The Digital Activism Gap: How Class and Costs Shape Online Collective Action

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ABSTRACT

What is the relationship between social class and online participation in social movements? Scholars suggest that low costs to digital activism broaden participation and challenge conventional collective action theories, but given the digital divide, little is known about cost variation across social movement organizations from different social classes. A focus on high levels of digital engagement and extraordinary events leaves scant information about the effect of social class on digital mobilization patterns and everyday practices within and across organizations. This study takes a field-level approach to incorporate all groups involved in one statewide political issue, thereby including organizations with different social class compositions, from Tea Parties to labor unions. Data collection spans online and off-line digital activism practices. With an index to measure digital engagement from an original data set of over 90,000 online posts, findings show deep digital activism inequalities between working-class and middle/upper-class groups. In-depth interviews and ethnographic observations reveal that the mechanisms of this digital activism gap are organizational resources, along with individual disparities in access, skills, empowerment and time. These factors create high costs of online participation for working-class groups. Rather than reduced costs equalizing online participation, substantial costs contribute to digital activism inequality.

KEYWORDS: digital inequality; social class; social movements; collective action; internet.

As online processes become more salient in political action, digital technology resources become increasingly relevant for movements. But while scholars have found persistent inequalities in digital participation in general, they have given scant attention to the implications of class difference for online mobilization. Meanwhile, studies of the role of the internet in movement dynamics have not grappled with the implications of digital divide research. Despite much discussion of how readily available online resources bring new tactics that can broaden democratic participation in political contention, stratification in the use of such resources implies that the incorporation of new technologies will be uneven.

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Scholars (Bennett and Segerberg 2013; Bimber, Stohl, and Flanagin 2005; Earl and Kimport 2011) have contended that online-intense digital activism can lower participation costs, rendering collective action (e.g., Olson 1965) and resource mobilization (e.g., McCarthy and Zald 1977) theories less relevant in favor of newer theories of mobilization in the digital era. The suggestion is that reduced costs remove participation barriers to enable more people to do more organizing with fewer resources. But we have not yet known if everyone has been able to harness these lowered costs of participation, nor if and how any variation in these costs shapes online participation in social and political movements. This article builds on this recent scholarship to examine how these theories of online activism extend to movement groups from different social classes.

Most of the studies on digital activism were not designed to understand social class divisions. This literature tends to focus on extraordinary moments of online political organizing (e.g., Vasi and Suh 2016), relying heavily on events such as anti-globalization protests, the Arab Spring, and Occupy Wall Street. The emphasis on these exceptional cases initially made sense as social media activism began to emerge, as they had highly visible levels of online activity. But this focus leaves scholars with more information on emergent movements of the digitally plugged-in and less data on existing organizations from different social classes. Examining mostly digitally *successful* movements has created a selection bias (McAdam and Boudet 2012), inadvertently obscuring differences with internet access and use.

The scholarship on digital inequality could shed light on this weakness in the digital activism literature. Socioeconomic inequality is the most persistent and primary demographic factor driving digital inequality, age notwithstanding (Anderson 2017; Martin and Robinson 2007; Schradie 2012; Zhang 2014). Social movement scholarship has also shown social class inequalities in mobilization efforts, but researchers in neither field have thoroughly examined whether and how online political participation is egalitarian across multiple social movement organizations that vary in class compositions. Little is known how social class differences shape online activism, nor the relevance of off-line practices for online participation. Therefore, this study asks, what is the relationship between social class and participation in online activism across organizations? Does the use of digital activism tools differ by social class? If so, how?

To answer these questions and to navigate away from selecting on the dependent variable of successful movements, this research takes a field-level approach to capture variation across all organizations involved with one issue in a political field—in this case, collective bargaining rights for public employees in North Carolina. I compared 34 political, labor, and social movement groups on both sides of this issue, from labor unions to Tea parties. Together, these organizations constituted a political field. Eight were unions, and the rest were political and social movement groups, all of which varied in class composition.

I combined online and off-line data collection procedures, using in-depth interviews and ethnographic observations to gain insight into any mechanisms of difference through the everyday online and off-line practices of the groups and their activists. The data also include an original data set of over 90,000 online posts for a digital activist index to quantify differences in the groups' internet use.

The fieldwork and the index show a large social class gap: groups with middle/upper-class members have much higher levels of digital engagement than those with working-class members. The mechanisms of this class-based digital activism gap are the substantial costs involved for any individual or group. From the digital inequality literature, we would expect that costs would be prohibitively high for activists from lower socioeconomic groups. The digital activism literature has yet to disentangle costs based on class, but the general assumption is that costs would be lowered to some extent across the board. Instead, costs are prevalent for all groups, yet excessively high for those with working-class members. Middle/upper-class groups and their members start out ahead by already having the organizational resources and individual access, skills, time, and the entitlement[1] to offset

1 Entitlement and empowerment in this context are how confident people are to express and act on a political opinion (e.g., Laurison 2015).

the costs of using the internet. For them, the *additional* costs for online activism sometimes are, indeed, much lower than for working-class groups, although never zero. Therefore, rather than reduced costs equalizing online participation, these substantial costs actually contribute to digital activism inequality. The internet, instead of driving democratic participation within and across movements, in fact, reproduces inequality.

By using a field-level research design that can uncover and explain cost variation across organizations from different classes, this study makes four theoretical contributions. First, I expand the digital inequality literature that has documented a class gap in internet use for individuals by showing that these divides are also pervasive with social movement organizations. The primary reason for this is that working-class groups and their members face higher costs to produce online content. The internet is a resource, but it takes classed resources to mobilize it. Second, class power, often overlooked in the digital inequality literature, is also a key mechanism that produces organizational digital activism inequality. Building on social movement and political stratification literature, I argue that middle/upper classes have the power to define what it means to be a savvy internet user, so working-class people and organizations do not believe that they fit into this space. Third, I add class differences to the digital activism literature that contends that participation costs have been lowered in the digital era. In the process, I show that costs are still relevant, so these findings reinforce and extend more traditional collective action and resource mobilization theories, rather than overturning them. Fourth, these findings suggest that digital technology does not necessarily contribute to class-based pluralism in a democratic society.

SOCIAL MOVEMENTS AND CLASS DIFFERENCES

Questions of social class inequality have long been central to the study of political and social movements. Early social movement theorists argued that relative deprivation itself incited participation (Gurney and Tierney 1982), yet it was not always the most deprived who were able to participate. Scholars found class differences in movements ranging from the civil rights to poor people's movements such that less elite groups and individuals had fewer resources and less access to power and influence (McAdam 1986; McCarthy and Zald 1977; Piven and Cloward 1978). Over the past few decades, few social movement scholars have addressed class divisions, in general (Goodwin and Hetland 2013), and class divisions related to online participation, in particular.

Two mechanisms linking class difference and mobilization may explain a potential digital activism gap. First, some scholars have argued that resources are critical for social movements. John McCarthy and Mayer Zald (1973, 1977) built upon Mancur Olson's (1965) free rider dilemma to explain why people would come together, participate, and build social movement organizations, given the costs of collective action. The answer was not just movement funding but also in-kind resources, often available to groups and individuals with more privilege. For instance, knowledge, time, and skill in using a specific tactic is often more available to a stratified group of experts (Oliver and Marwell 1992). Others argued that powerful classes already have well-defined interests, which can lower their coordination costs in comparison to their counterpart (Offe and Wiesenthal 1980). However, poor and working-class groups have limited resources and access to elite support (Lichterman 1996; McAdam 1988; McCarthy and Zald 1977), limiting participation levels and social movement development.

Another mechanism linking class inequality with social movements is how groups from different classes experience power and entitlement. Working-class social movements and their members not only have fewer resources but also often face powerlessness related to their class position (Croteau 1995; Gaventa 1980; McAdam 1988; Offe and Wiesenthal 1980), limiting participation. As Doug McAdam (1988) pointed out, certain activists have "a sense of personal efficacy or felt mastery over one's environment that often characterizes those who are economically well off" (p. 13). This entitlement, what Paul Lichterman (1996) called "personal empowerment," can be a mechanism of

inequality in social movements. Pierre Bourdieu (1984) similarly suggested that expressing a political opinion requires a sense of entitlement. Nevertheless, some social movement theorists argue that "lower-stratum groups" are better able to harness their own power of disruption (e.g., Piven and Cloward 1978). Likewise, outside of the social movement literature, a classic theory of pluralist democracy contended that different types of political groups can overcome power differences in a "polyarchy" (Dahl 1961, 1971) because competing interests keep power in check. In a long-standing debate, many have challenged this pluralist argument because of structural power imbalances between social classes (Bachrach and Baratz 1962; Schattschneider 1960), yet scant attention has been paid to the applicability of polyarchy in the digital era (e.g., Pickard 2006). Therefore, this question of class-based empowerment differences are worthy of investigation with online participation.

SOCIAL MOVEMENT EGALITARIANISM AND DIGITAL ACTIVISM

Much of the social movement literature on digital activism has not addressed class inequality, so an explicit reference to social class and digital activism is sparse. Scholars have suggested that social media is a space for more egalitarian democratic participation than movements in the pre-digital era (Bennett and Segerberg 2013; Castells 2012; Earl and Kimport 2011). Some have argued that the internet helps level the playing field for groups with fewer resources (Enjolras, Steen-Johnsen, and Wollebaek 2012) or that online political participation is not associated with digital inequality (Elliott and Earl 2016).

The contention is that more people can now participate than ever before because of the technology itself, or its affordances. With the advent of websites in the 1990s, scholars began writing about the Web's democratizing affordances for social movements, in which anyone could post information to the broader public to encourage participation, rather than relying on traditional media outlets (Donk et al. 2004; Garrett 2006). In the next decade, the proliferation of social media platforms expanded the use of static one-to-many websites to more instantaneous and interactive many-to-many platforms, such as Facebook or Twitter. Scholars suggested that both sets of digital tools are more democratic, not only because a social movement group can reach more people through digital technology than with printed flyers, for instance, but also because more people can interact and respond online than in off-line spaces (e.g., Earl and Kimport 2011). These technological affordances, scholars argued, increase and broaden participation in social movement activity (Bennett and Segerberg 2013; Bennett, Wells, and Freelon 2011; Castells 2012). Many said that a primary mechanism of this more egalitarian participation derives from the architecture's lowered costs and subsequent efficiencies of online participation: these costs are reduced in terms of time, physical presence, and organizational resources (Bennett and Segerberg 2013; Bimber et al. 2005; Earl et al. 2010; Leizerov 2000).

These lowered costs led some theorists to call into question the applicability of two key sociological theories of collective action in the digital era. First is resource mobilization. Especially with online-only movements, a contention is that costs to participation are so low that resource variation is rendered less irrelevant (Bennett and Segerberg 2013; Bimber et al. 2005; Earl and Kimport 2011). Second and related is the declining relevance of Olson's theory of collective action (Bennett and Segerberg 2013; Bimber et al. 2005; Earl and Kimport 2011), particularly his free rider dilemma, in which fewer people advocate for a cause than the number of people who believe in that cause because of the high costs of participation[2] (Olson 1965). Both of these theoretical challenges—resource mobilization and collective action—hinge on this question of lowered costs because of fewer individual and organizational resources required with a more networked activist environment. Even though the

2 Olson's original formulation of his collective action theory was not about self-interest and costs motivating people to free-ride off of the coattails of others. Instead, people would free ride because they could reap the benefits of the public good without participating because their participation would yield personal advantages once a certain group size is reached. Therefore, it is rational to free-ride if the collective good can be achieved without one's effort. Still, most re-interpretations of Olson offer a classic binary microeconomics model of the individual making a rational decision as to whether or not to engage in collective action based on one's own costs of participation, such as time and personal investment.

collective action model-change arguments were based on exclusively online movements, some scholars have questioned if online-only activism is even possible (Karpf 2012). Regardless, we do not know how social class differences may map onto these new theories.

Nonetheless, some scholarship has pointed to resources and how they might relate to inequality. One group of researchers showed that digital activism may be the provenance of more privileged individuals. Digital activists are more likely to have higher education levels than traditional activists (Brodock, Joyce, and Zaeck 2009; Cordero-Guzman 2011). Another set of scholars examined organizational differences in online engagement and resources. Some studies showed that civic organizations with more economic resources use digital media more frequently, particularly with websites rather than social media (Eimhjellen, Wollebæk, and Strømsnes 2013; Ignatow and Schuett 2011; Merry 2011). Social media usage gaps were still found to be in effect, such as with Facebook (Williams and Gulati 2013) or Twitter (Vergeer and Hermans 2013) for political campaigns. But we know little about the mechanisms of any inequalities across platforms nor about the class background of political, social, and labor movement members. A few studies have done more in-depth qualitative analyses. One showed that more technological resources available to lower-income activists enabled them to participate in movement activities (Pickerill 2003). Other research found that online organizing reinforces societal hierarchies based on "expertise" (Grignou and Patou 2004), suggesting that power differentials may be at play. Overall, though, scant attention has been paid to social class relations and the costs of online participation.

DIGITAL INEQUALITY AND ITS MECHANISMS

The literature on digital inequality may provide a framework for how social class may operate with digital activism. Much of this scholarship operationalizes class with education or income. Social class gaps exist not only in basic internet access but also in many forms of online content creation, such as with social media postings (Correa 2010; Haight, Quan-Haase, and Corbett 2014; Zillien and Hargittai 2009). Evidence suggests that people with higher income and education levels are more likely to participate in online civic engagement activities (Min 2010; Mossberger, Tolbert, and Stansbury 2003; Schlozman, Verba, and Brady 2010; van Dijk 2005; Van Laer 2010). Twenty-three percent of American adults with less than a high school education are active politically on social media versus 51 percent of those with a college education (Smith 2013), and these gaps are similar among youth (Cohen and Kahne 2012).

Digital inequality scholars initially focused on resource differences driving the gaps, given the costs of laptops, smartphones, or internet access (e.g., Norris 2001). More recently, scholars have found additional mechanisms to these *consumption* gaps for digital inequality, particularly with more active internet uses. Researchers suggested that online content *production*, such as posting to a daily blog or maintaining a website, involves both time and labor costs, and in the digital economy, such work is often unpaid and therefore considered as "free" (Fuchs 2013; Schradie 2011; Terranova 2000), but the poor and working class may not be as likely to have this disposable digital labor available to them. While skills and literacy are a factor in digital participation (Hargittai 2010; Hargittai and Shaw 2013; Van Deursen and Van Dijk 2011), even when these factors are accounted for, marginalized populations still participate less online (Bonfadelli 2002; Correa 2010; Sims 2014). Some digital inequality scholars, therefore, have extended some stratification conceptions of class and entitlement to the digital space, such as drawing on Bourdieu to understand the distinct digital habitus of different social classes (Robinson 2009). While this literature has suggested broader power differences between social classes accounting for the digital divide, it has yet to articulate this mechanism, especially in the social movement context.

POLITICAL FIELD-LEVEL APPROACH AND CASE SELECTION

Initially, studying high levels of digital activism, such as episodic events or online-intense movements, were novel and warranted empirical study, but focusing on these "vanguard movements" (Stein 2009)

has resulted in analyses of activists who tend to already have consistent internet connectivity and online participation. Findings and theories of low participation costs may reflect this selection bias. This is related to the widespread use of studying digital activism exclusively using online methods. By emphasizing high profile users or movements, as well as online data, it has been difficult to harness social class variation. To avoid these limitations, this study offers a field-level approach (McAdam and Boudet 2012) to compare digital activism practices across different types of organizations. It also uses a combination of online and off-line data collection methods, advancing Laura Stein's (2009) suggestion that multi-method research could help illuminate the various social movement organizational dynamics that shape internet use.

The research design begins with a single issue that was of interest to a broad spectrum of groups: the hotly contested debate over collective bargaining among public sector employees in North Carolina. The NC General Assembly, the state's legislative body, passed a ban on collective bargaining for the public sector in 1959. But it was not until the last two decades that North Carolina witnessed increased political polarization on the issue. It is one of only three states where public workers do not have collective bargaining rights (Freeman and Han 2012). In 2014, the state had the lowest unionization rate in the country (2 percent), according to the Bureau of Labor Statistics. Public sector workers can join unions, but North Carolina is "right-to-work" in that membership is not compulsory, making participation voluntary and similar to joining a social movement group.

This issue is an ideal case to evaluate class differences in online activism because it engages a broad array of groups that all target the same issue but vary in terms of socioeconomic class. The units of analysis for this multi-method field-level study are the 34 social, political, and labor organizations that actively supported or opposed these labor rights (see Table 1). Eight of these groups are labor unions, two of which are working class, three are mixed class, and three are middle to upper class. Three of the five working-class groups are *not* unions. Supporting these labor rights, the groups in this field also included the NC-NAACP and other social movement groups that I categorized as "left" for parsimony. On the "right," the organizations that opposed collective bargaining included conservative advocacy think tanks, government and business associations, as well as patriot groups, which consisted of Tea Parties and other far right organizations (see Table 1). All had open participation. This political field also involved newer groups with looser organizational structures, such as student and some patriot groups, as well as more firmly established legacy organizations.[3] This variation in the groups' organizational age and structure provided a way to capture the digital activism literature's emphasis on newer groups with less formal and more networked infrastructure. Yet the use of well-defined groups as a unit of analysis made it possible to identify class membership.

This study was designed neither to privilege nor to begin in online spaces. I included all groups exhibiting active participation on the issue of collective bargaining, including legislative work, public protests, and information and media campaigns. I developed the list of organizations under study from in-depth interviews, site visits, news media reports, and online searches. Each group I studied had been in existence for at least one year at the time the study began in 2011, and most were much older. Each group had a presence as a local or statewide organization, and some had national ties as well. I asked each group I contacted for a list of other groups in the field to make sure I captured the active organizations advocating on this issue, including those without a searchable web presence, so the sampling frame includes the entire field of organizations involved in this issue.[4]

North Carolina was a robust site to research digital activism from 2011-2014 because it had wide variation in internet access rates, with a mix of high internet connectivity in technology hubs and extremely low internet access in high-poverty areas, which enabled me to avoid bias based on over- or under-connectivity.

3 Twenty-six groups were more hierarchical in that they had three or more levels of decision-making, and eight groups were less hierarchical with two or fewer levels.

4 Some groups had been incorporated into other organizations or were no longer active on the issue by 2011. I also made sure to include any individuals active on the issue, but all people involved had an association with a group.

Table 1. Organizations of the Political Field of Activism Around Public Employee Collective Bargaining Rights in North Carolina, Categorized by Class and Total Standardized Digital Activist Score

Name	*Social Class*	*Score*
Americans for Prosperity-NC	middle/upper	2.56
John Locke Foundation/Carolina Journal	middle/upper	2.02
CIVITAS	middle/upper	1.18
Crystal Coast Tea Party	middle/upper	.94
Institute for Southern Studies	middle/upper	.80
NC Association of Educators*	middle/upper	.60
Moore TEA Citizens	middle/upper	.57
NC Chamber of Commerce	middle/upper	.55
National Association of Social Workers – NC*	middle/upper	.32
NC League of Municipalities	middle/upper	−.02
NC Association of County Commissioners	middle/upper	−.05
NC School Board Association	middle/upper	−.12
UNC-Student Action with Workers	middle/upper	−.49
American Association of University Professors – NC*	middle/upper	−.75
Coalition for NC Jobs	middle/upper	−1.21
NC Board of Governors	middle/upper	−1.48
NC Tea Party	mixed	.84
Caldwell Tea Party	mixed	.64
NC Freedom	mixed	.61
NC AFL-CIO	mixed	.60
CFFA-660 Charlotte Firefighters Association	mixed	.46
NAACP - NC	mixed	.41
Historic Thousands on Jones St. Coalition	mixed	.26
State Employees Association of NC	mixed	.06
NC Renegade	mixed	.04
NC Tea Party Revolution	mixed	−.09
Moccasin Creek Minutemen	mixed	−.57
Workers World Party-Durham Branch	mixed	−.76
HOPE Coalition	mixed	−1.01
Jobs With Justice - NC	working	−.67
Black Workers for Justice	working	−.67
IBT-Local 391 Teamsters	working	−1.10
UE Local 150	working	−1.64
Coalition Against Racism	working	−2.02

Notes: Score is the total standardized Digital Activism Score based on the calculations in Table 2. Organizations with an asterisk (*) are unions of workers that are categorized as middle/upper class to align with the digital inequality literature on socioeconomic factors, but based on classical definitions of class relations, I also analyzed their scores by including them as working class, which also showed class inequalities.

ONLINE AND OFF-LINE DATA COLLECTION AND ANALYSIS

Qualitative Data

To understand internet use, as well as mechanisms driving any differences in online participation, I interviewed 65 expert informants from most of the organizations. These were semistructured interviews that generally lasted from 30 to 120 minutes. I also conducted ethnographic observations of

meetings, protests, other events, and observations of personal internet use. A research team and I read and viewed each group's website, Facebook, and Twitter posts (for groups that used these platforms), taking field notes on our observations. In the coding procedures I used both emergent themes, as well as those based on the literature, such as inequality, costs, skills, and empowerment patterns in the data.

Digital Activist Scores – Measuring Digital Engagement

To triangulate the qualitative findings, a research team and I gathered original data from Tweets, Facebook posts, and website metrics of the organizations under study. These platforms dominated the literature and were the most commonly used public interfaces at the time of the study.[5] Data collection procedures involved writing scripts and code using the Facebook and Twitter Application Programming Interface (API).[6] We surveyed websites over 18 months to note any changes across six-month intervals, and we gave each group a score over that time period. Facebook data were based on the total time the organization was on the platform. For Twitter, the data derived from the total time the organization was on the platform for measurements of Tweets, following and follower numbers, but other data were not readily available for the entire time each group used Twitter, so we collected and averaged other measures of Twitter participation, such as mentions and hashtags, over a one-year period.

Social Class Operationalization

I categorized groups on the basis of their members' social class: working class, mixed class, and middle/upper class. I operationalized class by the types of jobs held by members using Erik Olin Wright and colleagues' (1982) classification of employees' control over their work environment. This operationalization aligned with the social movement and inequality scholarship's focus on empowerment as a participation mechanism. However, because of the digital inequality literature's focus on socioeconomic levels, rather than class power relations, I also used members' educational level (Mare 1980). If more than 75 percent of an organization's members had working-class jobs and a high school education or less, I categorized the organization as working class. If 75 percent of the members had middle/upper-class jobs and had a college education or more, the organization was categorized as middle/upper class. As a result, unionized teachers, social workers, and university faculty are categorized as middle/upper class. However, as a robustness check, I also conducted a separate quantitative analysis incorporating these groups as working class, rather than only highlighting intra-class differences of privilege (Eidlin 2016). If a group met neither threshold, I considered it as mixed class. This mixed-class categorization of groups, which were not uniform in class composition, enabled me to determine if having a substantial portion of both classes tipped the balance in digital activism levels in either direction. This coding was based on interviews and queries during observations. For groups comprising public employees, this information was readily accessible publicly. For other organizations, I gathered data from staff and respondents regarding their members' employment statuses and used interviews to verify my initial classifications. Some organizations had working-class members and middle/upper-class staff or leaders; I categorized these groups as working class.[7] Five groups were working class, 13 were mixed, and 16 were middle/upper class.

I specified and aggregated *types* of online use based on a typology of their development of, architecture for, and participation in websites, Facebook, and Twitter (see Table 2). Scant research compares different types of online platform use across organizations (e.g., Agarwal et al. 2014). I analyzed a combination of online activities, instead of focusing on any one platform to avoid privileging one

5 Email was not quantified because it is not part of the literature on social media affordances and is not publicly available.

6 Tweets were also directly scraped because of Twitter's limitations on historical data access.

7 College-educated staff/volunteers do not counteract class effects on digital activism scores.

Table 2. Digital Activist Score Computations by Activity and Platform – Standardized

	DEVELOPMENT **If you Build it…**		**ARCHITECTURE** **Design it for participation…**		**PARTICIPATION** **Will they come…?**		
Web Site	Group has website = 1 + Website has video to Measure complexity = 1 + Updated last 6 months = 1 *Cell A*	+	1 for each of following: donations, membership sign-ups, alert subscriptions, social media links, comments, calendar, petition or other interactive feature. Max #=7 *Cell B*	+	N/A *Cell C*	=	**Web Site Score** *Cell D*
	+		+		+		+
Facebook	Group uses Facebook = 1 + Posts/days on Facebook + Days on Facebook/1000 *Cell E*	+	Group = 1; Page=0 + Anyone Can Post = 1 *Cell F*	+	Comments/Days on Facebook + Likes/Days on Facebook + Members or Likers/Days *Cell G*	=	**Facebook Score** Cell H
	+		+		+		+
Twitter	Group has Twitter = 1 + #Tweets/Days on Twitter + #Days on Twitter/1000 *Cell I*	+	Mentions/Tweet + Hashtags/Tweet + Following/Days on Twitter *Cell J*	+	Retweeted/Day + Favorites/Day + Followers/Days on Twitter *Cell K*	=	**Twitter Score** *Cell L*
	=		=		=		=
	Development Score *Cell M*	+	**Architecture Score** *Cell N*	+	**Participation Score** *Cell O*	=	**TOTAL Digital Activist Score** *Cell P*

Notes:
*Each of the 16 cells is standardized with a *z* score. All of the scores for each row and for each column are averaged to determine the platform (website, Facebook, and Twitter) or activity (development, architecture, and participation) scores. Groups did not track unique visitors consistently for websites, so participation scores are not available. These activity scores are then standardized and averaged for the total digital activist scores, which are also standardized. Website evaluations took place over 18 months; Facebook for the life-span of the platform; Twitter for both life-span for measures of Tweet, following and follower totals, and 6/12-6/13 for favorites, hashtags, mentions, and retweeted measures.
*Facebook and Twitter participation data are divided by the number of days on the platform to capture overall participation, but architecture levels are divided by individual posts since that was a choice by the organization.
*Donations also included ways people could engage in a financial transaction with a group, such as registering for a conference.

that may decline in popularity. Table 2 describes the specific components of this overall score for each platform and activity.

1. *Development* (cell M/Table 2) measures whether and how much a group built each online platform. For social media, this measures posts and how old their account is. Because websites are more static, the measure is whether groups updated their websites over a six-month period.
2. *Architecture* measurements describe how much organizations designed each platform for open participation (Cell N). Websites with a larger proportion of seven interactive features received a higher architectural score (Cell B). Groups also received a higher score for setting up Facebook "groups," which are more participatory than "pages," and for allowing anyone

to post. For Twitter, encouraging participation included mentions, hashtags, and accounts they followed.

3. *Participation* on Facebook is a measure of comments and likes, as well as the number of members for a group or "likers" for a page (Cell G). For Twitter (Cell K), the number of "Retweets," "favorites," and "followers" a group received constructs this measure. Websites do not have a participation measure because "hit" data represent access rather than participation.

I constructed a total *digital activist score* for each group by standardizing every organization's development, architecture, and participation score on each of the three platforms. I then averaged all of these scores and standardized them again to create the total digital activist score (Cell P). This total standardized score was verified through factor analysis of the measures in Table 2; all factors loaded onto one latent variable.

Analytic Strategy

Quantitative findings are based primarily on the mean differences between the digital activist scores (Cells A - P) and social class using Welch's *t*-test between working-class and middle/upper-class groups, as well as mixed-class groups, as the data met the basic assumptions for this method.[8] I also employed robustness checks, such as a two-way regression analysis with class as the primary independent variable, as well as with other possible explanatory variables. A large multivariate analysis as the primary method was not appropriate for this analysis. Small sample sizes, including many covariates, would over fit the model due to few degrees of freedom. I also measured the effect size using pooled variation.[9]

FINDINGS: EXTENT OF DIGITAL DIFFERENCES

Both the qualitative fieldwork and the statistical analysis demonstrate that groups with predominantly working-class members had lower levels of digital engagement than their middle/upper-class counterparts.

Websites

Two organizations, both with working-class members, had no functioning website (UE 150 and Coalition Against Racism). These two organizations were among the most active groups for collective bargaining rights yet lacked a Web presence. The most complex website from a working-class organization did have a number of features, such as video posts, but the group did not consistently update the site. Table 3 shows the descriptive statistics of the website *development* scores. For instance, more than twice as many middle/upper-class groups update their websites than working-class groups.[10] Still, the overall website development score is not statistically significant with class, as most groups at least registered a website (see Table 6, cell A).

The architecture measures—how the groups set up their websites for interaction and use—show that groups with mixed or middle/upper-class members had more complex websites with interactive features and plug-ins, such as subscriptions and donations, as well as links to social media. The John Locke Foundation was one such organization, having six of the seven features in the architecture

8 I did not conduct a qualitative comparative analysis (QCA) because with the outcome variable as continuous and a vector space that is mostly empty, this method would be overstretched with the counterfactuals and calibration.

9 This measures the difference between two variables, complementing *p*-values. Pooled variation allowed a standardized measure of any effect of the primary independent variable under study relative to variability in the political field. Using both Cohen's *d* and Hedges' *g*, I corrected for any uneven groups. Jacob Cohen (1988) argued that any effect size more than .8 is considered "large." The effect size was large for all reported differences.

10 The finding is only significant with the two-way regression and with $p < .10$ given the small sample size although $t = -2.12$, but generally reported differences are significant with Welsch *t*-tests at the $p < .05$ level.

Table 3. Component Summary Statistics for Organizational Website Score by Social Class

	Registered Website	*Development (Cell A, Table 21) Video as Complexity*	*Updated*	*Architecture (Cell B, Table 2) Scaled*
Working class	.80	.60	.40[x,t]	2.60[t]
Mixed class	.77[x]	.69	.77	3.31*
Middle/upper class	1.00	.75	.94	4.75

Notes: The first three columns—the development scores—are all percentages of groups in each category, with the updated response from 2013. The architecture score is based on having a percentage of seven website features as described in Table 2.
*Statistically significant difference in a *t*-test (Welch) between the average standardized total digital activism score between working-class and middle/upper-class groups (* $p < .05$ ** $p < .01$ *** $p < .001$; two-tailed tests).
[t]Statistically significant at the $p < .05$ level with a basic two-way regression between working-class and middle/upper-class groups.
[x]*P* value is < .10 but more than .05, which I report given the small sample size.

index. As a conservative organization, it advocated for limited government in general, including advocating against public employee unions. Its website had a broad array of tools that participants could use to learn about not just the organization and its policy papers but also ways to participate online, such as registering for events. On average, working-class groups had 2.6 of these participatory features while middle/upper-class groups had 4.75 (see Table 3).

Overall, working-class organizations tended to utilize websites for organizing purposes at a lower rate than groups with more middle/upper-class members, and the standardized total website score bears this out as well. For websites, Table 6 shows that, on average, a 1.08 standard deviation (SD) class gap existed between working-class and middle/upper-class groups.[11]

Facebook

Working-class groups were less likely than mixed and middle/upper-class groups to develop a Facebook presence. Only three of the five working-class groups were on Facebook (see Table 4). None of the working-class organizations, even those with accounts, used them on a regular basis. During one month of the study, no working-class group posted on Facebook, even though they held public events during that time. On average, mixed and middle/upper-class groups posted 17 times as much as working-class groups (see Table 4). The overall Facebook development score showed a difference of 1.24 SDs between working-class and middle/upper-class groups and a 1.35 SD gap with mixed-class groups (see Table 6, cell E).

Activists talked about using Facebook more than other platforms, yet groups from different social classes used it in distinct ways. With the few posts they had, working-class groups tended to post original photos after their events, such as meetings and protests, especially posed group photos, just like they did with their printed newsletters. Middle/upper-class groups tended to post more official announcements, especially among the professional groups, while mixed-class groups used Facebook in a variety of ways, posting and exchanging items such as news articles, political memes, or information about group events.

Like many of their mixed-class counterparts, none of the working-class organizations restricted Facebook participation, but their participation was still extremely low. As Table 4 shows, working-class groups had about .02 comments per day on Facebook while middle/upper-class groups averaged 1.08. The number of likes per day had a similar gap with .16 versus 3.10, and on average, middle/upper-class groups had ten times as many members or likers on Facebook. These aggregated participation measures yielded an overall participation score gap of .74 SDs between working and middle/upper-class groups. For the standardized total Facebook scores (see Table 6), all of the working-class

11 This is a large effect size, significant at the $p < .05$ level with the regression and simple *t*-test but not with Welsch.

Table 4. Component Summary Statistics for Organizational Facebook Score by Social Class

	Development			*Architecture*			*Participation*	
	Have Facebook	*Posts/Day*	*Day/1000*	*Group (1) or Page (0)*	*Anyone Post? (1)*	*Comments/ Day*	*Likes/ Days*	*Members-Likers/Day*
Working class	.60	.05^{**,m,t}	.44^{*,m,t}	.00^{m}	.20^{m}	.02^{*,m,t}	.16^{*,m,t}	.25^{t}
Mixed class	1.00	.86	1.03	.31	.85	.92	2.50	1.17
Middle/upper class	.88	.83	1.04	.13	.63	1.08	3.10	2.94

*Statistically significant difference in a *t*-test (Welch) between the average standardized total digital activism score between working-class and middle/upper-class groups (* $p < .05$ ** $p < .01$ *** $p < .001$; two-tailed tests).
^{m}Working-class groups have a statistically significant difference from mixed class groups at the $p < .05$ level.
^{t}Statistical significance at the $p < .05$ level with a basic two-way regression between working-class and middle/upper-class groups
^{x}*P*-value is < .10 but more than .05, which I report given the small sample size.

groups were below the mean. Mixed and middle/upper-class groups had average Facebook scores that were 1.46 and 1.28 SDs, respectively, higher than the scores of working-class groups.

Twitter

The extent of Twitter engagement varied based on social class, with many measures showing a larger digital activist gap than the other platforms. Among groups of all class compositions, Twitter content often consisted of tweeting articles. This was particularly true of mixed-class Tea Party groups, which tended to tweet political articles or memes, whereas more professionalized middle/upper-class organizations were more likely to tweet links to self-produced content. Among working-class groups, Black Workers for Justice (BWFJ), a leader in early public employee collective bargaining activities, was the only working-class organization with a Twitter account. But since BWFJ opened their Twitter account in 2011, they had only tweeted once during the course of the study. As a result, of the approximately 64,000 Tweets in this analysis, only 1 came from a working-class organization.

Nine of the 34 organizations did not have a Twitter account. Two of these groups were middle/upper class and in academia—the University of NC Board of Governors and the American Association for University Professors, NC Chapter. Some of the professional organizations that were the most powerful players in opposing collective bargaining rights did not use social media at all. Still, organizations with mixed and middle/upper-class members were more apt not only to have a Twitter account but also use it more actively. Over 80 percent of the mixed and upper-class groups had Twitter accounts and averaged up to two Tweets per day, as well as having been on the platform, on average, five times as long as the one working-class group with an account (see Table 5). These *development* measures funnel into a Twitter development score, which shows a 1.09 SD difference between working-class and middle/upper-class groups and a 1.25 difference with mixed-class groups (see Table 6).

Because working-class groups were not using Twitter at all, their architecture and participation scores were zero, which of course resulted in vast differences with other groups (see Tables 5 and 6). Middle/upper-class groups were more likely than mixed-class groups to mention other people in their Tweets (12 percent versus 27 percent of Tweets), but they were about even with using hashtags, both of which are ways to maintain and increase Twitter participation. Participation rates were also fairly evenly divided between mixed and middle/upper-class groups. The average difference between the total Twitter score of working-class groups and that of mixed-class groups was 1.11 SDs and that of middle/upper-class groups was 1.33 SDs (see Table 6).

Table 5. Component Summary Statistics for Organizational Twitter Score by Social Class

		Development			*Architecture*		*Participation*		
	Have Twitter	*Tweets/ Day*	*Day/ 1000*	*Mentions/ Tweet*	*Hashtags/ Tweet*	*Following/ Day*	*Retweet/ Day*	*Favorites/ Day*	*Followers/ Day*
Working class	.20^{*,m,t}	.00^{***,m,t}	.21^{*,m,t}	.00^{***,m,t}	.00^{**,m,t}	.00^{**,m,t}	.00^{**,m,t}	.00^{*,m,t}	.00^{**,m,t}
Mixed class	.85	2.02	.93	.12*	.59	.36	.26	.03	.57
Middle/ upper class	.82	1.58	.96	.27	.64	.52	.25	.03	1.11

*Statistically significant difference in a *t*-test (Welch) between the average standardized total digital activism score between working-class and middle/upper-class groups (* $p < .05$ ** $p < .01$ *** $p < .001$; two-tailed tests).
^{m}Working-class groups have a statistically significant difference from mixed class groups at the $p < .05$ level.
^{t}Statistical significance at the $p < .05$ level with a basic two-way regression between working-class and middle/upper-class groups
^{x}*P*-value is < .10 but more than .05, which I report given the small sample size.

Table 6. Averaged and Standardized Digital Activism Scores for Different Social Classes by Online Activity and Platform

	Development	*Architecture*	*Participation*	*Total Platform*
Website				
Working	−.59	−.66^{t}		−.67^{t}
Mixed	−.15	−.30^{*,t}	NA	−.24^{x}
Middle/upper	−.31	.45		.41
	Cell A	*Cell B*	*Cell C*	*Cell D*
Facebook				
Working	−1.10^{*,m,t}	−.87^{x,m}	−.52^{*,m,t}	−1.16^{**,m,t}
Mixed	.25^{t}	.46	−.06	.30
Middle/upper	.14	−.10	.22	.12
	Cell E	*Cell F*	*Cell G*	*Cell H*
Twitter				
Working	−.99^{**,m,t}	−.86^{**,m,t}	−.82^{**,m,t}	−1.05^{**,m,t}
Mixed	.26	−.01	−.10	.06
Middle/upper	.10	.28	.34	.28
	Cell I	*Cell J*	*Cell K*	*Cell L*
Total Activity				*TOTAL*
Working	−1.12^{*,m,t}	−1.23^{**,m,t}	−.75^{**,m,t}	−1.22^{**,m,t}
Mixed	.15	.08	−.09	.05
Middle/upper	.23	.32	.31	.34
	Cell M	*Cell N*	*Cell O*	*Cell P*

*Statistically significant difference in a *t*-test (Welch) between the average standardized total digital activism score between working-class and middle/upper-class groups (* $p < .05$ ** $p < .01$ *** $p < .001$; two-tailed tests).
^{m}Working-class groups have a statistically significant difference from mixed class groups at the $p < .05$ level.
^{t}Statistical significance at the $p < .05$ level with a basic two-way regression between working-class and middle/upper-class groups
^{x}*P*-value is < .10 but more than .05, which I report given the small sample size.

Overall Digital Activism Scores

Inequalities persisted when aggregating all three platforms. Figure 1 shows differences in how groups created and built digital content. Both mixed and middle/upper-class groups had higher development scores than working-class groups—a difference of 1.27 and 1.35 SDs, respectively. Similarly, the extent to which the groups designed these platforms for online participation, or their architecture scores, showed a difference of 1.31 and 1.55 SDs. We might expect that the biggest hurdle to online engagement would be getting the platform up and running, but that did not seem to be the case, as participation scores also varied greatly across class lines. Working-class groups had fewer people liking, commenting, retweeting, and following them as compared to middle/upper-class groups, with an average 1.06 SD difference in participation, though mixed-class groups' participation score actually fell below the mean. The participation difference between working-class and middle/upper-class groups was similar across platforms (Figure 1) with over one standard deviation for websites (1.08), Facebook (1.28), and Twitter (1.33), so social media gaps were slightly higher.

For the total digital activist score, which standardized and averaged all platforms and activities, the class difference was statistically significant (see Tables 1 and 6, Figure 1) between working-class and mixed-class groups (1.27), as well as between working-class and middle/upper-class organizations (1.56). The lowest score was 2.02 SDs below the mean (a working-class group) and the highest was 2.56 SDs above the mean (middle/upper-class group). Figure 2 shows a boxplot of the variation and median in the total score with the three class categories, all of which show a class gap between working-class groups and the other two class categories of approximately 1.5 SDs. When I excluded the single outlier working-class group with no online presence, all of the class differences remained. At the same time, with unionized teachers, social workers, and faculty included in the working-class category, the class difference with the total score remains significant. Middle/upper-class groups also had the widest variation in standardized digital activist scores compared to other class categories, so the gap even includes some elite groups with very low scores who chose not to use public social media because they wielded a lot of power in the state and did not want or need public feedback (see Figure 2).

I evaluated alternative explanations for the digital activism gap other than class. Table 7 shows no statistical difference in internet use between formal unions and non-unions (Model G) or between newer and older groups (Model F). Right-wing groups showed a medium effect size with higher scores ($p = .053$ in Model B), but I found a statistically significant and large effect size between working-class left groups (-1.22 SDs below the mean) and middle/upper-class right groups (.45 SDs above the mean), with these conservative and resourced groups having the highest score across the field. Class composition and ideology were highly correlated: all of the working-class groups were also left. In some respects, then, class is associated with ideology in this analysis; however, ideological differences do not *directly* explain how class operates with the digital activism gap.[12] Instead, I outline below the mechanisms of this inequality.

FINDINGS: MECHANISMS OF THE DIGITAL ACTIVISM GAP

To explain the extensive class inequality in this political field's online activism, I turn to the qualitative analysis. The costs for online participation for working-class groups drive the gap.[13] For organizations, class divides were rooted in resource variation. For individual working-class activists, the gap in online participation was embedded in access, skills, empowerment, and tools (ASETs).

12 The size of an organization as statewide or local does not shape digital activist scores. Hierarchy levels do show strong associated affects with the scores, but hierarchical working-class groups show no increase in digital engagement. Political strategy also works together with social class to create less of a motivation to use social media (Schradie 2015). I analyze all of these factors in a book (Schradie forthcoming).

13 Except for a measurement of staff levels, these mechanisms are not operationalized in a quantitative analysis.

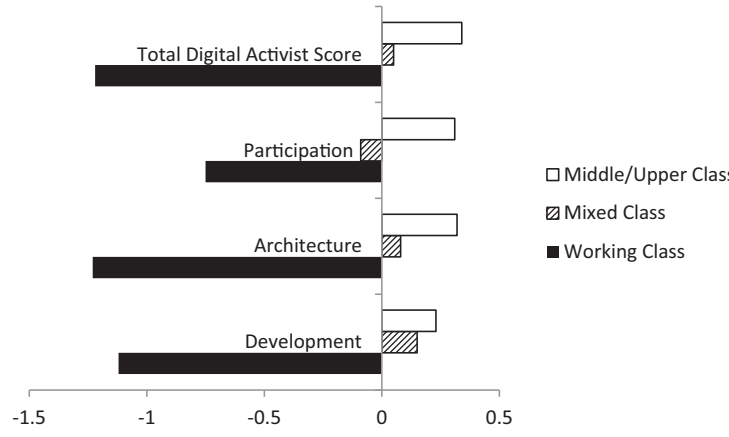

Figure 1. Standardized Activity Scores Based on Organizational Social Class

Notes: All based on standardized calculations from Table 2. Statistically significant differences between working-class and middle/upper-class groups, as described in Table 6, with the following differences in the standardized score: development: 1.35 SDs; architecture: 1.55 SDs; participation: 1.06 SDs; website: 1.08 SDs; Facebook: 1.28 SDs; Twitter: 1.33 SDs.

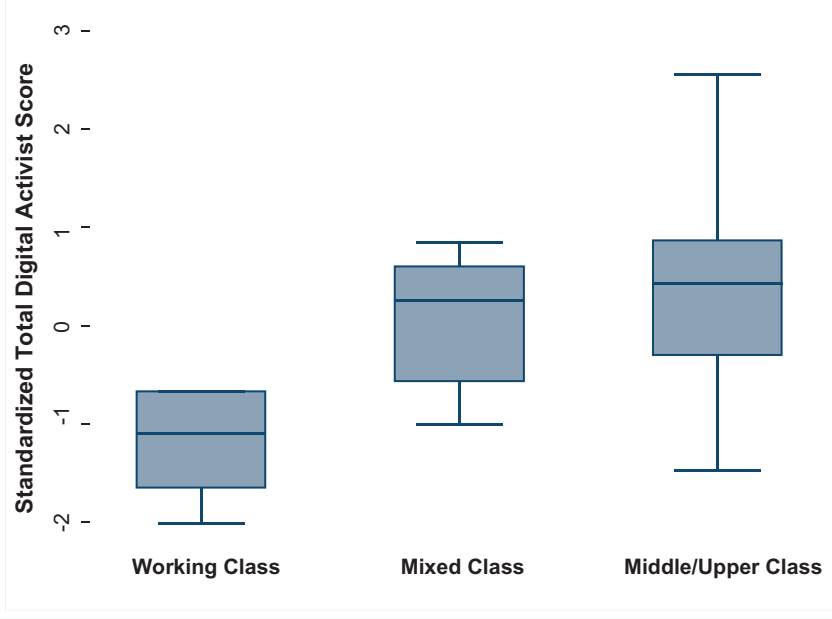

Figure 2. Boxplot of Median Total Standardized Digital Activism Scores by Social Class

Notes: The line through the box represents the median for each group at the 50th percentile, the bottom line of the box is the 25th percentile, and the top line is the 75th percentile. The whiskers include the full variance and all outliers are included.

The Means of Digital Production for Organizations

In a sprawling office building on the suburban outskirts of the capital city of Raleigh, four staff members of a middle/upper-class organization were part of a communications team equipped with the latest computers. Across the city in downtown Raleigh, in a one-room office, an organizer in a working-class group showed me his organization's communications equipment. There were a number

Table 7. Regression Analysis: Total Standardized Digital Activism Scores with Other Variables

	Model A	*Model B*	*Model C*	*Model D*	*Model E*	*Model F*	*Model G*
Working class	−1.56		−1.28		−1.40		
	(3.48)**		(2.79)**		(2.74)*		
Mixed class	−.29		−.04		−.23		
	(−.88)		(−.11)		(−.69)		
Middle/upper class							
Number of staff		.02	.01				
		(2.42)*	(−1.80)[x]				
Right wing				.66	.24		
				(−2.01)[x]	(−.69)		
Left wing							
Organizational age						.00	
						(.97)	
Union							−.24
							(.59)
Non-Union							
_cons	.34	−.23	.03	−.33	.18	−6.97	.06
	−1.55	−1.25	−.10	−1.42	−.55	(.97)	(.28)
R^2	.28	.15	.35	.11	.29	.03	.01
N	34	34	34	34	34	34	34

*Statistically significant difference in a *t*-test (Welch) between the average standardized total digital activism score between working-class and middle/upper-class groups (* $p < .05$ ** $p < .01$ *** $p < .001$; two-tailed tests).
[x]*P*-value is < .10 but more than .05, which I report given the small sample size.

of broken computers and a fax machine that no longer worked. Everyone in the organization turned to him for technological and communications questions, but he admitted that he did not understand social media. This working-class group did not have a Twitter feed or a functioning website and only occasionally made use of its Facebook page.

Differences in organizational resources were stratified along class lines, which shaped groups' abilities to build an online presence. But it was not simply a question of which group had the latest digital equipment. Respondents also often talked about lacking a dedicated person who knew how to update their online presence. As Robert said about this digital labor, "We didn't always have the staff or volunteers to update [our website], but someone has to go and do it. It's not a function of the site but finding people to do it." Even with seemingly more "basic" social media tools, like Facebook, respondents reported not being able to afford someone to create and sustain them. Maintaining an active digital presence imposed high costs on organizations. Another activist, David, said this about the state of their online presence:

> [It's] just so pitiful. It's such a clear thing that we really should have. . . . I mean, it's just such a weakness and frustration . . . It's one of those learning curve things—it's like [sighs] what a big thing to learn how to do.

He went on to talk about how people have repeatedly shown them how to operate various online platforms but that their group did not use it often enough to remember.

Having more middle/upper-class members often translated into more funding[14] and more staff members, which contributed to higher levels of digital engagement. Only one working-class group had more than five staff members while the average number of staff for middle/upper-class groups was 28. With more staff, organizations were more likely to develop complex platforms with high levels of participation. The digital activism relationship between resources and social class was about more than paid staff. In fact, some may argue that organizational resources for paid staffing created the observed effect of inequality, rather than class. Indeed, groups with more staff were more likely to have higher scores (see Table 7, Model B). The inclusion of staffing levels as a separate variable in a regression analysis did not remove the significance of the class gap (Model C). I also observed substantial variation in staffing levels among the groups with higher scores. For instance, the North Carolina chapter of the Koch brothers funded Americans for Prosperity (NC AFP) had consistently high scores across the index and the highest staffing levels, so as a robustness check, I excluded the NC AFP from the participation score as well as the total digital activist score, and the class gap was still substantial and significant.

For groups seeking mass participation, additional organizer effort was required to ensure that all members could join in the flow of the organizations' digital communication. The organizers of some of the mixed-class organizations described the intensive labor required to engage the entire membership when some members had internet access and others did not. Activists often talked about all of the ways to communicate with members in various life circumstances: home or work visits, phone calls, Facebook messages, text messages, and email. Courtney, a staff member of a mixed-class group, described the elaborate strategy she used to make her organizing inclusive, above and beyond those who could afford to use social media and other internet tools: "I think that's an important thing for us to figure out—not just to do organizing with people it's easy to do organizing with because that really misses a lot of people." In other words, it is easy to advertise a meeting or event online, but if some of your members do not have internet access, it takes extra work—and time—to make sure that everyone is included.

Individual Member Costs—I'm not a Tech Person

Organizational resources were not the only costs to digital activism; individual members or supporters also faced high ASET (access, skills, empowerment, and time) costs to digital participation.

For some, maintaining regular, consistent internet access was a challenge for people who could barely make ends meet. Respondents from working-class organizations and those in mixed-class groups with working-class jobs often struggled to access the internet. These members were often limited in terms of access to new technologies, such as smart phones or broadband. Mariah, a working-class leader, summed up her experience organizing people with various connectivity levels at both home and work:

> We can't do everything online, because a lot of workers . . . don't sit on the computer all day, like I do, they're out, they're working . . . public service work like sanitation or housekeeping. Or, if you have a state job, you might have some time on the computer, but you can't live there outside of your email for your job . . . assuming they have internet at all. Because I talked to a couple of our members this weekend, and they're not working, so they don't have a phone, and they don't have internet. So it's gonna be a challenge to get up with them over the next couple of weeks because they're disconnected. And that's the struggle, you gotta go to the library to get access to the internet . . . You're not gonna be able to do that from the comfort of your own home.

14 Funding, per se, is not a variable in this analysis but the number of staff can reflect financial resources.

Working-class members who did have internet access also faced other class-based constraints, such as skills. I visited the house of an active member, Edith, of a working-class union whom staff members said was the most digitally savvy in their membership. She worked full time for the state on less than $20,000/year. When I asked her to show me what she did online, it took her over a half hour to get her internet connected. She often clicked on ads inadvertently, which slowed down her computer. As Edith said about keeping up their group's online presence, "I just don't have the knowledge, the skills to do it."

The costs of personal time to go online were also high for many working-class public employees. Many were not allowed to use their mobile phone or the internet for personal use during the day, which was less of an issue for white-collar employees. One activist, who was a nurses' aide at a mental hospital, talked about having to forfeit his phone before punching his timecard. Rather than operating on a 24/7 social media clock, many activists did not have flexible and continuous device time. Instead, some interacted with digital media on a weekly basis or even less often.

This lack of control over where and when to go online was part of a broader sense of powerlessness and lack of entitlement that activists from working-class organizations experienced. Power, therefore, was another key mechanism deterring social media activism for these groups. Interviewees demonstrated a lack of entitlement to the internet through the phrases they used to describe digital technology. Many respondents in working-class groups often contrasted themselves to digitally savvy people. They tended to see digital activism as something "other" people would do. About a dozen people said, "I'm not a tech person," even a volunteer who had written some HTML code years earlier to build a group's website. One young labor activist, Jean, said, "I'm not computer ready, you know. It took me two hours just to set one bill up, so I'm not computer ready. But you have the cell phones, mail, so you can get the information out there." Jean said that non-internet means for information dissemination was what they had to do. And she was not talking about smart phones that can access the internet—when members of working-class organizations referred to cell phone use, they more often meant the work of placing phone calls or texts to members.

To explain their limited digital activism, members of working-class organizations often told me, "We make do with what we have." One young union member said of her lack of social media use, "I don't get up there," implying that these social media platforms were above her abilities. Respondents often laughed uncomfortably when asked about Twitter and said that this was just not something they did. One union member said, "That's too fast for me. I can't keep up. No, I ain't never did that. I just can't keep up with Twitter. I've seen them on there and they be talking to too many people at a time." Most people from groups that did not use Twitter expressed a vague desire to use it but that it seemed out of reach. One working-class organizer, in response to a meeting being videotaped, quipped, "Of course, this won't be on YouTube." As he later explained, posting a video to YouTube was not something that their organization could possibly do.

In contrast to the disempowerment felt by many working-class members, people from more mixed and middle/upper-class groups simply had more ASETs. They not only tended to have the access, skills, and tools, but they often expressed more entitlement and confidence in their ability to use social media to formulate and share their political opinions. The words used by one Tea Party member, Roan, to describe his online engagement were common among active social media users from mixed and middle/upper-classes. Roan often referred to himself as a scientist who, "of course," used the internet to learn about and share information to make "intelligent decisions." His comments reflect many of the interviews of people from organizations that fully integrated and normalized digital engagement into their existing activist practices. This contrasted with the generally low digital presence and lack of ASETs by many of the working-class activists whom I interviewed and observed online and off-line to understand their individual digital use.[15]

15 In a book that incorporates this research (Schradie forthcoming) another finding related to class differences and empowerment was how working class *fear* of repression for political repression, especially for African American workers, shaped their low levels of internet use.

DISCUSSION: CLASS, COSTS, AND COLLECTIVE ACTION IN THE DIGITAL ERA

Digital activism is not egalitarian. Organizations with predominantly working-class members were much less likely to use the internet for organizing than those with members from middle and upper classes. The findings presented here extend digital activism and inequality scholarship by showing a deep, perhaps deepening, divide based on class. Digital technology may indeed improve democratic participation, but it does not do so equally across social classes. Digital engagement varies systematically along class lines. This produces a digital activism gap. These findings contribute to the literature empirically, theoretically, and methodologically. First, I fill a gap by bridging the digital inequality scholarship on individuals and the social movement literature on costs to find cost disparity across social movement groups of different social classes. Next, collective action and resource mobilization theories are still critical, not overturned, as resources and costs are still essential. Third, I show that a key mechanism to the digital activism inequality is power differences, building on stratification literature across fields. Fourth, these findings suggest that democratic pluralism promises fall short in this case of digital activism. Finally, these contributions are all in the context of a new method I developed to analyze digital activism through a field-level approach.

Digital activist inequality was due to the costs of online participation in the form of organizational resources and individual access, skills, entitlement, and time. All groups and their members face costs involved in producing online content. But working-class organizations, both unions and non-unions alike, face much higher cost hurdles because they are starting out behind other groups in terms of resources and ASETs. While this study is not able to calculate whether or not digital media raise or lower costs for participation across time or with other regions or issues, it does demonstrate that there are substantial costs to sustain online participation for different classes of groups. Interviewees talked about wanting to do more online but not being able to pay the costs to do so. Rather than eliminate organizational and individual costs to political participation, internet activism comes with hidden costs. Internet use does offer cost efficiencies in communication but only if a group or its members already start out having the resources and ASETs to use them. The lower scores for working-class groups were due to these costs that they were not able to offset because they did not have these existing resources and ASETs. The costs to attain them were too high. Many of the mixed and middle/upper-class groups did not have to expend additional costs, similar to an "in-kind" line-item on a budget. As a result, class gaps for social movements continue in the digital era.

Though some scholars suggest that the internet can transcend Olson's (1965) collective action theories due to the reduced costs of online-intense organizing, my findings of the necessity of organizational resources and individual ASETs for online participation take this argument in a different direction. Olson's free rider dilemma is an imprecise framework to understand digital activist engagement. Even though individual member constraints influenced the digital activism gap in the overall political field, these individual costs must be contextualized. Studies that look at participation on an individual level of people already online are not always able to capture fully the structural constraints that shape inequality in the digital realm.

This study also extends resource mobilization and digital inequality theories by bringing in class power differences. Both sets of literature contend that resources can make a difference, so we might have expected that inequality would map onto online activism. Yet, just like McCarthy and Zald (1977) titled their resource mobilization article a "partial theory," so it is for digital activism. These two scholarly frameworks of socioeconomic differences do not account for the full effect of class differences. We must also account for broader classed power relations in their societal and structural context. One key mechanism of inequality often overlooked, even in studies of the digital divide, is class power. This factor is also not captured by traditional measurements of costs in the digital activist field. In line with some social movement scholarship on class power differences (e.g., Gaventa 1980), this study showed that people of different classes have varying experiences of power, powerlessness, and entitlement in relation to the internet. Regardless of skill level, people from working-class organizations frequently said they did not feel entitled to use technology and often referred to "other"

people as technologically savvy. Participation in online activism involved more than a technical understanding of how to operate a computer and access to social media tools; it also involved a feeling of entitlement to form and articulate a political judgment online—what working-class activists sometimes lacked. This sense of entitlement was fostered through the practice of producing content in the language and discourse of the plugged-in digital class.

The deep inequality across activities and platforms is consistent with the scholarship that has found platform differences along resource lines. Unlike some previous findings of the widest gaps with websites, findings show more inequality with social media. Twitter use was non-existent. Facebook posts were also scarce among working-class groups, yet this platform shows potential as an expressive space. In alignment with Lance Bennett, Chris Wells, and Deen Freelon (2011), their posts often reflected photos from their events, rather than the more official posts of their middle/upper-class counterparts. This was not necessarily due to the internet, however, as their printed newsletters had similar types of graphics. Working-class groups also had much lower levels of designing and using Facebook in participatory ways than the other groups. Still, mixed-class groups, which include working-class members, sometimes had higher levels of Facebook activity than middle/upper-class groups. Yet they may simply be mediating for working-class people, rather than working-class people speaking and participating online for themselves.

A key implication for the digital activism gap is that democratic pluralism arguments fall short in this context of digital activism. Class differences persist rather than disappear online. While the data presented here do not show the results of the activism to see how this inequality plays out with this political issue, it does suggest that in the case of collective bargaining rights in North Carolina, an online polyarchy is not viable. Yet groups who may not be active online were still participating in off-line forms of organizing and protest. Political participation, then, has not fully moved online for all groups. At the same time, as more policies and journalism derive from online debates, groups with low visibility on the internet may not have their voices heard as much as those with a loud digital bullhorn.

These digital divide and cost findings differ from the preponderance of the literature because of the object of study. With a focus on groups that are active online, research may have obscured variation in internet use by groups from different social classes. By incorporating an entire political field of groups involved in one issue, this study builds on Doug McAdam and Hilary Schaffer Boudet (2012) to provide a new framework to study activism and politics in the digital era. As a result, the diversity of organizations in this study provides analytical leverage. This research uncovered the behind-the-scenes off-line practices, costs, and class-based constraints that are involved in organizing initiatives. Findings demonstrate the relevance of studying the full range of organizations' everyday practices to see how most political work happens. Expanding on David Karpf's (2012) work on the organizational mechanisms behind online-only movements, this study reveals the limitations of online data. Some of the most active groups and individuals on the collective bargaining issue had no presence on Twitter. Even for online-intense groups, a lot of organizing still takes place off-line. Studying the everyday practices of a range of organizations opens up a window into how most political work happens and shows wide variation in this work. This comparison was also bolstered by a measure that went beyond counting hashtags to include not just whether or not movements have an online presence but also how much they design and use it for participation.

This field-level approach also reveals broader and deeper interactions between technology and society than by only examining how the internet shapes activism. It shows the reverse—how societal structures shape internet use for activism. By avoiding selection bias, this study reverses the assumed causal link between technology and activism and builds on an emerging scholarship that makes a more complex picture of the internet and politics than the flashpoints of digital activism (Bimber, Flanagin, and Stohl 2012; Karpf 2012; Wells 2015).

It is possible that this study may overlook personal posts by working-class people involved in this issue. If working-class individuals were using digital tools with their own social media networks to

counteract the lack of organizational resources, I would have observed this among the working-class activists I followed online. However, I did not observe (though did not count) a higher personal usage among working-class people than people from middle/upper classes. One would also expect that respondents would have discussed this extra-organizational usage in interviews, but they overwhelmingly talked about the constraints and minimal social media use, even among those considered to be more digitally savvy. The class-based constraints for organizations symbiotically affected individuals. Finally, comparing groups with different levels of organizational infrastructure had no effect on the significance of the digital activist gap. This triangulation of online metrics, online/off-line observations, and off-line interviews, instead, confirms digital activist inequality.

Overall, these findings trouble theories of drastically reduced participation costs in the digital era; theories of digital inequality, resource mobilization, and collective action remain relevant yet insufficient, as economic resources are only one mechanism of this gap. Social media use requires more than equipment, time, and skills because another class constraint limits members' online involvement. Power, in the form of entitlement differences, is also at play. A common assumption is that people are already wired and at the starting gate ready to participate online. But individuals and organizations should not be assumed to use technologies in the same way. Structural constraints affect groups' internet use for online participation. The internet reproduces class inequality, rather than operating as a mechanism of egalitarian participation.

CONCLUSION

Among users with ASETs to participate online, posting to a social media site for political action may require little commitment, but for someone with few resources and even less entitlement, intense commitment is required, even for hashtag activism. Digital activism takes work and requires digital labor. As political movements continue to move online, this variation in costs and power may exacerbate inequality within and between social movements. The digital activism gap may make collective action more difficult for groups with fewer resources and more working-class members.

While diffusion theories suggest that eventually all social movement groups will catch up, new technologies are constantly being created. Even if some working-class groups and activists begin to use social media or movements like Black Lives Matter emerge, having the classed resources and ASETs to keep up with middle/upper-class users is an uphill battle. Digital technology creates a treadmill that reproduces inequality. This study, therefore, has broad implications for our understanding of the reproduction of inequality, digital or otherwise. In addition to building on social movement and digital inequality theories, therefore, this research demonstrates the importance of the stratification literature in examining digital technologies.

With the ready availability and ease of tracking social media, often in large troves of "Big Data," an over-reliance on online data may miss organizing that takes place mostly on the ground. Internet searches are not sufficient to capture the full array of modern activism because some of the most active groups may not have any visible online presence. Because some political organizations and activists do not participate in the latest forms of social media, researchers who examine one popular platform—hashtags on Twitter, for example—may overlook digital activism from lower-income activists that may be more intermittent or occur on older platforms. Simply, the societal context matters, not just the technology itself.

A key implication for this study, therefore, is that theories—and policies—that are built only on those who have an empowered digital presence are limited. Future research, therefore, should go beyond data garnered just on the internet, particularly from only high profile mobilizations. Research would benefit from more precise modeling of how individual class factors—and class relations—affect internet use with digital activism. Scholarship could also more broadly look at how technology use differences and functionalities affect social movement goals, outcomes, and successes. The intersection of race and class is also critical in further research to better understand variation. In the

process, we can continue to move toward a more generalizable picture and corrective of digital engagement and democracy relevant to all of society, not just those online. At the same time, given that these differences are entrenched in broader structural and classed inequalities, resolving the digital activism gap will require more than providing digital resources to the working class.

REFERENCES

Agarwal, Sheetal D., Michael L. Barthel, Caterina Rost, Alan Borning, Lance W. Bennett, and Courtney N. Johnson. 2014. "Grassroots Organizing in the Digital Age: Considering Values and Technology in Tea Party and Occupy Wall Street." *Information, Communication & Society* 17(3):326-41.

Anderson, Monica. 2017. Digital Divide Persists Even as Lower-Income Americans Make Gains in Tech Adoption. Washington, DC: Pew Research Center.

Bachrach, Peter and Morton S. Baratz. 1962. "Two Faces of Power." *The Americun Political Science Review* 56(4):947-52.

Bennett, W. Lance and Alexandra Segerberg. 2013. *The Logic of Connective Action: Digital Media and the Personalization of Contentious Politics*. Cambridge, UK: Cambridge University Press.

Bennett, W. Lance, Chris Wells, and Deen Freelon. 2011. "Communicating Civic Engagement: Contrasting Models of Citizenship in the Youth Web Sphere." *Journal of Communication* 61(5):835-56.

Bimber, Bruce, Andrew Flanagin, and Cynthia Stohl. 2012. *Collective Action in Organizations: Interaction and Engagement in an Era of Technological Change*. Cambridge, UK: Cambridge University Press.

Bimber, Bruce, Cynthia Stohl, and Andrew Flanagin. 2005. "Reconceputalizing Collective Action in the Contemporary Media Environment." *Communication Theory* (4):365-88.

Bonfadelli, Heinz. 2002. "The Internet and Knowledge Gaps: A Theoretical and Empirical Investigation." *European Journal of Communication* 17(1):65-84.

Bourdieu, Pierre. 1984. *Distinction: A Social Critique of the Judgement of Taste*. London, UK: Routledge.

Brodock, Katharine, Mary Joyce, and Timo Zaeck. 2009. "Digital Activism Survey Report." DigiActive Research Series. Boston, MA: DigiActive.

Bureau of Labor Statistics. 2014. "Union Membership by State in 2014." U.S. Department of Labor, Washington, DC. Retrieved June 1, 2015 (www.bls.gov/opub/ted/2015/union-membership-by-state-2014.htm).

Castells, Manuel. 2012. *Networks of Outrage and Hope: Social Movements in the Internet Age*. Cambridge, UK: Polity.

Cohen, Jacob. 1988. *Statistical Power Analysis for the Behavioral Sciences*. New York: Lawrence Erlbaum Associates.

Cohen, Cathy J. and Joseph Kahne. 2012. *Participatory Politics: New Media and Youth Political Action*. Washington, DC: Pew Research Center.

Cordero-Guzman, Hector R. 2011. "Main Stream Support for a Mainstream Movement." Working Paper, School of Public Affairs, Baruch College, City University of New York, New York, NY.

Correa, Teresa. 2010. "The Participation Divide Among 'Online Experts': Experience, Skills and Psychological Factors as Predictors of College Students' Web Content Creation." *Journal of Computer-Mediated Communication* 16(1):71-92.

Croteau, David. 1995. *Politics and the Class Divide: Working People and the Middle-Class Left*. Philadelphia, PA: Temple University Press.

Dahl, Robert A. 1961. *Who Governs? Democracy and Power in an American City*. New Haven, CT: Yale University Press.

——. 1971. *Polyarchy: Participation and Opposition*. New Haven, CT: Yale University Press.

Earl, Jennifer and Katrina Kimport. 2011. *Digitally Enabled Social Change: Activism in the Internet Age*. Cambridge, MA: The MIT Press.

Earl, Jennifer, Katrina Kimport, Greg Prieto, Carly Rush, and Kimberly Reynoso. 2010. "Changing the World One Webpage at a Time: Conceptualizing and Explaining 'Internet Activism.'" *Mobilization: An International Quarterly* 15(4):425-46.

Eidlin, Barry. 2016. "Review of 'Missing Class: Strengthening Social Movement Groups by Seeing Class Cultures.'" *Contemporary Sociology* 45(2):206-9.

Eimhjellen, Ivar, Dag Wollebæk, and Kristin Strømsnes. 2013. "Associations Online: Barriers for Using Web-Based Communication in Voluntary Associations." *VOLUNTAS: International Journal of Voluntary and Nonprofit* Organizations 25(3):730-53.

Elliott, Thomas and Jennifer Earl. 2016. "Online Protest Participation and the Digital Divide: Modeling the Effect of the Digital Divide on Online Petition-Signing." *New Media & Society*. Retrieved October 15, 2016 (http://journals.sagepub.com/doi/abs/10.1177/1461444816669159#articleCitationDownloadContainer).

Enjolras, B., K. Steen-Johnsen, and D. Wollebaek. 2012. "Social Media and Mobilization to Offline Demonstrations: Transcending Participatory Divides?" *New Media & Society* 15(6):890-908.

Freeman, R. B. and E. Han. 2012. "The War against Public Sector Collective Bargaining in the US." *Journal of Industrial Relations* 54(3):386-408.

Fuchs, Christian. 2013. "Class and Exploitation on the Internet." Pp. 211-24. in *Digital Labor: The Internet as Playground and Factory*, edited by Trebor Scholz. New York: Routledge.

Garrett, R. Kelly. 2006. "Protest in an Information Society: A Review of Literature on Social Movements and New ICTs." *Information, Communication & Society* 9(2):202-24.

Gaventa, John. 1980. *Power and Powerlessness: Quiescence & Rebellion in an Appalachian Valley*. Champaign: University of Illinois Press.

Goodwin, Jeff and Gabe Hetland. 2013. "The Strange Disappearance of Capitalism from Social Movement Studies." Pp. 82-102 in *Marxism and Social Movements*, edited by Colin Barker, Laurence Cox, John Krinsky, and Alf Nilsen. Leiden: Brill Academic Press.

Grignou, Brigitte le and Charles Patou. 2004. "ATTAC(k)ing Expertise: Does the Internet Really Democratize Knowledge?" Pp. 145-58 in *Cyberprotest: New Media, Citizens, and Social Movements*, edited by Wim B. H. J. van de Donk, Brian D. Loader, Paul G. Nixon, and Dieter Rucht. London, UK: Routledge.

Gurney, Joan Neff and Kathleen J. Tierney. 1982. "Relative Deprivation and Social Movements: A Critical Look at Twenty Years of Theory and Research." *The Sociological Quarterly* 23(1):33-47.

Haight, Michael, Anabel Quan-Haase, and Bradley A. Corbett. 2014. "Revisiting the Digital Divide in Canada: The Impact of Demographic Factors on Access to the Internet, Level of Online Activity, and Social Networking Site Usage." *Information, Communication & Society* 17(4):503-19.

Hargittai, Eszter. 2010. "Digital Na(t)ives? Variation in Internet Skills and Uses among Members of the 'Net Generation.'" *Sociological Inquiry* 80(1):92-113.

Hargittai, Eszter and Aaron Shaw. 2013. "Digitally Savvy Citizenship: The Role of Internet Skills and Engagement in Young Adults' Political Participation around the 2008 Presidential Election." *Journal of Broadcasting & Electronic Media* 57:115-34.

Ignatow, Gabe and Jessica Lynn Schuett. 2011. "Inter-Organizational Digital Divide: Civic Groups' Media Strategies in the Trinity River Corridor Project." *First Monday*. Retrieved December 2, 2011 (http://firstmonday.org/ojs/index.php/fm/article/view/3696).

Karpf, David. 2012. *The MoveOn Effect: The Unexpected Transformation of American Political Advocacy*. Cambridge, UK: Oxford University Press.

Laurison, Daniel. 2015. "The Willingness to State an Opinion: Inequality, Don't Know Responses, and Political Participation." *Sociological Forum* 30(4):925-48.

Leizerov, S. 2000. "Privacy Advocacy Groups versus Intel: A Case Study of How Social Movements Are Tactically Using the Internet to Fight Corporations." *Social Science Computer Review* 18(4):461-83.

Lichterman, Paul. 1996. *The Search for Political Community: American Activists Reinventing Commitment (Cambridge Cultural Social Studies)*. Cambridge, UK: Cambridge University Press.

Mare, Robert D. 1980. "Social Background and School Continuation Decisions." *Journal of the American Statistical Association* 75(370):295-305.

Martin, Steven P. and John P. Robinson. 2007. "The Income Digital Divide: Trends and Predictions for Levels of Internet Use." *Social Problems* 54(1):1-22.

McAdam, Doug. 1986. "Recruitment to High-Risk Activism: The Case of Freedom Summer." *American Journal of Sociology* 92(1):64-90.

——. 1988. *Freedom Summer*. New York, NY: Oxford University Press.

McAdam, Doug and Hilary Schaffer Boudet. 2012. *Putting Social Movements in Their Place: Explaining Opposition to Energy Projects in the United States, 2000-2005*. Cambridge, UK: Cambridge University Press.

McCarthy, John D. and Mayer N. Zald. 1973. *The Trend of Social Movements in America: Professionalization and Resource Mobilization*. Morristown, NJ: General Learning Press.

——. 1977. "Resource Mobilization and Social Movements: A Partial Theory." *American Journal of Sociology* 82(6):1212-41.

Merry, Melissa K. 2011. "Interest Group Activism on the Web: The Case of Environmental Organizations." *Journal of Information Technology & Politics* 8(1):110-28.

Min, Seong-Jae. 2010. "From the Digital Divide to the Democratic Divide: Internet Skills, Political Interest, and the Second-Level Digital Divide in Political Internet Use." *Journal of Information Technology & Politics* 7(1):22-35.

Mossberger, Karen, Caroline J. Tolbert, and Mary Stansbury. 2003. *Virtual Inequality: Beyond the Digital Divide (American Governance and Public Policy)*. Washington, DC: Georgetown University Press.

Norris, Pippa. 2001. *Digital Divide: Civic Engagement, Information Poverty, and the Internet Worldwide*. Cambridge, UK: Cambridge University Press.

Offe, Claus and Helmut Wiesenthal. 1980. "Two Logics of Collective Action: Theoretical Notes on Social Class and Organizational Form." *Political Power and Social Theory* 1(1):67-115.

Oliver, Pamela E. and Gerald Marwell. 1992. "Mobilizing Technologies for Collective Action." Pp. 241-72 in *Frontiers in Social Movement Theory*, edited by Aldon D. Morris and Carol McClurg Mueller. New Haven, CT: Yale University Press.

Olson, Mancur. 1965. *The Logic of Collective Action: Public Goods and the Theory of Groups*. Cambridge, MA: Harvard University Press.

Pickard, Victor W. 2006. "Assessing the Radical Democracy of Indymedia: Discursive, Technical, and Institutional Constructions." *Critical Studies in Media Communication* 23(1):19-38.

Pickerill, Jenny. 2003. *Cyberprotest: Environmental Activism Online*. Manchester, UK: Manchester University Press.

Piven, Frances Fox and Richard Cloward. 1978. *Poor People's Movements: Why They Succeed, How They Fail*. New York: Vintage.

Robinson, Laura. 2009. "A Taste for the Necessary." *Information, Communication & Society* 12(4):488-507.

Schattschneider, Elmer E. 1960. *The Semisovereign People: A Realist's View of Democracy in America*. Boston, MA: Wadsworth.

Schlozman, Kay Lehman, Sidney Verba, and Henry E. Brady. 2010. "Weapon of the Strong? Participatory Inequality and the Internet." *Perspectives on Politics* 8(02):487-509.

Schradie, Jen. 2011. "The Digital Production Gap: The Digital Divide and Web 2.0 Collide." *Poetics* 39(2):145-68.

——. 2012. "The Trend of Class, Race and Ethnicity in Social Media Inequality." *Information, Communication & Society* 15(4):555-71.

——. 2015. "Labor Unions, Social Media, and Political Ideology: Using the Internet to Reach the Powerful or Mobilize the Powerless?" *International Journal of Communication* 9:1985–2006.

——. Forthcoming. *The Work of Democracy and the False Promise of Digital Activism*. Cambridge, MA: Harvard University Press.

Sims, Christo. 2014. "From Differentiated Use to Differentiating Practices: Negotiating Legitimate Participation and the Production of Privileged Identities." *Information, Communication & Society* 17(6):670-82.

Smith, Aaron. 2013. "Civic Engagement in the Digital Age." Pew Research Center Internet & Technology, Washington, DC. Retrieved April 30, 2013 (www.pewinternet.org/2013/04/25/civic-engagement-in-the-digital-age/).

Stein, L. 2009. "Social Movement Web Use in Theory and Practice: A Content Analysis of U.S. Movement Websites." *New Media & Society* 11(5):749-71.

Terranova, T. 2000. "Free Labor: Producing Culture for the Digital Economy." *Social Text* 18(263):33-58.

van de Donk, Wim B. H. J., Brian D. Loader, Paul G. Nixon, and Dieter Rucht. 2004. "Introduction: Social Movements and ICTs." Pp. 1-22 in *Cyberprotest: New Media, Citizens and Social Movements*, edited by Wim B. H. J van de Donk, Brian D. Loader, Paul G. Nixon, and Dieter Rucht. London, UK: Routledge.

van Deursen, A. J. A. M. and Jan A. G. M. van Dijk. 2011. "Internet Skills and the Digital Divide." *New Media & Society* 13(6):893-911.

van Dijk, Jan A. G. M. 2005. *The Deepening Divide: Inequality in the Information Society*. Thousand Oaks, CA: Sage Publications, Inc.

van Laer, Jeroen. 2010. "Activists Online and Offline: The Internet as an Information Channel for Protest Demonstrations." *Mobilization: An International Quarterly* 15(3):347-66.

Vasi, Ion Bogdan, and Chan S. Suh 2016. "Online Activities, Spatial Proximity, and the Diffusion of the Occupy Wall Street Movement in the United States." *Mobilization: An International Quarterly* 21(2):139-54.

Vergeer, Maurice and Liesbeth Hermans. 2013. "Campaigning on Twitter: Microblogging and Online Social Networking as Campaign Tools in the 2010 General Elections in the Netherlands." *Journal of Computer-Mediated Communication* 18(4):399-419.

Wells, Chris. 2015. *The Civic Organization and the Digital Citizen: Communicating Engagement in a Networked Age*. Oxford, UK: Oxford University Press.

Williams, Christine B. and Girish J. Gulati. 2013. "Social Networks in Political Campaigns: Facebook and the Congressional Elections of 2006 and 2008." *New Media & Society* 15(1):52-71.

Wright, Erik Olin, Cynthia Costello, David Hachen, and Joey Sprague. 1982. "The American Class Structure." *American Sociological Review* 47(6):709-26.

Zhang, Peter H.2014. "Digital Divides and Socio-Demographic Factors: A Longitudinal Quantitative Study of Internet Users in U.S. from 2000 to 2010." PhD Dissertation, School of Business and Technology, Capella University, Ann Arbor, MI.

Zillien, Nicole and Eszter Hargittai. 2009. "Digital Distinction: Status-Specific Types of Internet Usage." *Social Science Quarterly* 90(2):274-91.