are thinking.

Journalists also adopted social media in their reporting because these companies promoted and even directly contacted reporters to share candidate and media-event metrics, particularly after debates. This shared data shaped coverage, which is evident from my content analysis as well as interviews with journalists. As Silverstein, of the *NY Daily News,* noted:

> I just know that from a reporter standpoint, when the debate was done, not even when it was done, as it was going on and then after it was done and we were still picking up the pieces from it, the way that we were determining what are we going to break out, what are we going to write about off of this debate was largely looking at what kind of stories had become big on Google, what kinds of things had started trending on Facebook, on Twitter, what things were getting the biggest reaction.

In speaking with journalists and graphic designers who worked with data from social media companies, it became clear that companies like Facebook and Twitter are actively promoting the data from their platforms as a source of public opinion beyond just debate reaction. Teams at *USA Today*, *FiveThirtyEight*, and *The Associated Press* (AP) worked on stand-alone projects with social media data. As described earlier, *FiveThirtyEight* published the Facebook Primary, a stand-alone interactive that also fueled stories on the site. Likewise, *USA Today* partnered with Facebook to publish an election-long interactive: the USA Today/Facebook Candidate Barometer[36], which used weekly data about the number of likes, shares, and mentions of a candidate on Facebook, "showing who is trending up and down." *The Associated Press* hosted the AP Election Buzz[37], which used data from Twitter and Google to show tweet and search activity throughout the election. In the run-up to the features, reporting teams at these organizations had multiple conversations and negotiations about what kinds of data the

[36] https://www.usatoday.com/pages/interactives/fb-barometer/
[37] http://elections.ap.org/buzz

companies would provide. For example, Twitter offered to set up custom search APIs for news organizations that were going to use their data, automating the process by which a news outlet could query Twitter for tweets that mention a given candidate. This also allowed reporters to access raw data. In contrast, Facebook pulled data themselves and provided aggregate data to these reporting teams. For example, Facebook emailed weekly CSV files to *USA Today*. Mitch Thorson, who worked on the *USA Today*/Facebook Barometer project recalled:

> If I were to go back and say, I do think that in our experience these folks are interested in getting this data out there in front of people. It seems like they [social media companies] are always open to suggestions about what we're interested in, and they don't always seem to have a strong point of view about here's what we think you guys should be reporting on. They say, oh, here's what we have, is this interesting to you, can we get you something else?

In looking at social media as a whole, and what the sheer numbers and extent of participation across platforms can reveal about public opinion, journalists also reflected on what social media *did* indicate in the 2016 election. Those who looked at metrics, and especially those who parsed it in some way (sentiment, topics, etc.) perceived social media to show an enthusiasm for Trump that was not conveyed in polling. As Silverstein of the *NY Daily News* said:

> Everybody had 20/20 hindsight after the election, again as I said I didn't think Trump was going to win, I was very, very convinced he was not going to win. My hindsight is that when I look back and I realize there was one candidate who was the center of attention every single day and he commanded what Twitter was talking about, what Facebook was talking about, what was on cable news, just by virtue of being himself, and there was one candidate who couldn't do that – so of course [Trump] won. I find it amazing in retrospect that so many people in our social media-saturated culture couldn't see that, myself included, but that's the thing to pay attention to. It's not just people talking and it's not just people tweeting, it is a realistic evaluation of who is more popular and who has more attention and I guess you could say who is more important really, because he's getting all that attention then he's more important, that's just the way it works.

As other post-election analyses have shown, Trump did command the lion's share of media coverage throughout the election (Patterson, 2017). Nationwide polls consistently showed Clinton's lead, and they were correct in predicting her winning the popular vote. But, as I detailed in the last chapter, Clinton staffers were frustrated by what they saw as journalists use of

social media to convey American's enthusiasm for other candidates, but not for Clinton. As is clear, enthusiasm does not equal votes, but journalists perceived social media to offer a window into the public's passion for particular candidates.

Social media companies actively communicated and provided quantitative metrics from their platforms to journalists throughout the course of the 2016 election. Journalists mostly used these quantitative metrics in service of partisan scorekeeping, or horserace and strategy styled coverage, attempting to put one candidate, or party, ahead of another.

Partisan scorekeeping

In order to answer research question 4a about the use of social media to engage in particular kinds of election coverage, news stories were coded as to whether or not social media were being used in service of partisan scorekeeping. A category identified by Toff (2016) in his examination of the news media's use of public opinion, stories were coded as *partisan scorekeeping* when they employed social media to engage in horserace coverage or broader evaluations of political fortunes of politicians or parties. In these cases, social media metrics – or individual posts – were used to show public evaluations of a certain candidate or party or their campaign strategies. A majority of the stories using social media to represent public opinion did so in this style – 74.8% (n = 288). A story on FoxNews.com[38] portrayed Mike Pence as the winner of the vice-presidential debate, using Twitter data, under the headline "Pence dominated Twitter during vice presidential debate."

There was a strong relationship between election stories utilizing social media to engage in partisan scorekeeping with those that employed quantitative representations (62.8%): $\chi^2(1) = 35.81$, $p < .001$. For example, a story on MSNBC.com[39] compared Facebook engagement numbers from GOP candidate Rick Santorum's campaign launch posts to that of a post by Ted Cruz about the mobile game Candy Crush, under the headline "Cruz's gamer post got more traction than Santorum's big announcement." Half of the stories that used social media in service of partisan

[38] http://www.foxnews.com/tech/2016/10/05/pence-dominated-twitter-during-vice-presidential-debate.html
[39] http://www.msnbc.com/msnbc/ted-cruz-candy-crush-post-has-more-likes-rick-santorum-speech

scorekeeping employed qualitative representations of public opinion (50%). Another story on MSNBC.com[40] featured individual Twitter posts that used the hashtag #HillarySoQualified from Clinton supporters in response to Bernie Sander's comment that Clinton wasn't qualified to be President. Only 21.9% of stories using social media in service of partisan scorekeeping also used social media in service of relaying public opinion on issues: $\chi^2(1) = 9.99, p < .01$.

As my interviews also revealed, journalists routinely saw social media data as a way to indicate the popularity of candidates. Kahn, of *Slate*, worked on a feature that was updated weekly throughout the election, Twitter Power Rankings, which displayed the extent to which tweets from candidates were liked and retweeted. "The main thing that I wanted to convey with the visualization was how big the pie was, and how big each person's slice of the pie was," he said. "I wanted to convey as clearly as possible how much room the most popular Twitter candidates were taking up, and how much room the most popular tweets from those candidates were taking up."

In stories about the 2016 election, news organizations displayed quantitative social media data in ways that looked quite similar to how public opinion polling is shown. I spoke with several graphic and interactive designers in newsrooms who worked on visualizing public opinion data and how they tried to convey *different* types of data. Thorson, of *USA Today*, worked on visualizations for several election projects: the PollTracker, the Candidate Facebook Barometer, and Election Day results. While he felt comfortable visualizing direct comparisons about people's favorable or unfavorable responses to candidates from polls, he felt he had to make different choices when it came to displaying Facebook data:

> It was a design decision for us to show each candidate, what parts of the country are they getting the most engagement, and how are they doing this week compared to last week or previous weeks but a little bit less of that head-head. This person just got more likes, comments, posts, whatever interactions on Facebook than this person, seems like a little bit of a less honest and accurate representation of anything meaningful but the jury may be out on that a little bit.

[40] http://www.msnbc.com/msnbc/hillarysoqualified-erupts-twitter-after-sanders-criticism

And yet visualizations of social media data did mirror displays of polling data. News sites mapped Facebook likes of candidates to certain counties, recalling electoral maps. Stories featured bar graphs showing the number of Twitter mentions per candidate, positioning candidates as ahead or behind, similar to poll results.

Like polling data, many journalists saw the ability to dive into particular demographic groups as enhancing the value of social media data for understanding the electorate. As Paul Singer, of *USA Today,* noted in talked about their ongoing feature, the Facebook Candidate Barometer:

> If you click on any one of those candidate pages, there's little graphs in the corner that show the age distribution and the gender distribution of the conversation about those candidates, which was too subtle to be useful. I don't think the visual worked very well, but it provided some interesting opportunities for linking stories off of it, when it was clear that the vast number of people chatting about Bernie Sanders were males under the age of 30, and the vast number of people chatting about Donald Trump were over the age of 60. It tells you something. Again, not to be specific necessarily, but something meaningful, because it was trending over time. It was not even just that week, it was over a period of years.

Stories focused on the horserace did incorporate both polling and social media data, but for the most part, the metrics were not combined in analytical ways. One exception was *FiveThirtyEight*, which toyed with using data on candidate's share of Facebook likes, geographically, to help forecast early primary wins. "I know for a couple of stories, Nate [Silver] actually used a ratio of Facebook likes, like how many more Facebook likes as a percentage did Bernie have than Hillary as a metric for estimating how Bernie might outperform in certain states," said Fischer-Baum, of *FiveThirtyEight*.

As noted earlier, journalists relied on both quantitative and qualitative representations of social media to convey public attitudes about candidate performance at key media events, like the nominating conventions and debates. Social media metrics were often used to convey who "won" a particular debate. As McMurray, of ABC News, said:

> People also liked them as points scoring. If we put out a tweet that said, you know, the most tweeted about candidate during the Democratic debate was Bernie Sanders, obviously all the Bernie Sanders people wanted to retweet that because it proved they

> had, their candidate had the enthusiasm behind him. The same thing happened on the right. Ted Cruz happened to beat out Donald Trump for the most tweeted-about candidate during the debate. Ted Cruz people wanted to tweet that out, and very often the candidates themselves would tweet those out, because they wanted to prove that they had the enthusiasm.

While partisan scorekeeping stories featuring individual social media posts were curated by journalists (if at times aided by DataMinr), social media firms played a more active role in communicating metrics to journalists. "Twitter, Facebook, Google, are all pretty deliberate about trying to get mentioned in things, so during the debates for example, each of those platforms would send notes. 'Here's what people are searching for. Here's what people are tweeting about,' et cetera," said Bump, of *The Washington Post*. This echoed what nearly every journalist relayed to me about how social media firms actively worked to get their data into public opinion reporting about the election. As my analyses showed, these efforts paid off.

Public opinion storytelling

A multitude of election studies, including ones examining the 2016 race, have noted the news media's outsized emphasis on horserace style coverage, often at the expense of issue coverage (e.g. Cappella & Jamieson, 1997; Lawrence, 2000; Patterson, 2005, 2017; Toff, 2016). The second part of research question 4 asked to what extent, and how, did journalists use social media to portray public opinion about issues during their election coverage. Social media was not often used in stories to represent public opinion on issues – only 26% (n = 100) of stories used social media that way. Of stories that did use social media to convey public opinion on certain issues, 66% featured quantitative measures of public opinion, while just over half (55%) used qualitative data: $\chi^2(1) = 7.79$, $p < .01$. Stories using social media to relay public opinion on issues often also featured horserace style coverage (63%). A story on Salon.com[41] used social media to portray issue-focused public sentiment on Clinton under the headline "#WhichHillary?

41 http://www.salon.com/2016/02/25/whichhillary_twitter_trend_calls_out_clinton_for_hypocrisy_on_racism_wall_street_and_war/

Twitter trend calls out Clinton for hypocrisy on racism, Wall Street and war: After a Black Lives Matter activist disrupted a fundraiser, critics on Twitter condemned Clinton's double standards."

As my analysis showed, social media did not play a substantial role in informing issue-focused coverage during the 2016 election – but there were distinct differences in the way journalists did so along qualitative versus quantitative lines. Journalists wrote stories featuring collections of individual social media posts to convey public attention to certain issues throughout the campaign, notably the Dakota Pipeline (#noDAPL) and racial discrimination (#BlackLivesMatter). Many of these stories focused solely on a trending hashtag, but some did tie public attention to a certain issue, via social media, to more traditional issue-focused reporting. However, reporting on issues via social media in quantitative terms involves gaining access to large troves of data from these platforms, as well as the ability to computationally parse data. Perhaps because of this, quantitative representations of social media attention to issues stemmed mostly from the technology firms themselves.

ABC News partnered with Facebook to live-stream the general election debates. As AdWeek reported, "ABC News said … that its curated Facebook feed will feature Facebook Live streams from debate host cities, inside spin rooms and watch parties across the U.S., as well as commentary from anchors and correspondents at the network's New York headquarters, adding that Facebook users' comments, questions and conversations will be incorporated into its live coverage on the social network." As part of this partnership, ABC News' reporting team got metrics on the debates from Facebook shortly before they were released publicly. As McMurray, political social media reporter for ABC News during the election, recounted:

> We used [social media metrics] a lot in broadcasting, as kind of a bump. You know, coming in from a commercial we would throw up a graphic and say, "We're an hour into night three of the convention. Here are the big topics so far on Facebook," and we would just have a graphic. I would tweet them out as soon as I got them, usually from Twitter and Facebook, and I found they got a lot of engagement. People were generally interested in it.

Parsing public attention or interest to issues from social media requires more work than simple candidate-name searches. Journalists relied on, and reported on, analysis of issues in

social media conversations done by the social media firms themselves. Many journalists noted what a "blunt tool" social media metrics were for understanding candidate favorability, particularly with the unreliability of sentiment analysis. Building on this, some journalists saw promise in future uses of social media to understand what issues motivate the public. "Social media's information around issues can be much more illuminating, because I don't care as much about whether you're in favor of Hillary Clinton or Donald Trump," said Singer, of *USA Today*. "I'm much more interested to know why, and what's motivating you." Mining social media conversations for insights about public opinion on certain issues may be valuable for reporting. But, as of now, these analyses are conducted by social media firms and provided to journalists, making the disclosure of methods strived for in reporting nearly impossible.

Reconciling "the internet" and the public

Throughout the course of my interviews, journalists spoke of social media as another tool to understand the public, one that should be incorporated with other methods to understand the populace, like polls. "I think that the utility of the following of social media is it is an extra tool, where as a reporter you are always looking for new tool and without social media, you've got polls, in person interviews, and you've got, and this is at least one more to work with," said Voorhees, of *Slate*. With the exception of a few national outlets, many of the journalists I spoke with did not work at news organizations that conducted their own polling during the election. They saw social media as a way to complement, and sometimes supplement, polling data. As Jackson, of *USA Today,* said:

> You mention polls and one thing you have to remember is polling data, to me, is very suspect right now. Partly because a lot of media cut backs and one of the things cutting back on is money for research. People just aren't doing as many polls and the quality of them has suffered because of budget cut backs, quite frankly. Obviously, polling is another tool, and it's a tool people should be using but I think people should exercise caution with whatever tool they use and that includes social media.

But as with any new tool, there were inconsistencies in its deployment. Some journalists noted a disconnect in the newsroom, where more veteran reporters were not as keen to use social media

data in their reporting. Bump, of *The Washington Post,* did not mince words. He said of using social media to understand public opinion: "I would call it intellectually offensive. It is not representative of the population at large … It is sort of splashy in a way that should be antithetical to good journalism, and at no point in time did I find it actually useful or revelatory about the campaign itself."

As is clear in my content analysis, journalists certainly deployed social media to represent public opinion, but some saw how social media might be problematic for understanding the public. Several journalists perceived that social media data and polls generally appeared to be correlated, but were uncertain about whether parsing social media data could serve as a method to predict election outcomes. As Krieg, of CNN, said:

> Social media is an incredibly useful tool for taking the temperature of things but it's also not ... It can in some cases be a leading indicator, but I tend to think that it's a lagging indicator. I still think, fundamentally, you need context for this, and you need to talk to people, and you need to look at real polls that are done by professional pollsters, which for all the stuff that was going on after the election, turned out to be pretty accurate.

News organizations at the national and local level, representing broadcast, legacy, and digital-native outlets all used social media in reporting on public opinion during the 2016 election. Despite this, there appears to be no consensus on its particularly utility nor how best to incorporate social media data with other information sources about public opinion.

As noted earlier, the journalists I spoke with were self-aware about their own presence on social media, particularly Twitter, and how that might shape the very data they took up to understand the public. With few exceptions though, this did not stop them from using social media to inform their reporting on public opinion. Journalists reported drawing from their own timelines to cull individual social media posts for stories, while reflecting on their role in driving digital discussion. "You're asking me questions, like how do you use social media to report stuff," said Singer, of *USA Today*. "I'm like here is part of the problem, is we're now such active creators of the social media environment, that it's hard for us to really extract what's organic and what's just our ripple effect."

Twitter was the social media tool most mentioned by journalists, which is no surprise given what we know about the extent to which, and how, journalists use the platform (Lawrence et al., 2015; Mourao, 2015). In addition to that, Twitter became important because that's where Trump was – and Trump dominated the campaign (Patterson, 2017). Almost every single journalist – as well as every campaign professional – that I spoke with talked about how covering the 2016 election became just covering (or in the case of campaigns, reacting to) Trump. Campaigns' carefully crafted strategies were tossed out the window as soon as Trump tweeted something. His tweets also drove news coverage. What I show here is that people's reaction to Trump's tweets also drove new representations of public opinion through social media. In a passage worth quoting at length, Silverstein, of the *NY Daily News*, talked about this particular phenomenon:

> This was a Twitter election, Trump commanded the entire world's attention through his fucking Twitter account, you know. I thought it was like, the closest thing that anyone has ever come in the digital age to world domination essentially, like he tweets a message and everyone has to pay attention to it, it's crazy. There was the element of Trump being such an avid Twitter user and then Clinton trying to cut into that a little bit by giving him some attitude on Twitter, but it was always kind of like committee decided attitude, and then all of the journalists who were covering the election are on Twitter all day filing stuff directly from the rallies and the events, and you see people responding in real-time to everything, and it gives you a sense of which stories are bubbling up, which stories are really taking over the day's dialogue, and so Twitter was the single most helpful tool. I also used Reddit pretty extensively, the thing I would hold against Reddit is that it's much easier for people to just subsection themselves into these particular Reddit pages that they're interested in, whereas Twitter felt more like it was representing, as much as you could, what the masses in general were talking about.

It's of course worth noting only 21% of U.S. adults use Twitter (Pew, 2017) – if the site plays hosts to any masses, its political elites' masses: journalists, pundits, politicians, political professionals, academics. And yet, journalists relied heavily on Twitter when it came to using social media to portray public opinion. Some noted how users of the platform did not reflect the U.S. population at large, and many expressed a desire to further incorporate data from Facebook, which they viewed as more representative, into their reporting. As McMurray, of ABC News, said:

> I would say that there's a growing disconnect between what's talked about on Twitter and what's talked about on Facebook, and if I'm trying to pay attention to one thing right now, I think that's where it is. Oftentimes what's talked about on Twitter has little to no relation to what's getting big on Facebook, and people on Facebook interact with it in different ways … The Facebook [metrics] are much more difficult to track, and so I just don't think we have as much of a grasp on that, and so we end up focusing a lot more on Twitter, which is a lot more representative of I think the professional media industry, so I think we're getting a skewed version of what people are talking about.

Facebook did provide data analysis publicly around media events like debates, while also working with some news organizations, including *FiveThirtyEight* and *USA Today*, to provide data on engagement with candidate pages on the platform. Facebook reached out to *FiveThirtyEight*, as it did with other outlets, and offered up this large dataset if the news outlets could "do something interesting" with it. In these cases, journalists described a back and forth with teams at Facebook about what types of data the news outlets could access and how it might best be used. Fischer-Baum, who worked on *FiveThirtyEight's* Facebook Primary, reflected on the use of Facebook data:

> … but the reason that we thought it was valuable is we were a site that focused very heavily … on polling or has a central core trying to figure out what the public believed and we were interested in this idea of seeing if there are other sources of data that could get at those concepts. There isn't all this great polling available, if there are other ways of measuring national interests in certain things and that would be interesting to look at. I don't think we went into the Facebook Primary thinking that the real answer is gonna be super revealing. We knew they were talking about a Facebook population, and we wanted to make it really clear that it was not supposed to represent a survey of the United States. That the people on Facebook are not randomly distributed. But I do think, and this is sort of speculative on my part, we were maybe a little bit too dismissive of it as a data source.

Competition appeared to drive at least part of the extent to which journalists relied on social media to understand public opinion. Throughout my interviews with journalists, there was a sense that if other outlets used social media in reporting, then so too should they.

Conclusion

The results in this chapter stem from an analysis of news stories about the 2016 U.S. presidential election, which I complement with interviews with the journalists who wrote them. By putting journalists work product into conversation with their work routines, I was able to

paint a more complete picture of how journalists use social media data to understand public opinion and how that manifested in news coverage.

I found that journalists do use social media to report on public opinion, but that methodological disclosures are not the norm. When provided at all, disclosures did not go into the type of detail needed to allow readers to more fully understand this emergent representation of public opinion, which differs in important ways from polling. In their own words, journalists grappled with the new challenges that social media data bring to public opinion reporting. These include problems of representativeness and access, as well as the fact that journalists, ever present on social media, make up and shape the very public opinion they seek to represent. Journalists rarely disclosed details of how they came to choose individual social media posts as vox populi quotes, which made up the 50% of stories that featured qualitative representations of social media as public opinion.

In stories that featured individual posts, journalists used social media analytics companies like DataMinr or Facebook's Signal to find posts, although they also culled from their own Twitter feeds. Social media posts from the public were often used to convey public reaction to media events, like debates. In fact, journalists saw Twitter especially as a new post-debate spin room, where important narratives about the winners and losers of debate took shape. In just over half the stories I examined, journalists reported quantitative social media metrics to portray public opinion, overwhelmingly in service of horserace-style reporting. Journalists worried that in quantifying social media data, they might be conferring to their readers too much certainty about what this data can reveal about electoral outcomes. Especially around these quantitative metrics, social media companies actively marketed this data as a source of public opinion to news organizations and reporters, who took up the offer, even as they expressed doubts about what could meaningfully be inferred from the data.

The use of social media to convey public opinion in the news focused overwhelmingly on partisan scorekeeping, or positioning one candidate or party ahead of another. Public opinion storytelling that focused on issues was not a central use of social media data, but journalists did

tap issue-based hashtags to convey public concerns. Journalists saw potential in learning more about what issues people cared about, conveyed in social media posts. But most newsrooms are not equipped to take on these more complicated analyses, nor did social media companies share the raw data that might make this possible.

Finally, my interviews suggest what might be termed a third-journalist effect. Journalists worried about relying too much on social media data to inform their understandings of public opinion, but they perceived this mostly to be a problem for other journalists. Journalists over-relied on Twitter, and they acknowledge their own influence on the platform – but most still admitted that it shaped their understanding of, and reporting on, public opinion throughout the course of the 2016 election. In particular, journalists noted that they, as well as their colleagues, had highly curated Twitter feeds of political players and other journalists. And yet, they took to Twitter to get a sense of public opinion, while at the same time worrying about other journalists' use of Twitter for the same purposes. Third-person effect is strongest for those who perceive a message to be undesirable (Sun, Pan & Shen, 2008). Similar factors may be at play with journalists, who certainly don't want to see their objectivity as vulnerable to any sort of influence.

Chapter 6: Discussion

Nearly a year after the 2016 U.S. presidential election, the role of social media in our democratic process dominates the news. I began this dissertation shortly after the election, convinced of the importance of social media in today's hybrid media system, notably for the ways in which the public participates in their own representation of the slippery concept of public opinion. The concept of public opinion, through which individuals can be heard by political elites, and each other, is vital to democracy. But public opinion is socially constructed, forged by the methods and data from which it manifests, as well as how it is understood by political actors tasked with evaluating and representing it. As social media data is used by elites to understand and represent public opinion, the concept itself transforms. If survey methods formed a mass public, my findings suggest we are now in the early stages of a social public.

The means by which elites measure, generate information about, and represent the public necessarily shape what public opinion *looks* like as officials, candidates, and the press communicate with the public. As Herbst pointed out nearly two decades ago, "the social climate, technological milieu, and communication environment" (Herbst, 1998, p. 1) inform the means by which these impressions of the public are crafted. The rise of social media – more important than ever in the wake of the 2016 U.S. election – has changed how elites think about and assess public opinion. Social media posts written or endorsed by the public, and the metrics used to quantify these behaviors, become the raw materials of an emergent representation of public opinion. As I have shown, the powerful image of public opinion, once dominated by polls, now also includes social media, conveyed to the public through elite communication.

Social media offer access to more *public, relational,* and *temporally sensitive* conceptions of public opinion. First, all social media posts and actions are in essence, public. Facebook posts and comments, tweets and replies are produced to and for an individual's perceived audience. Unlike anonymous survey questions, these political opinions are expressed publicly. Furthermore, political expressions on social media are relational. These digital traces chart interactions between networked individuals, and the text of social media posts must be understood in the context of their relation to others. These opinions are formed through traceable social (media) interactions, as opposed to the isolated opinions captured in polling. Finally, social media make possible more temporally sensitive conceptions of public opinion. Social media data, like recurring survey questions, can be used to chart public opinion across time or to provide a snapshot of public attitudes. But social media data capture individuals' real-time expressions and reactions to news events, as they unfold. In a time when news cycles are measured by minutes, near real-time data with the ability to correlate to specific statements by political actors on public opinion is valuable. Social media data not only provide a means to expand conceptions of public opinion, particularly along the lines of publicness, relationality, and temporality, but also to introduce new challenges for understanding the public.

This dissertation assessed the extent to which, and how, social media plays a role in elite conceptions of public opinion. I asked: *What role do social media play in how elites understand and represent public opinion?* I turned to political elites to explore how their understanding of public opinion guides their work, how their efforts shape what we know about public opinion, and crucially, what role social media play in those processes. I interviewed 13 campaign professionals, some twice, who worked on 2016 U.S. presidential bids to understand how social media shape what they know about the public

and how that informs campaign strategy and communication. I found that campaigns used quantitative measures of social media data to further microtarget messages to the public, as well as to assess public reaction to key moments in the election process. Campaigns turned to qualitative readings of social media posts as well, which are used to get a sense of general public opinion, but also to gauge specific opinions of supporters. Campaigns also deployed social media as a symbolic representation of public opinion. This took qualitative forms, like re-sharing public posts to communicate support and enthusiasm for their candidate with hopes that this may influence press coverage. Campaigns tapped into supporter networks to shape public opinion through attempts to manipulate quantitative social media data, which could again be shared to communicate their candidate's popularity.

I spoke to 18 journalists who covered the election about the role social media played in how they understood and reported on public opinion, while also examining their coverage to document what this looked like in practice. I found that social media data shape public opinion reporting in a number of ways. Journalists used individual social media posts as new sources of vox populi quotes, especially to showcase public reaction to media events like debates. Social media firms actively marketed quantitative metrics as public opinion to journalists, who reported these metrics mostly in service of positioning candidates or parties in the horserace. Journalists worried that quantification of social media metrics may confer a misleading certainty about social media's relationship to election outcomes. Journalists were also concerned about an overreliance on social media – especially Twitter – to understand public opinion. But they perceived these concerns mostly impact other journalists: a third-journalist effect.

MAJOR FINDINGS

I've argued that understanding opinions expressed on social media are inherently public – and that this is key to properly assessing them towards understanding public opinion. Social media actions and posts are markers of individuals' social and political identities that they *choose* to share publicly. In contrast, answers to survey questions indicate individuals' opinions that they are *asked* to share privately. This invites a debate between the normative value of private versus public attitudes and behaviors. Rather than prioritize one over the other, we can use social media to observe the social formation of public opinions, which may then be used to understand privately espoused opinions. My interviews indicated that political practitioners and journalists mostly believe social media to shed light on private opinions, suggesting the need for a keener understanding of the public nature of opinions expressed on these platforms.

Also, key to the social formation of public opinion is relationships, which underpin political expression on social media. What one chooses to share publicly on social media is also informed by who one perceives the audience(s) to be. Furthermore, social media offer a means by which to observe some of the interactions between individuals that help to form public opinion. As for interactions between lay people, I found that campaigns and journalists rarely tapped these conversations as markers of public opinion. However, social media also brings political actors and lay people into the same spaces, allowing us to observe the relationship between elites and the public. Campaigns and journalists alike took to social media to assess public reaction to elite messages, shedding light on the impact of elite messaging on opinion formation.

I've argued that social media bring temporal sensitivity to the concept of public opinion. Campaigns used data from social media about distinct moments in the campaign to inform instrumental and symbolic uses of public opinion. Journalists also looked to

social media for their temporal sensitivity. On Twitter, journalists saw narratives about winners and losers of news media events like debates take shape near instantaneously, formed through real-time public reaction.

But with these new possibilities come new challenges. My results indicated that neither campaigns nor journalists have come up with any formal means by which to integrate new insights on public opinion from social media into the still dominant ones informed by surveys. Other scholars have bemoaned the failure of the press to properly disclose relevant polling details, and I found the same with regards to social media. When journalists used social media to represent public opinion, little information was given about the sources and methods that informed this reporting. Furthermore, there are unintended consequences for the use of social media by political elites to understand and represent public opinion. Since the 2016 election, we've learned that a not-insignificant amount of social media accounts posting about politics were in fact part of a Russian interference campaign[42]. In addition, I found that campaigns actively work to shape what public opinion looks like on social media. This means at least some of what was reported in the press to the public as public opinion was neither American nor "natural."

While both campaigns and journalists used social media to understand public opinion, I found that their uses culminated in different representations of public opinion. For campaigns, social media enabled a more segmented public, wherein miniscule differences in social media actions or posts were mined for inference. For journalists, social media led to overgeneralizations – constructing new mass publics like "the Internet" or non-distinct groups like "Bernie Bros," a nickname for young male supporters of Bernie Sanders. These differences may in part stem from the greater access

[42] https://medium.com/@d1gi/can-elections-be-bot-970d4b4ae430

to data and resources that social media companies provided to campaigns relative to newsrooms. As I've shown, for both campaigns and journalists, social media led to an expansion of qualitative notions of public opinion. Even when elites used individual social media posts to understand quantitative metrics, they still saw a fuller picture of public opinion.

Social media as an emergent representation of public opinion brings the public closer to politics and political actors, sometimes in remarkably visible ways – journalists reported social media posts as vox populi opinions; campaigns re-shared and interacted with public posts. And yet, this proximity to politics may not result in more power for the public in political processes – for all of this is mediated by social media firms themselves. In fact, social media companies like Facebook and Twitter have gained immense power in part because they are purveyors of this emergent public opinion. Political elites use of social media to represent public opinion grants legitimacy to social media firms, as these companies create and steer flows of information to campaigns and journalists, de facto reducing their agency. These hybrid flows have shaped routines. Journalists reported turning to DataMinr or their own Twitter feeds to make sense of public opinion, practices embedded into their daily work routines. Campaign professionals, candidates, and even elected officials perform routine readings of social media posts to understand the public.

As such, the role of scholars is vital. We must bring social media into the ontology of public opinion to shape, with our vast knowledge of communication, what can (and cannot) be understood about public opinion from social media.

The rest of this final chapter expands on these findings and proceeds as follows: First, I discuss the implications of my findings along the lines of how I've theorized social media as public opinion: as public, relational, and temporally sensitive. Next, I discuss the impact of my work on the new challenges social media introduces to the study

of public opinion. I highlight challenges that surround methods, disclosure and transparency, and the unintended consequences of using social media as public opinion. After that, I discuss the role of scholars in addressing this emergent form of public opinion. Next, I discuss the implications of my findings for theories about the press, public opinion, and democracy. The next section notes the limitations of my studies and suggests fruitful areas of future research to build from this work. Finally, I conclude with a section on the expansion of public opinion.

PUBLICNESS

Quantitative representations of public opinion drawn from social media sites are shaped by and limited to the affordances of each site: likes, comments, or shares on Facebook; favs, mentions, or retweets on Twitter. These can be understood as markers of one's political identity, the part of one's "whole self" that we choose to communicate publicly. Social media metrics make visible an individual's impression management, especially for those who use social media to construct or signal their political identity. "What we choose to 'like' or 'follow' is part of our identity, an indication of our social class and status, and most frequently our political persuasion," write Wardle and Derakhshan in a recent op-ed in *The Guardian*[43]. Surveys attempt to reveal individuals' private attitudes, but must also be understood as a reaction to the survey instrument itself. Social media metrics reveal public attitudes, necessarily shaped by what each platform affords, as well as what individuals perceive their audience to be and desire.

However, campaign professionals and journalists alike prized social media because they perceived it to offer a window into people's private attitudes. For example, social media metrics were often used by journalists to indicate a certain enthusiasm for

[43] https://www.theguardian.com/commentisfree/2017/nov/10/fake-news-social-media-current-affairs-approval?CMP=share_btn_tw

Bernie Sanders as a candidate. This is problematic in several ways[44], but in this case, using these metrics to represent support for Sanders oversimplifies what people may choose to communicate publicly vis-à-vis social media. While Sanders "led" on social media, Clinton led in the polls. Sanders was new, at least to the presidential scene, while Clinton had run previously in the 2008 Democratic primary. Individuals wishing to signal their "liberal credentials" might like Sander's posts on social media, but express privately to a surveyor their willingness to vote for Clinton. In short, individuals may take to social media to *publicly* express aspects of their political identity, but this may have little relation to their *private* decisions at the ballot box. This does not mean that public expressions are meaningless, just that their very publicness must be considered when attempting to draw meaning from them.

It's also worth considering the priority placed on private attitudes and behaviors by scholars and practitioners alike. Surveys are anonymous, privileging private attitudes over public ones. Likewise, recent research using Google's search data bolstered claims that Americans are secretly racist and misogynistic based on their private search history (Stephens-Davidowitz, 2017). What these instruments reveal about private attitudes or behaviors is privileged over the public – as if private attitudes and behaviors are somehow more "true" than public ones[45]. If our goal, as scholars or political practitioners or journalists, is to understand the public, then conceptions of public opinion should contend with both private *and* public attitudes and behaviors, even if it means we must wrestle with the contradictions between them. As Cramer noted, "paying attention to how

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[44] Recall also that the Sanders campaign, like others, actively worked to shape what quantitative public opinion on social media looked like – calling hard-core supporters to get a certain hashtag trending or to increase a candidate's social following.

[45] As Cramer noted recently in a criticism of her conclusions based on public conversations, "As a field, we pay a disproportionate amount of attention to private political behaviors at the expense of attention to social or group behaviors," (Cramer, 2017, p. 3).

people present themselves to each other can help us understand how people weave their traits and conditions together into views of the world that make their choices seem appropriate and natural, rather than what individual characteristics and conditions predict those choices" (Cramer, 2017).

Qualitative readings of social media offer greater possibility to understand the nuance of people's public displays of political identities, but this was taken up more visibly by journalists than campaigns. Campaign professionals did perform qualitative assessments of social media to understand public opinion. Routine readings of social media – posts or comments on a candidate's Facebook page, their mentions on Twitter – informed campaign decisions on strategy and communication. But campaigns also worked to shape what comments on their candidate's Facebook page looked like: deleting overtly negative comments and working to promote the visibility of positive ones. These actions shaped the very public discourse that campaigns sought to understand. Campaigns also shared qualitative representations symbolically to communicate their candidate's popularity, especially on Twitter, where campaigns sought to influence journalists' coverage of their candidate. For example, shortly after he announced his candidacy, Trump shared a tweet from a supporter (see Figure 7), praising, among other things, his business savvy. Sharing posts from "regular" folks via social media communicates popularity, especially to the press, while also performing a sense of responsiveness to the public, part of what Stromer-Galley has called "controlled-interactivity" (2014, p. 104).

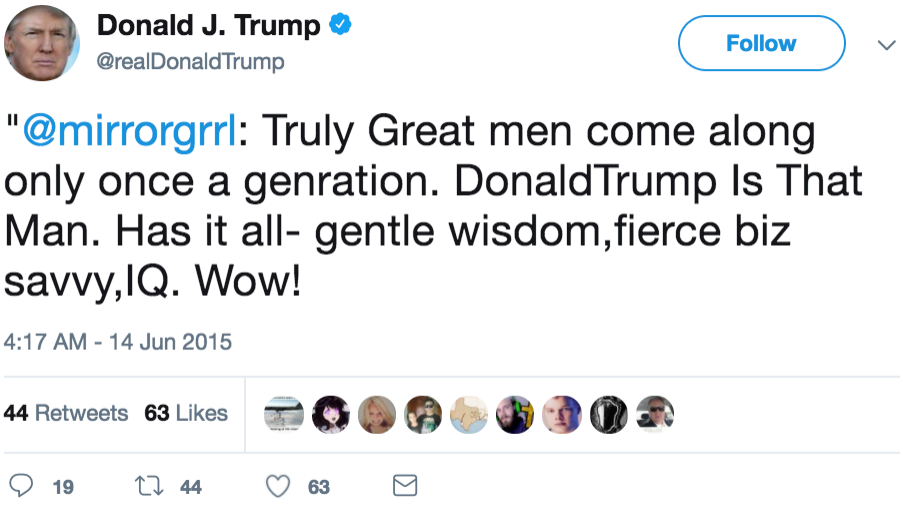

Figure 8. Trump quote-sharing a tweet from a supporter.

Campaigns' use of social media to comprehend public opinion demonstrates an openness to hearing more directly from members of the public, even if these professionals mistakenly regarded social media as private instead of public. Most citizens do not have direct access to face-to-face meetings with politicians, and "instead are represented – either well or badly – by the mass media" (Herbst, 1998, p. 169) whose reporting on the public is often based on polls. But as my findings reveal, social media data does inform politicians' notions of public preferences, bringing the public "closer" to elite politics.

Journalists also used social media metrics and positive posts to communicate popularity or enthusiasm for a particular candidate. But reporters were apt to employ negative public sentiment as well, allowing public voices to repudiate, or ridicule, candidates for their missteps. As my analysis showed, journalists embedded individual

public tweets to condemn Trump's infamous tweet[46] (declaring "Happy #CincoDeMayo! The best taco bowls are made in Trump Tower Grill. I love Hispanics!" with a picture of him in front of a taco bowl) to craft an overgeneralized negative response from "Latino Twitter." Throughout the stories I analyzed, journalists used individual social media posts to poke fun at Trump's candidacy, using these as representations of public opinion towards crafting the narrative of taking him "literally but not seriously[47]."

Individuals' quantifiable actions as well as their posts on social media can best be understood as what they choose to communicate *publicly* about their identity, which can be explicitly and/or implicitly political. Public opinion derived from social media may not then be appropriate to predict private behaviors, like voting, but instead offers a way to understand how people construct and communicate their public political identities – the social formation of public opinion. But, what individuals choose to communicate publicly is also shaped by their perceived audiences on social media – practitioners and scholars must also contend with the relationality of public opinion stemming from social media.

RELATIONALITY

Since their introduction, surveys have been critiqued for their inability to reveal social opinion – by measuring individual opinions, survey fail to account for the ways in which opinions manifest from conversations and social interactions (Blumer, 1948; Entman & Herbst, 2001; Fishkin, 2006; Key, 1961; Krippendorff, 2005; Lewis, 2001; Price, 1992). Social media – through their various affordances like commenting or replying – forefront conversation and interaction, thereby providing a public and collective space where public opinion manifests. In this way, social media have been

46 https://twitter.com/realdonaldtrump/status/728297587418247168?lang=en
47 https://www.cjr.org/special_report/trump-coverage-election-clinton.php

compared to public meetings or citizen groups (Anstead & O'Loughlin, 2015), examples of so-called "organs" of public opinion (Bryce, 1888, as cited in Anstead & O'Loughlin, 2015). If opinions are formed through social interactions (Blumer, 1948), then social media provide a way to observe *some* of these interactions and the opinions that stem from them.

For the most part, campaigns and journalists did not contend with the relational aspect of public opinion formation on social media. Social actions were aggregated and quantified; individual posts were read and shared – but rarely did elites tap full conversations or consider interactions when using social media to understand public opinion. However, campaigns' use of social media to understand public opinion provide two small exceptions in regards to relationality. First, campaigns' use of supporter networks to test messages and identify salient issues takes into account the relationship, expressed as mutual candidate support, between individuals in these groups. These supporter groups were identified, or assembled, by campaigns based on the connectedness of individuals who support their candidate, and often share similar political identity markers.

Campaigns also tapped specific individuals in these supporter networks to amplify particular messages. For example, the members of the campaign's "Big League Trump Team" were selected because of their relational power in particular social networks. Likewise, the Sanders campaign tapped the powerful members of their supportive sub-Reddit, whose prowess with and activity on social media made them relationally influential and capable of shaping things like trending hashtags. As Blumer noted, "We do not know from the conventional kind of sample or from the responses of the interviewee what influence, if any, he has in the formation or expression of public opinion. We do not know whether he has a following or whether he doesn't" (Blumer,

1948, p. 546). Social media provided a way to assess some measure of an individual's influence within society, which campaigns used to their advantage by selecting individuals who had relative impact on the formation of public opinion.

Other critiques of surveys and the formation of a mass opinion note that this obfuscates the hierarchical nature of society and the role that elites play in opinion formation (Blumer, 1948; Herbst, 1998). Social media, used by elites and the public alike, offer a chance to observe and assess the relationships between elites and the public. This taps a second aspect of relationality, one that was taken up by campaign professionals and journalists.

Campaigns used engagement metrics generated by social media sites to assess public reaction to key moments. Especially around high-attention events like debates or speeches, campaigns used engagement metrics to assess what "worked" or resonated with the public, which in turn informed campaign and communication strategy. These uses take advantage of the relationality of social media, assessing public reactions *to* news events or candidate rhetoric. But these traces of public sentiment bear a particularly positive prejudice in both their form and their interpretation. Journalists' reporting on these metrics conveys the same positive bias. There are little means by which to compare the likes to non-likes, the mentions to those who did not mention. In both cases, social media were used to quantify public reaction to and interaction with politicians, but did not tap the relationships between lay people that shape their public actions and utterances on social media.

Journalists' use of social media, especially Twitter, does not contend with the nature of their own influential presence on the site, ignoring the unequal reporter/audience relationship. As my interviews revealed, journalists did understand that their own tweets and posts on social media shape, and are even counted among, the very

public opinion they sought to represent using social media data. Yet this did not seem to deter their use of such data in their reporting. In their daily work, journalists are embedded in social media – following and interacting with other journalists and elites, getting alerts from DataMinr about newsworthy tweets or trends. While journalists may be able to see opinion polls at a distance, their presence and reliance on social media influences the nature of the public opinion on which they seek to report.

TEMPORALITY

Where campaigns and journalists did not, for the most part, account for the publicness and relationality of social media, they succeeded in making use of its temporal sensitivity. Campaigns used social media metrics to assess public reaction to distinct moments in debates and campaign speeches. Social media firms provided metrics drawn from user activity on their sites during these events (see Figure 8), which campaigns deployed to symbolically represent public opinion (when it was in their favor). Journalists also reported these metrics in their stories, using things like "most Twitter mentions" as evidence of which candidate "won" a debate. Political professionals took to social media, notably Twitter, as the new spin room, where they worked in real time to influence public, and journalistic, evaluations of their candidate's performances by re-sharing positive posts from supporters. Journalists also turned to Twitter for qualitative assessments of minute-by-minute reaction to debate performances, speeches, or breaking news – embedding individual social media posts in their stories to communicate the public's candidate evaluation or issue priorities. Perhaps especially with journalists, temporality influenced their uptake of social media as public opinion. Timeliness is a key determinant of news value, and social media provide access to immediate public opinion that informs journalists' reporting. My interviews with campaign professionals and

journalists revealed that they see promise in the increased temporal sensitivity that social media offer as insights into public opinion.

Figure 9. Official Twitter Government account shares quantitative analysis of tweeted moments during U.S. Presidential debate

NEW CHALLENGES

Methods

As campaign professionals and journalists alike took up social media data to understand the public in a multitude of ways, in addition to more traditional measures like surveys, neither group has settled on a meaningful way to combine these various measures in ways that might be a) reproducible or b) more comprehensive than either

data set alone. Campaign professionals and journalists both felt that social media provide access to a *different* type of public opinion than what can be measured in surveys. Campaign professionals perceived social media might offer insights into motivations behind particular attitudes or even voting behavior. Journalists spoke of social media's ability to convey the public's enthusiasm for a candidate not captured by surveys. Representative from both industries saw promise in the ability to craft a more nuanced understanding of public opinion by combining insights from various sources of data, but neither group has settled on a meaningful, much less standardized, way to combine these data.

Campaigns, relative to journalists, were sophisticated and varied in their use of social media to understand public opinion. In fact, I mapped campaigns' use of social media to represent public opinion into four general categories. These categories account for the measurement of the data (whether it was *quantitative* or *qualitative*) as well as the purpose for which it was used: *instrumental* or *symbolic* (Herbst, 1993). Campaigns' methods for quantitatively evaluating social media data were aided by the technology firms themselves. These firms released metrics around media events, which were symbolically deployed by campaigns to communicate popularity. But social media firms offered hands-on help to campaigns as well. As Gary Coby, who served as director of digital advertising and fundraising for Trump's general election campaign, told me:

> I required that if people wanted to work with us, they needed to send bodies to us in Texas and put people on the ground because Hillary had this giant machine, well-built out with digital operations, and we're just a few guys and a big Twitter account. Google, Twitter, and Facebook, we had people who were down there constantly and constantly working with us, helping us solve our problems in relation to how we're using the platforms. If we're coming up with new ideas, bringing them into the fold to come up with ideas of how their platform could help us achieve our goals.

Social media platforms, especially Facebook, provide campaign professionals the ability to match or mirror online profiles with voter file data. But campaigns did not systematically combine what they learned from social media with polling data to expand their understanding of public opinion.

There are vast differences between survey-based data and data culled from social media platforms. While professionally produced survey samples are generally designed to be representative of the American public at large, social media data offers no such representativeness. Even more, as both my content analysis and interviews revealed, journalists have an over-reliance on Twitter. However, just 21 percent of U.S. adults use Twitter, compared to 68 percent who use Facebook (Pew, 2017). This over-reliance manifests especially in journalists' use of individual social media posts to represent public opinion with vox populi quotes. Even when reporting individual tweets, journalists rarely confirmed who these sources are when embedding tweets in stories, and they often failed to get details about a user when they do contact them[48].

Many journalists reflected about the unique limits of using social media data to understand public opinion, including problems of representativeness. For example, the journalists I interviewed spoke about the need to for reporters to "exercise caution" in interpretations of social media posts or data, while at the same time, relying on these same sources in the course of their own reporting. These reservations seem mostly to manifest in what might be best understood as a third-journalist effect, where journalists worried about their colleagues relying too much on social media use and data to inform their understandings of public opinion, but not their own.

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[48] For example, see this Newsweek story trying to confirm the identity of a Twitter user whom President Trump retweeted on Sept 17, 2017. http://www.newsweek.com/trump-retweets-user-lana-del-fenty-glamourizes-twitter-667057

Social media data are, relative to polling data, new to the public opinion scene. Social media data, and the public opinion represented through it, are different from survey data in a multitude of ways. The novelty and difference of social media data may explain why campaigns and journalists have not yet formalized methods to combine their analysis with polling data. As I've shown, neither group has adequately addressed the publicness and relationality of public opinion crafted from social media – a necessary pre-requisite for then integrating with mass opinions as measured by surveys. A synthesis of different sources to form a more complete picture of public opinion would take advantage of the *different* types of opinions available across sources. For example, unprompted, publicly expressed opinions on social media can be compared to prompted, privately expressed opinions in anonymous surveys to shed light on differences (or similarities) between what people talk about (on social media) to their opinions on what surveyors might desire them to opine on (in polls).

Disclosure and transparency

In the news media, I found irregular and infrequent reporting on methodological disclosures around social media data. My research suggested that the press too has yet to settle around acceptable norms of disclosure around using social media to report public opinion. While news stories do not always disclose all relevant details around polling (Andersen, 2000; Bhatti & Pedersen, 2015; Brettschneider, Donsbach & Traugott, 2008; de Vreese & Semetko, 2002; Marton & Stephens, 2001; Miller & Hurd, 1982; Stromback, 2012; Traugott & Lavrakas, 1996; Weaver & Kim, 2002; Welch, 2002), there are at least guidelines from bodies like AAPOR (2010) about how journalists should evaluate and report polling data. Reporting on public opinion is increasingly complex. Response rates to random-digit telephone dialing surveys are at an all-time low (AAPOR,

2013; Pew Research, 2012). Due to costs, fewer news organizations sponsor polls of their own (Dunaway, 2009; Toff, 2016). Furthermore, as public opinion data are more readily shared online, surveys sponsored by advocacy groups are more likely to make their way into reporting (Toff, 2016). Enter into this, readily available data marketed as public opinion and made available to journalists by the social media firms that generate them. As with polls sponsored by advocacy groups, journalists should approach social media data, especially as marketed to them by these firms, with a critical eye. Surely, there is worth to using social media to report on public opinion. Social media provide the ability to reveal individuals' public displays of political identity, as well as the ability to assess public opinion with temporal precision. The news industry and journalists have yet to establish best practices around disclosures when using social media data to report on public opinion. In the news sample I analyzed, methodological disclosures were far from routine, even when reporting that a hashtag was trending was coded as a methodological disclosure.

As new sources enhance reporting on public opinion, new standards for data disclosure must be established. Journalists should, at a minimum, report the following details when using social media in their stories: the data source (i.e. Twitter, Facebook), the data collection method (i.e. "Instagram data was gathered using Facebook's Signal" or "All tweets containing the debate hashtag '#DemDebate' were gathered from Twitter's API"), the number of posts analyzed (i.e. "Of the 7 million tweets posted during the debate that contained the debate hashtag, 3.2 million mentioned Hillary Clinton"), the date(s) or time(s) when the data was collected, additional analysis details (i.e. "Analysis of issues users talked about on Facebook was performed by Facebook's data team" or "The top tweeted about moment during the second night of the convention, as reported by Twitter").

As I write this dissertation, a bill is being introduced in the U.S. Senate that would regulate political digital advertising on social media sites. The legislation would require political advertisers to reveal the content of the advertisement, as well as disclose who paid for the ad – requirements that would mirror those in place for political ads on television. But the legislation would also require advertisers to disclose what types of individuals were targeted with particular ads. As professionals from the Trump campaign revealed that they ran upwards of 50,000 iterations of advertisements a day on Facebook, these disclosures will be a massive undertaking for campaigns and social media firms.

Unintended consequences

Practical implications of this research must include the idea of unintended consequences. In the wake of the 2016 election, we've learned about the massive scale of the Russian campaign, through social media, to influence the election[49]. Social media accounts, set up by Russian trolls, were counted among the quantified measures of public opinion both campaigns and journalists used to understand and represent American public opinion. These accounts, which purported to be situated in the U.S., then appeared in social media data and analysis that campaigns and journalists examined explicitly to understand the U.S. voting public.

Furthermore, as journalists took up individual social media posts to convey public opinion in their reporting, they unwittingly shared Russian propaganda. According to a story and analysis by *Recode*[50], tweets from Russian-tied troll accounts were featured in stories from a range of publications, including Vox, Buzzfeed, *The Washington Post*, and a number of regional publications. At its pre-election peak, on August 17, 2016, U.S.

[49] https://www.nytimes.com/2017/10/09/technology/russia-election-facebook-ads-rage.html
[50] https://www.recode.net/2017/11/3/16599816/washington-post-mcclatchy-miami-herald-ap-russian-propaganda-twitter

news organizations featured 140 quotes from Russian-linked Twitter accounts. The editor of *The Washington Post*, Marty Baron, told Recode, "We'll seek to rectify any stories that contain such links, and we'll now assess our policy regarding the publication of links to Twitter accounts." What is clear is that campaigns and news organizations alike must make meaningful efforts to discern between "real" and "manufactured" opinion on social media. What is not clear at all is how they, or anyone else, might begin to undertake this monumental task.

As I've shown, campaigns also worked to shape the nature of public opinion on social media. In short: Public opinion drawn from social media is open to increased manipulation, and professionals must work to discover methods to overcome these problems. As Igo (2007) warns in her epilogue, "Misreadings of 'the public' via the powerful conjunction of media narrative and quantified support seem just as likely in the twenty-first century as they had been in the twentieth," (p. 292). Quantified social media metrics, subject to manipulation by domestic and foreign actors, were taken up by the press as part of the dominant style of horserace election coverage. Some journalists even expressed concerns that reporting these metrics may lead the public to incorrectly infer outsized meaning from these metrics.

Even if elites can verify that individuals on social media are who they say they are, there are further unintended consequences. Do people intend their political expressions on social media to be reported on by the press? To be retweeted by a presidential candidate? What happens to individuals when their thoughts on social media are amplified to a widespread audience by elites? Without taking up social media directly, Ruth Palmer shows that the process of becoming a news subject is an emotional one. Individuals covered by journalists felt that their public persona was beyond their

control (Palmer, 2017). Little is known about the experience of having one's social media posts quoted in stories or shared by politicians.

THE ROLE OF SCHOLARS

In this void of norms and routines, I argue explicitly for social media to be considered as a form of public opinion. By bringing social media into the ontology of public opinion, scholars of communication, political science, and public opinion can play a crucial role in the development of norms. What *can* social media tell us about public opinion? On social media, individuals perform their social and political identities – this tells us what individuals *want* others to know about what they think and how they feel. Social media also sheds light on the social formation of opinion; how people shape their opinions in relation to other's opinions within their social network. Importantly, social media also convey real-time and temporally specific public opinion, showcasing immediate reactions to news events. In social media posts and comments, people relate political opinions in their own words. These expressions are not subject to interference from survey questionnaires, but this does mean they are not subject to outside forces. Instead, these opinions are shaped by the affordances of individual social media platforms. We must work to articulate the constraints, affordances, and cultural norms that shape a public opinion constructed from social media.

What can social media *not* tell us about public opinion? First, social media cannot provide a comprehensive snapshot of the electorate. Even the most used social media platform, Facebook, is not representative of the U.S. public – 68% of Americans are on Facebook, but their demographics do not mirror the American public at large (Pew, 2016). Furthermore, many social media users simply do not interact with or express opinions about politics or news on social media. Given this, what can meaningfully be

inferred from various social media metrics? More research is needed to understand the motivations behind people's quantifiable actions on social media. Learning more about why an individual likes a post, retweets a tweet, follows a candidate, or uses a hashtag will better inform meaningful interpretations of these actions – by scholars, as well as by practitioners.

How can we best marry survey practices with social media analysis to paint a fuller picture of public attitudes, preferences, and concerns? Social media provide a means by which to expand notions of public opinion. As Kathy Cramer argues: "[Public opinion] is also the understandings that emerge from communication among people" (Cramer, 2016, p. 19) – social media are but one place where people communicate about politics. Surveys tell us what people think, and social media can help us understand *why* they think that. This can be especially useful for specific groups of people. For example, one could learn more about why the so-called alt-right hold racist views by examining their conversations in social media groups. On social media, people talk about the issues that matter to them. As I've shown, assessments of those conversations already shape how political elites understand public opinion. These conversations can also be used to inform survey design – we can design questions to more precisely and widely measure the concerns people share on social media. Concerns people share on social media may be similar, but hard to compare – each individual uses distinct language to talk about issues. But these conversations can be used to craft survey questions about concerns people have (rather than the concerns surveyors wish to measure), allowing researchers to more precisely measure differences between groups of people.

We are, after all, experts on communication, and the words and actions that people express on social media – whether measured quantitatively or qualitatively – are *communication*. Scholars in our field know much about the factors, from psychological

attributes to perceived affordances to networked environments, that shape political expression on social media. As Toff noted, "the challenge of interpreting public opinion is a collective one" (2016, p. 260), and increased scholarly engagement with social media as a form of public opinion, for all its complexities, is necessary.

IMPLICATIONS FOR THEORY

Public opinion, when understood as a socially constructed object, means different groups may construct distinct objects. As Herbst points out, this framework sheds light on the conflict when "political actors have differing ideas about public opinion" (Herbst, 1998, p. 150). As my studies show, there are indeed tensions between how campaigns and journalists make use of public opinion crafted from social media. Campaigns take up social media to inform a more segmented perspective of the public, crafting meaning and utility from the minute differences social media can reveal about the public. On the other hand, journalists overgeneralize, constructing a new "mass public" out of social media or carving out non-distinct groups like "Latino Twitter."

Campaigns and the news media both turned to social media data to understand the public, but their uses highlight different priorities. For campaigns, social media data were valuable because they allowed sophisticated advertising and strategic targeting. Identifying particular publics, such as "multicultural millennials" and "post-grad nest builders," and then further segmenting these groups based on ad-testing highlights campaigns' relative sophistication in using social media data, as compared to the press. Social media companies marketed this data to campaigns as public opinion insights, and as my interviews show, even provided staffers to work inside campaign offices to advise on how best to make use of this data (see also Kreiss & McGregor, 2017). Social media companies did make some data available to journalists, such as those featured in several

large projects including FiveThirtyEight's Facebook Primary, *The Associated Press'* Election Buzz Monitor, and *USA Today's* Facebook Candidate Barometer. But social media companies did not provide journalists access to the type of nuanced breakdown and analytics staffing support offered to campaigns. On top of this, most newsrooms are not staffed with experts in advanced data analytics (Lawrence, Radcliffe, & Schmidt, 2017; Fink & Anderson, 2015; Maier, 2002, 2003; Parasie & Dagiral, 2013), which might explain why even a relatively well-resourced news organization like *The Washington Post* outsourced its social media data analysis. In this way, campaigns are at a relative advantage to news media companies in their power over social media companies (see Kreiss & McGregor, 2017). These unequal resources likely have many explanations (a fruitful research agenda to pursue further), but the result is different representations of public opinion. For campaigns, social media data availed increased segmentation of public opinion. For the press, social media data were used to craft a new mass opinion (i.e. "the Internet") or overgeneralized segments (i.e. "Latino Twitter") that were based on qualitative impressions of posts, not trace data as was campaign targeting.

Another tension in public opinion studies is the paradigmatic use of quantitative understandings of the public at the expense of qualitative studies. In the wake of the 2016 election, the media narrative quickly centered around the failure of the polls to predict Trump's victory (though national polls were correct in predicting Clinton's popular vote margin – see AAPOR, 2016). Amidst this supposed failure of the polls, scholars and journalists alike turned to Kathy Cramer's *The Politics of Resentment* for its ability to explain the "rural consciousness" not captured by surveys. Cramer spent time with rural Wisconsinites, sitting in on and listening to groups "piece the world together for themselves" (Cramer, 2016, p. 20). Social media provide broad access to conversations

among people, allowing another means by which to expand qualitative understandings of public opinion.

On the other hand, social media as public opinion in its more formal and quantified sense speaks to Herbst's concerns about the growing rationality (trend towards increasing quantification and systemization in social, political, and economic practices) in the measurement of public opinion (Herbst, 1993). The recent spate of scholarship on data-driven and technology-intensive campaigning as well as computational and data journalism, which as I show is informed by social media, may exacerbate rationality in public opinion studies. On the other hand, I also find that social media are used in more informal, or softer, representations of public opinion. Campaign professionals and politicians perform routine readings of social media to "take the temperature of the room." These instrumental uses are novel only in that social media provide the access to citizens – politicians have always used qualitative means to understand public opinion (Cramer-Walsh, 2009; Fenno, 1978; Herbst, 1998). Journalists also turned to social media for qualitative impressions of public opinion, sourcing vox populi quotes from individual's posts on platforms like Facebook and Twitter. That social media also make possible qualitative representations of public opinion may help to balance the increasing quantification of public opinion.

The rationality and quantifiability of social media metrics shape these qualitative representations as well. Journalists showcased individual social media posts to give voice to "trending hashtags." Campaigns deployed favorable individual social media posts to symbolically represent public opinion. Social media make qualitative understandings of public opinion more readily available. Candidates still visit with supporters at Pizza Ranches across Iowa, but they also read comments from a great many more Americans about the issues at the heart of their political identities. Journalists still attend campaign

rallies, but also absorb and report social media posts to convey public evaluations of political figures and issues.

As Doris Graber (2006) suggests, closed-ended questions about specific, contrived, and narrowly framed questions regarding limited issues prevent respondents from selecting and expounding upon their views of the issues that they deem important. In fact, when it comes to citizens' political knowledge, Graber observes that qualitative examinations show greater political knowledge, in part because "Respondents do much better when allowed to discuss the areas of political knowledge with which they are familiar, and to frame information in their own way. By contrast, survey-based tests call for knowledge about topics selected and framed by researchers that often cover areas of little interest to respondents" (Graber, 2006, 170-171). Social media platforms loosen constraints around deliberation, providing relatively open spaces where members of the public may express their views and enter into dialogue with one another largely on the basis of their own priorities, bringing to the table the information, arguments, and opinions they believe are relevant. In this sense, social media may provide particularly fertile ground for gathering and gauging fuller, richer, and less constricted citizen input.

The practice of quantifying and reifying political opinions and behaviors on social media may counteract some of the more depressing takes in public opinion scholarship, particularly Lippmann's (1922) notion that common citizens are unable to reason or participate properly in politics. Elite use of social media to represent public opinion may bring political elites closer to understanding the public as engaged, and thus prizing (social media) conversations in a Deweyen sense (Dewey, 1954), fore fronting public deliberation. Social media offer the public a means to connect and converse about politics, as well as to communicate their needs and concerns to elites This may be particularly true during media events like debates, where both journalists and campaign

professionals saw increased value in learning about the public vis-à-vis social media, as they perceived that more of the public was more engaged. This also highlights the temporal nature of public opinion drawn from social media, bound by time and valued for its real-time responsiveness to media events.

Chadwick (2013) describes the shifting dynamics of power in the hybrid media system, in which "actors create, tap, or steer information flows in ways that suit their goals and in ways that modify, enable, or disable the agency of others, across and between a range of older and news media settings" (p. 45). The situation I detail in this dissertation, in which social media posts by the public are consumed and re-broadcast by political elites to understand and communicate public opinion, exemplifies the hybrid media system. Elite actors tap public political expressions, made available to them by social media companies, to shape what public opinion looks like, in ways that appear to highlight the power of the public, but in practice grant legitimacy and political power to social media companies (as purveyors of public opinion), while also allowing these elites more control over the substance of public opinion to their advantage. For example, I show how both campaigns and journalists see Twitter as the new spin room. Twitter is populated by a small, but politically interested, segment of the public. Campaigns take to the site to shape journalists' impressions of their candidate's success, re-sharing public posts and metrics from social media firms as part of their efforts. Likewise, journalists turn to Twitter for insight into public reaction to these political performances, embedding social media reactions and metrics into their post-debate stories. This development no doubt brings the public more visibly into political processes, but also underscores the notion of Twitter as "the place" for politics.

In detailing how, and why, journalists use social media data in their political reporting, I show how routinized processes, like newsroom norms and editorial practices,

shape news content. Editors encouraged journalists to include individual social media posts in post-debate coverage. Journalists take the pulse of public opinion from their own elite-dominated Twitter feeds, and the use of DataMinr alerts to drive coverage was ubiquitous in newsrooms I studied. These practices indicate emergent norms around the use of social media data in public opinion reporting. Social media posts and quantified metrics are interpreted by journalists as measures of public opinion, which impact coverage of candidate qualities and qualifications and assessments of a campaign's fortunes and competitiveness – both of which shape public attitudes and behaviors, including voting. Journalists give force and form to slippery concepts like "momentum" in part by how they interpret, and make use of, these emergent forms of public opinion.

One way to understand public opinion is by its operational definition. If time is what a clock measures, then public opinion is what surveys measure (Krippendorff, 2005). But as I show here, new measurements drawn from social media data challenge the clear epistemology of public opinion as an artifact of polls. As new measures of public opinion, culled from social media data, enter the measurement of public opinion, the object itself transforms. If public opinion crafted from surveys is shaped by the question wording and even what is (and is not) polled, then what shapes public opinion crafted from social media? For one, the technical affordances of particular platforms create particular public opinion artifacts. In particular, actions that can be aggregated tend to the positive (likes on Facebook, favs on Twitter, hearts on Instagram). Social media also offer the chance to assess peoples' opinions in their own words. But these too are shaped by technical affordances (like character limits on Twitter), as well as perceived affordances, such as what speech is (or is not) appropriate on Facebook, which differs from that which might be appropriate on Twitter (e.g. Kreiss, Lawrence, & McGregor, 2017; Nagy & Neff, 2016). Furthermore, both of these measurable artifacts

must be understood in the context in which they were expressed. On social media, actions such as likes or retweets, as well as expressions such as comments or posts, are expressed to and for an audience: an individual's social network. This points to the relational aspect of public opinion on social media – individual opinions becoming public opinion through these grouped, or networked, interactions. As Bourdieu (1979) argued, political opinions are mobilized by group interactions. On social media, these interactions can be observed and measured on social media in ways, and at a scale, that would not be possible in other contexts such as bars or public hearings.

Social media, as a way to understand public opinion, comes to life as elite actors use it to inform their communications to a broader public, particularly through advertisements by political campaigns and news stories by journalists. For much of recent history, people had few means to learn about the opinions of others except by communicating with others directly and through news reports on public opinion, mostly based on polls. In this situation, the news media "participate[d] decisively in the formation of public opinion" through their assertive reporting on the preferences and concerns of the public beyond the bounds of conversation (Krippendorff, 2005, p. 144). Public opinion on social media manifests a different social reality, one which is shaped by individual preferences and actions, as well as by social media platforms and the algorithms that support them.

Limitations and directions for future research

In this dissertation, I've captured how campaign professionals use social media to represent and understand public opinion, mapping these uses onto a model that accounts for variations in measurement (qualitative and quantitative) as well as uses (instrumental and symbolic). I've detailed how social media posts and data appear in news stories,

focusing again on measurement and uses (partisan scorekeeping and public opinion storytelling), as well as methodological disclosures. I reveal, in their own words, how journalists think about and use social media to inform their understanding of and reporting about the public. But of course, my findings in this dissertation fall short of painting a full picture of the myriad of ways social media may inform and affect public opinion. Instead, I hope that these studies serve as a fruitful base for future research.

One limitation is my choice of interview subjects on the campaign side of things. I began with digital directors for two reasons. First, political elites are not easy subjects to access, and since I had previous relationships with some of them, I began there. Second, digital directors are responsible for coordinating all of a campaign's digital efforts, as well as for communicating their team's insights to other departments within a campaign's infrastructure. It's possible that those so deeply involved with digital efforts might overstate the importance or impact of their work or value with the campaign. I addressed this in part by following where my informants led me. At the end of each interview, I always asked my subject with whom else they thought I should speak. This led me to interview professionals who worked in communications and research, as well as campaign management. A more robust description of the role social media play in campaign understandings of public opinion would include a wider array of informants. Interviews with professionals working on down-ballot races would more fully account for the ways in which campaign resources (or lack thereof) dictate conceptions of public opinion, including from social media. It is my hope that, in interviewing professionals who worked at the highest level of campaigning, my analysis lays the groundwork for future research in this area.

One implication of campaigns' use of social media to represent public opinion is the question of responsiveness. Candidates become, or remain, elected officials who

represent various swaths of the electorate. Gallup, Roper and other early pollsters envisaged survey-generated public opinion, by giving citizens a "voice," as a tool for improving responsiveness from officials and ultimately enriching democracy. Despite the proliferation of polls designed to enhance responsiveness, politicians systematically misperceive constituent concerns (Broockman & Skovron, 2017). To the extent to which officials look to social media to understand public opinion, it's possible that this practice may shift responsiveness. Public opinion on social media – particularly when understood through routine qualitative readings of posts, comments, and replies – presents officials with a non-representative sample of their electorate. But whose voices resonate most with officials on social media? My findings suggest politicians attend more to positive feedback, but this was in an electoral context. Broockman and Skovron (2017) found that conservative constituents are more like to initiate contact with officials, which partially explains how both Republican and Democratic politicians considerably misjudged their constituents' support for conservative policies. This presents two questions for further research. First, to what extent, and how, are officials responsive to public opinion culled from social media? And second, do problems of representativeness mitigate what officials learn about their constituents from social media? More research is needed, relevant to political practice and theory, about how candidates and officials attend to unsolicited opinions from social media communities.

Public opinion occupies a vaunted place in democratic theory because it ostensibly holds elected officials accountable to public will, compelling politicians to support policies their constituents favor (e.g. Downs, 1957; Loewen & Rubenson, 2011). But, elite influence on public opinion is well documented (e.g. Broockman & Butler, 2017; Lenz, 2009, 2012; Minozzi et al., 2015). As I document, candidates use social media in attempts to actively shape public opinion. How does communication about

official's policy preferences, communicated indirectly through symbolically evoking public social media posts, impact actual public opinion? Are these policy cues, embedded into and drawn from the social media platforms that underpin social life, differentially persuasive to the public?

Social media make possible a closer relationship between politicians and the public, allowing constituents to voice opinions directly to officials from apps on their mobile phones. But the social media platforms that support these public political expressions, as well as the distribution and measurement of them, have gained immense political power. Polling was legitimated in part due to claims early pollsters like Gallup and Roper made in relation to democracy – these early pollsters worked in step with academics and journalists to style surveys into sources of social authority (Igo, 2007; Krippendorff, 2005). Social media companies make similar claims about their ability to relay public opinion. Katie Harbath, Facebook's global politics and government outreach director has "argued that Facebook content and its sentiment are predictive of electoral outcomes; she cited that it was more predictive than polling around Brexit in the U.K. given that there were '89 billion conversations on the platform'" (Kreiss & McGregor, 2017, p. 11). As my interviews revealed, social media firms marketed their data as forms of public opinion to both campaigns and journalists. Because these firms have inserted themselves into politics, future research should focus on the ways in which social media firms attend to democratic obligations and responsibilities. These firms are currently being investigated by Congress for their role in supporting and spreading deliberate misinformation in the 2016 campaign[51]. How these firms respond to the strategic political

[51] https://www.nytimes.com/2017/11/01/us/politics/russia-technology-facebook.html?_r=0

manipulation of public discourse on their platforms will tellingly guide research in this area.

Turning to the press, my sample of news stories limits the generalizability of my findings. Because my inquiries were focused on emergent concepts, I sampled on my variable of interest: social media as public opinion. I document how and why journalists used social media to report on public opinion, but I am unable to quantify what portion of the news landscape this occupies. With my study as a basis, future research should focus on positioning journalists' use of social media to represent public opinion with their use of polls as well as with other sources of vox populi quotes. As journalists hopefully adopt more robust means of disclosure around these uses, future research should examine how those disclosures shape public reception of social media in public opinion reporting.

I based my coding decisions along the lines of examining the inherent tensions between qualitative and quantitative measurements of public opinion, while also attempting to capture what purpose social media served in reporting public opinion. There are several reasons to believe that these combined typologies will neither be exhaustive nor definitive. First, Anstead and O'Loughlin (2015) investigated data from 2010, since when the use of social media for political communication has dramatically increased and developed. Additionally, their data draw from an election in the United Kingdom, which has a significantly different electoral process than the U.S. Perhaps because of these factors, as well as that the authors only queried one month of data, they derived their categories based on only 47 examples of journalists deploying social media to represent public opinion. While Toff's (2016) categories provide more nuanced conceptions of public opinion in reporting than merely coding for horserace coverage (or not), his typology stems from survey-based public opinion coverage. In short, there is much still to be learned about the specific roles social media play in news reports.

To this end, future work should inductively seek, and develop as necessary, additional categories to represent the ways in which journalists use social media to represent public opinion. For example, I found articles that used social media to represent the public, but it did not fit into the explicitly political categories on which I focused. These uses of social media posts in stories might best be understood as humor.

As my journalist interview subjects were drawn from my focused sample of news coverage, they too lack generalizability. A more robust pool of subjects, including those who routinely report on public opinion culled from surveys, is needed to contextualize the practices I document here within the wider practice of journalism. Likewise, interviews with editors could reveal more about the value of social media analytics as objects of reporting.

As for my own continuing research agenda, here are several areas where I intend to follow up.

1. I intend to return to my news media data, extending coding to the full data set (N = 770). In addition to this, I will distinguish between methodological disclosures, including the extent to which a trending hashtag served as the sole methodological note in a story. I will also code for which social media platform was used to represent the public, enabling me to quantify what my interviews with journalists suggest is an over-reliance on Twitter, especially in vox populi uses.
2. In order to complement my interviews with campaign professionals, I propose to examine the social media feeds, campaign emails, and other communication from campaigns, in order to examine to what extent, and how, social media posts or metrics were communicated as symbolic representations of public opinion throughout the 2016 presidential campaign.

3. Given what we know about the impact of public opinion reporting on actual public opinion, combined with the effects of social endorsement cues (e.g. Messing & Westwood, 2014), I propose to conduct a series of survey experiments to assess the impact of social media representations of public opinion in the press (both metrics and vox populi uses) on public opinion. Some early evidence suggests that individuals may be skeptical about public opinion reporting based on social media metrics, but that these perceptions are attenuated by attitudes towards news media (see Kuru, 2017, working paper).

EXPANDING UNDERSTANDINGS OF PUBLIC OPINION

The idea for the dissertation took shape as I saw social media metrics and posts appear on my television screen during presidential debates. Against the backdrop of scholarly considerations of whether the promise of big data and availability of social media metrics might supplant surveys' power to predict electoral outcomes (they won't!), elites were already communicating their acceptance and uptake of social media as public opinion. Taking cues from expanded conceptions of public opinion, I wondered how these emergent representations were used to convey public opinion in elite rhetoric, and why.

Elite rhetoric is a powerful tool that shapes social reality. After the 2015 Supreme Court opinion ruling same-sex marriage constitutional, individual's personal opinions about the practice did not change – but people's perceptions of other's opinions about it changed. "Americans, whether liberal or conservative, thought that their fellow citizens now supported same-sex marriage more than before, even though, in reality, the only thing that had changed was the ruling of a public institution" (Tankard & Paluck, 2017). Simply put, elites can create the impression of a social consensus where none exists. The

information provided to us *about* public opinion, as well as communication *shaped by* public opinion, exerts powerful influence on actual opinions held by the public. As I've shown, social media represent shifts in social, technological, and communication systems, providing another means by which elites craft powerful communication about the public.

As I documented in these studies, both journalists and political elites grasp that social media does not capture the entirety nor a realistic depiction of American public opinion – and yet, my findings reveal that both groups still looked to social media to understand and represent public opinion. This conflict suggests that the concept of public opinion itself is in flux. As I have noted – as did many of my interview subjects – public opinion informed by social media data captures only a fraction of opinions or beliefs from the actual public. But *what* public is captured via social media? My findings, as well as many others on social media and political expression, suggest that those discussing politics on social media are highly motivated partisan individuals – this may skew notions of public opinion to a more polarized public than what may actually exist. Furthermore, this partisan distorted view of the public informs news coverage – as I have shown, social media dictates how journalists cover new stories and even what constitutes as news itself. The use of social media to understand public opinion has shifted the picture of reality that elites present to us via news reports or campaign messaging. From a normative perspective, the use of social media to understand public opinion offers up some hope and some concern. On the one hand, social media offers a way to expand notions of public opinion, particularly in qualitative ways, while also giving marginalized voices easier access to elites. On the other hand, social media presents a more fractured sense of the public that is not inclusive or representative, while also shifting the routines, practices, and output of journalists in negative ways. Social media shrink and distort the

nature of the polity, while also allowing journalists easy access to profiles and posts that fit their "imaginary portraits" of the public (Herbst, 1998, p. 181) and their "theory" of the story. At the same time, political opinions on social media – unlike those captured by surveys – are rooted in the cultural context of the sites themselves, the very platforms for our everyday sociality. In short: social media provide expanded context to conceptions of public opinion but must be understood contextually in conjunction with other sources of public opinion data.

With new possibilities for bringing increased public, relational, and temporal understandings to public opinion, social media also problematize long-held conceptions and measurement standards of public opinion. Public opinion is becoming harder to understand, more complicated to report, and more complex to study. And yet, for all those challenges, I remain hopeful that we can overcome them, and in the process, expand responsiveness and attention to citizen concerns and perspectives. Social media platforms provide the infrastructure for much of our social lives, so too are they woven into the routine observations about the public, providing opportunities, if we carefully consider them, to more fully hear one another and to be heard.

Appendix A: Campaign professional interview protocol

1. What position did you serve on the XX campaign?
2. What did the campaign rely on to understand and assess public attitudes?
3. How did the campaign gather data on public attitudes?
4. Did the campaign distinguish between voters, or likely voters, and the larger public when assessing the role of social media in the campaign?
    a. If so, how? And why?
5. In your capacity as digital/social media director in the campaign, what role did you play in communicating data about or understandings of the public to other teams in the organization?
6. What was the campaign's attitude toward social media?
7. What was your role with respect to social media?
8. What role, if any, did social media play in understanding the public or voters?
    a. Specifically, how was this incorporated with more traditional measures of public opinion like polling data?
9. Did you (or anyone on the campaign) read posts, tweets, comments or replies?
    a. If so, for what purposes were those readings used?
10. Did the campaign use social media analytics?
    a. If so, how were analytics used?
    b. What campaign tactics or communications were informed by analytics?

Appendix B: Campaign professionals interviewed

Name	Title	Campaign	Date(s)
Chris Georgia	Digital director	Bush	7/13/2016 6/14/2017
Tim Miller	Communications Director	Bush	6/9/2017
Chris Maiorana	Digital strategist & Chief technology officer	Huckabee	7/5/2016 6/13/2017
Jordan Powell	Deputy campaign manager	Huckabee	7/12/2016 6/7/2017
Jack Minor	Deputy digital director	Cruz	7/5/2016 6/21/2017
Chris Wilson	Director of research, analytics & digital strategy	Cruz	6/22/2017
Vincent Harris	Digital director	Paul	7/12/2016 6/27/2017
Matt Compton	Deputy digital director	Clinton	2/13/2017 6/27/2017
Christina Reynolds	Deputy communications director	Clinton	2/7/2017 6/23/2017
Jenna Lowenstein	Digital director	Clinton	3/28/2017
Kevin Bingle	Digital director	Kasich	6/16/2017
Hector Sigala	Social media director	Sanders	7/13/2016 6/16/2017
Gary Coby	Director of digital advertising and fundraising	Trump	6/20/2017

Appendix C: News Sources

Cable news:
CNN – CNN.COM
Fox News – FOXNEWS.COM
MSNBC – MSNBC.COM

Digital-native publishers:
247SPORTS.COM
APLUS.COM
BLEACHERREPORT.COM
BREITBART.COM
BUSINESSINSIDER.COM
BUSTLE.COM
BUZZFEED.COM
CHEATSHEET.COM
CINEMABLEND.COM
CNET.COM
DAILYDOT.COM
DEADSPIN.COM
DIGITALTRENDS.COM
ELITEDAILY.COM
ENGADGET.COM
GIZMODO.COM
HELLOGIGGLES.COM
HOLLYWOODLIFE.COM
HUFFINGTONPOST.COM
IBTIMES.COM
IJREVIEW.COM
MASHABLE.COM
MIC.COM
OPPOSINGVIEWS.COM
QZ.COM
RARE.US
RAWSTORY.COM
REFINERY29.COM
SALON.COM
SBNATION.COM
SLATE.COM
THEBLAZE.COM
THEDAILYBEAST.COM
THEROOT.COM
THEVERGE.COM
THRILLIST.COM
TMZ.COM

UPROXX.COM
UPWORTHY.COM
VOX.COM

Magazines:
The Economist – ECONOMIST.COM
Forbes – FORBES.COM
Fortune – FORTUNE.COM
National Review – NATIONALREVIEW.COM
The New Yorker – NEWYORKER.COM
New York Magazine – NYMAG.COM
Rolling Stone – ROLLINGSTONE.COM
The Atlantic – THEATLANTIC.COM
The Week – THEWEEK.COM
Time – TIME.COM
Vanity Fair – VANITYFAIR.COM
Wired – WIRED.COM

Network TV:
ABC News – ABCNEWS.COM
CBS News – CBSNEWS.COM
NBC News – NBCNEWS.COM

Newspapers:
The Atlanta Journal-Constitution -- AJC.COM
Arkansas Democrat-Gazette -- ARKANSASONLINE.COM
The Arizona Republic -- AZCENTRAL.COM
The Baltimore Sun --- BALTIMORESUN.COM
The Boston Globe -- BOSTONGLOBE.COM
The Buffalo News -- BUFFALONEWS.COM
Chicago Tribune -- CHICAGOTRIBUNE.COM
Houston Chronicle -- CHRON.COM
Cincinnati Enquirer -- CINCINNATI.COM
The Cleveland Plain Dealer -- CLEVELAND.COM
Courier-Journal (Louisville, KY) -- COURIER-JOURNAL.COM
Los Angeles Daily News -- DAILYNEWS.COM
The Dallas Morning News -- DALLASNEWS.COM
The Denver Post -- DENVERPOST.COM
The Columbus (OH) Dispatch -- DISPATCH.COM
Detroit Free Press -- FREEP.COM
The Indianapolis Star -- INDYSTAR.COM
Milwaukee Journal Sentinel - JSONLINE.COM
The Kansas City Star -- KANSASCITY.COM
The Los Angeles Times -- LATIMES.COM
The Mercury News (San Jose, CA) -- MERCURYNEWS.COM
San Antonio Express-News -- MYSANANTONIO.COM

Newsday (Long Island, NY) -- NEWSDAY.COM
The Star-Ledger (NJ) -- NJ.COM
The Record (NJ) -- NORTHJERSEY.COM
New York Daily News -- NYDAILYNEWS.COM
New York Post -- NYPOST.COM
The New York Times -- NYTIMES.COM
Orange County Register (CA) -- OCREGISTER.COM
The Oregonian -- OREGONLIVE.COM
Orlando Sentinel -- ORLANDOSENTINEL.COM
The Philadelphia Inquirer -- PHILLY.COM
Pittsburgh Post-Gazette -- POST-GAZETTE.COM
The Sacramento Bee -- SACBEE.COM
The Seattle Times -- SEATTLETIMES.COM
San Francisco Chronicle -- SFGATE.COM
Star-Telegram (Dallas/Fort Worth, TX) -- STAR-TELEGRAM.COM
Minneapolis Star-Tribune -- STARTRIBUNE.COM
St. Louis Post-Dispatch -- STLTODAY.COM
The Sun Sentinel (Broward County, FL) -- SUN-SENTINEL.COM
The Tampa Bay Times -- TAMPABAY.COM
The Tampa Tribune -- TBO.COM
The Tennessean -- TENNESEEAN.COM
Pittsburgh Tribune Review -- TRIBLIVE.COM
Pioneer Press (St. Paul, MN) -- TWINCITIES.COM
USA Today -- USATODAY.COM
The San Diego Union-Tribune -- UTSANDIEGO.COM and SANDIEGOTRIBUNE.COM
The Washington Post -- WASHINGTONPOST.COM
The Wall Street Journal -- WSJ.COM

Public Broadcasting:
NPR – NPR.COM
PBS News Hour – PBS.ORG/NEWSHOUR

Appendix D: Content analysis codebook

Variable	Description	Code
Relevance	Does the story utilize social media from the public? e.g. Stories focused on tweets from Hillary Clinton, without mention of their reception by the public, would *not* count. However, a story focused on tweets from Hillary Clinton that also described how many followers she had or how many retweets she had *would* count. **If the story *does not* use social media from the public, do not code further.	1=yes 0=no
Method	Does the story mention any methodology – data source, analysis details, time period, trending hashtag?	1=yes 0=no
Qual_measure	Does the story present individual social media post(s) or social media	1=yes 0=no
Quant_measure	Does the story present social media counts or other metrics?	1=yes 0=no
Part_score	Does the story utilize social media posts or metrics to "position" a candidate (or party) in relation to others? e.g. winning, losing, rising, falling, ahead, behind	1=yes 0=no
PubOp_issue	Does the story utilize social media posts or metrics to characterize public sentiment on an issue or issues? e.g. "More than a hundred thousand comments expressed fear about combatting terrorism" or "The most widely tweeted issue during the Democratic convention was jobs."	1=yes 0=no

Appendix E: News Sources in Sample

Source	Number of stories
The Washington Post	48
CBS News	32
USA Today	25
Mashable	24
CNet	21
Breitbart	20
MSNBC	19
New York Times	19
Salon	14
Buzzfeed	11
The Huffington Post	11
CNN	10
Houston Chronicle	10
NY Daily News	10
Daily Beast	9
NBC News	7
Fox News	6
Wired	6
Detroit Free Press	5
Elite Daily	5
Fort Worth Star Telegram	5

Slate	5
ABC News	4
Fortune	4
IB Times	4
New York Post	4
DigitalTrends.com	3
Hello Giggles	3
LA Times	3
Raw Story	3
Associated Press	2
Boston Globe	2
Business Insider	2
Cleveland.com	2
Forbes	2
Hollywood Life	2
NJ.com	2
The Atlantic	2
Atlanta Journal Constitution	1
Chicago Tribune	1
Cincinnati.com	1
Columbus Dispatch	1
National Review	1
New York Magazine	1
NPR	1

Opposing Views	1
PBS	1
Rolling Stone	1
San Antonio Express News	1
San Jose Mercury News	1
Talking Points Memo	1
Tampa Bay Times	1
The News Star	1
Uproxx	1
Upworthy	1
Wall Street Journal	1
Washington Times	1

Appendix F: Journalists suggested interview protocol

1. Did you cover one (or more) particular campaign(s) or did you cover the election more generally?
2. In the process of your reporting, what did you rely on to understand and assess public attitudes?
3. How did you – and your news organization more generally – gather data on public attitudes?
4. In your capacity reporting on the election, what role did you play in communicating data about or understandings of the public to other people or groups in the news organization?
5. What is your news organization's attitude toward social media? And your own?
6. What is your role with respect to social media – both in terms of communicating your work but also in relying on social media to inform your coverage?
7. What role, if any, did social media play in understanding the public or voters?
    a. Specifically, how was this incorporated with more traditional measures of public opinion like polling data?
8. Did you (or anyone in your news organization) read posts, tweets, comments or replies related to the election?
    a. If so, for what purposes were those readings used?
9. Does your news organization have access to social media analytics?
    a. If so, how were analytics used?
    b. What reporting or coverage decisions were informed by analytics?

Appendix G: Journalists interviewed

Name	Position	Outlet	Date
Phillip Bump	National correspondent	The Washington Post	6/28/2017
Eliza Collins	Congressional reporter	USA Today	6/22/2017
Matt Conlen	Computational journalist	FiveThirtyEight	6/28/2017
Reuben Fischer-Baum	Visual journalist	FiveThirtyEight	6/19/2017
James Hohmann	National political correspondent	The Washington Post	6/28/2017
David Jackson	White House correspondent	USA Today	6/29/2017
Andrew Kahn	Assistant interactives editor	Slate	6/20/2017
Greg Kreig	Politics reporter	CNN	6/16/2017
Heather Leighton	Digital producer	The Houston Chronicle	6/30/2017
Brian Lisi	Reporter	New York Daily News	6/23/2017
David Mack	Reporter & weekend editor	Buzzfeed	6/20/2017
Evan McMurray	Political social media editor	ABC News	6/23/2017
Jason Silverstein	National politic reporter	New York Daily News	6/23/2017
Paul Singer	Washington correspondent	USA Today	6/16/2017
Mitch Thorson	Interactives graphics editor	USA Today	6/19/2017
Josh Voorhees	Senior writer	Slate	6/27/2017
Derek Willis	News applications developer	ProPublica	6/27/2017
Youyou Zhou	Interactive producer	The Associated Press	6/21/2017

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