



UvA-DARE (Digital Academic Repository)

Social media and new protest movements

Poell, T.; van Dijck, J.

Publication date

2018

Document Version

Author accepted manuscript

Published in

The SAGE Handbook of Social Media

License

Unspecified

[Link to publication](#)

Citation for published version (APA):

Poell, T., & van Dijck, J. (2018). Social media and new protest movements. In J. Burgess, A. Marwick, & T. Poell (Eds.), *The SAGE Handbook of Social Media* (pp. 546-561). SAGE reference.

General rights

It is not permitted to download or to forward/distribute the text or part of it without the consent of the author(s) and/or copyright holder(s), other than for strictly personal, individual use, unless the work is under an open content license (like Creative Commons).

Disclaimer/Complaints regulations

If you believe that digital publication of certain material infringes any of your rights or (privacy) interests, please let the Library know, stating your reasons. In case of a legitimate complaint, the Library will make the material inaccessible and/or remove it from the website. Please Ask the Library: <https://uba.uva.nl/en/contact>, or a letter to: Library of the University of Amsterdam, Secretariat, Singel 425, 1012 WP Amsterdam, The Netherlands. You will be contacted as soon as possible.

Poell, Thomas & José van Dijck (2018). Social Media and new protest movements. In *The SAGE Handbook of Social Media*, 546-561, edited by Jean Burgess, Alice Marwick & Thomas Poell. London: Sage.

Social media and new protest movements

Thomas Poell and José van Dijck

From the Arab Spring to the Occupy movement and the Gezi Park protests, major contemporary protest movements have been accompanied by intense social media activity. Millions of social media users have become involved in the rapid and widespread production and circulation of activist materials, including everything from protest hashtags, second-hand rumours and photoshopped images, to first-hand eyewitness reports and video evidence. In January and February 2011, the opposition against the dictatorial regimes in Tunisia and Egypt especially used Facebook and text messaging to share reports on the events in the streets, while Twitter played a vital role in the transnational communication on these revolutions (Bruns et al., 2013; Lim, 2012; Lotan et al., 2011; Tufekci & Wilson, 2012). Inspired by the Arab Spring, large protests subsequently erupted in Spain, the US, and Italy during the summer and fall of 2011. Again major social media platforms were used for mobilization and communication purposes (Castells, 2012; Gerbaudo, 2012). And in following years, similar spikes in social media activity could be observed during protests in Turkey, Hong Kong, Brazil, and other countries (Göle, 2013; Kuymulu, 2013; Lee & Chan, 2016; Saad-Filho, 2013).

This chapter discusses how the intensive use of social media transforms the organization and communication of protest. The starting point of this discussion is to question the idea that traditional modes of organization in social movements (with structural features like identifiable leaders and persistent collective identities) have been largely replaced by more distributed and emergent mass user activity enabled by social media platforms (Bennett & Segerberg, 2013; Castells, 2012; Margetts et al., 2016). We will show how this argument has been questioned and complicated from two angles. First, through detailed studies on social media protest practices, researchers have demonstrated that leadership and collective identities continue to play a vital role in online contention. Second, based on the exploration of the techno-commercial architecture of social media, it has been argued that these platforms not only enable activist social media activity, but also fundamentally shape it.

Reviewing these arguments, we will combine insights from different fields of research. We not only build on social movement studies, but also on work in political communication, platform and software studies, and political economy. Furthermore, we profit from a wide range of available case studies on protest and social media, which have been published over the past years. These studies trace in detail how social media protest practices have taken shape in different parts of the world. In turn, this allowed us develop a nuanced understanding of how social media platforms become involved in protest. Finally, we build on our own research, especially using material from case studies on social media communication during the 2011 Egyptian and Tunisian uprisings, which many scholars consider as the start of the current wave of popular protests (Poell et al., 2016; Poell & Darmoni, 2012). We also draw from an earlier inquiry into the techno-commercial shaping of social media protest activity (Poell & van Dijck, 2015).

A new mode of protest

Reflecting on recent protests and uprisings, various scholars, most prominently Castells (2012), Bennett and Segerberg (2012, 2013), and Margetts et al. (2016), have proposed that social media user activity is at the heart of a fundamental transformation of activism. These theorists see social media platforms enabling more bottom-up, distributed forms of protest mobilization, organization, and communication. It is important to emphasize that none of these authors considers social media activity in isolation or gives this activity primacy over ‘offline’ protest practices. In fact, as much current research shows, the distinction between the ‘online’ and ‘offline’ can no longer be made. Since many protestors carry smartphones and have continuous access to online platforms to share their content and observations, protest simultaneously unfolds on the ground *and* online. Thus, the key question is not whether the activity on social media is more important than street protests, or whether the rise of these media is somehow the ‘cause’ of popular uprisings, as was suggested by some of the press reports on the 2011 Arab Spring protests. Instead, the question is how the widespread use of social media platforms affects the organization and communication of contemporary protest (Shea et al., 2015).

Responding to this question, Castells argues in *Networks of Outrage and Hope* (2012: 232) that today’s protest movements should be seen in the context of a ‘culture of sharing’, enabled by social networking sites and the internet more generally. In this culture, people construct horizontal networks that simultaneously take shape locally on streets and squares and globally on social media platforms. For Castells, these networks transform the dynamic of activism, as they support ‘cooperation and solidarity while undermining the need for formal leadership’ (2012: 225). Crucially, they ‘create togetherness’, which allows people to ‘overcome fear and discover hope’. This togetherness does not, however, constitute community, because ‘community implies a set of common values’, whereas ‘most people come to the movement with their own motivations and goals’ (ibid.). Thus, following Castells, new social movements revolve around both solidarity and individuality.

Lance Bennett and Alexandra Segerberg (2012, 2013) have articulated the most developed theory of how social media sharing practices transform the dynamic of activism. They maintain that new protest movements are driven by ‘the self-motivated (though not necessarily self-centered) sharing of already internalized or personalized ideas, plans, images, and resources with networks of others’ (2012: 753). Sharing activist content becomes self-motivated because it is a form of ‘personal expression’ and ‘self-validation’ (2012: 752–753). The mass sharing of ‘personal action frames’ facilitates, according to Bennett and Segerberg, a new type of action, which they label ‘connective action’ (2012: 744). From this point of view, the communication process itself provides key organizational resources, allowing large crowds to act together with little need for prominent leaders, formal social movement organizations, and collective action frames, which require individuals to share common identities and political claims (2012: 747).

The latest major contribution to the argument that social media enable bottom-up, distributed forms of mass protest has been made by Margetts et al. (2016). On the basis of large-scale data analysis of contemporary protest events, they come to the conclusion that ‘social media extend the range of political activities that citizen can undertake, lowering the cost to an extent whereby people are offered the opportunity to make micro-donations of time and effort to political causes’ (2016: 196–197). As such, social media platforms provide what the authors call ‘zero-touch coordination’ for micro-donations, altering the costs and benefits of political actions (2016: 199). While micro-donations might seem insignificant, Margetts and colleagues emphasize that they are politically of great importance, as they can and occasionally do scale up to mass mobilizations. The authors label this new mode of popular contention ‘chaotic pluralism’, which constitutes an individualization of collective action, and

‘injects turbulence into every area of politics, acting as an unruly, unpredictable influence on political life’ (2016: 200).

These theories on how social media enable distributed forms of protest mobilization, organization, and communication have had a lot of impact on current scholarship. Many case studies on particular protests build on them, citing similar observations (see, for example, Anduiza et al., 2014; Caraway, 2016; Dessewffy & Nagy, 2016; Lim, 2013; Wright, 2015). At the same time, as discussed in the following sections, a growing number of studies question some of the key assumptions underpinning these theories. By staging a debate between the different interpretations of the role of social media platforms in contemporary protest, we gain a more precise understanding of both the intricacies of social media protest practices and the techno-commercial infrastructures through which such practices are articulated. We will start by looking at the question of leadership and collective identity.

Leadership and collectivity

Whereas the theorists discussed above examine how social media platforms enable mass self-organization and self-communication by individuals, various other scholars observe the emergence of new forms of hierarchy and leadership. Research on transnational social media communication during the Tunisian and Egyptian uprisings, for example, shows that prominent users, mostly activists, bloggers, and journalists, deployed carefully planned tactics. These tactics included promoting particular hashtags and accounts, and collecting protest information from Facebook and on-the-ground social networks; it also involved translating, distributing, and curating this information on Twitter, YouTube, and various independent blogs. In these translation and distribution efforts, core users strategically employed different languages, most prominently Arabic, English, and French, to address publics ranging from Arab youth to international news media (Della Ratta & Valeriani, 2014; Lotan et al., 2011; Papacharissi, 2015; Poell & Darmoni, 2012).

Such protest tactics were not just used on social media platforms, but also on the streets. Research on the build-up to the Egyptian uprising demonstrates how leading activists from different protest networks, loosely organized through social media platforms, distributed tens of thousands of flyers, circulated calls for mobilization in public transport, and organized feeder marches in the working-class neighborhoods of Cairo (Gerbaudo, 2012; Lim, 2012). Crucially, most of these mobilization tactics were not invented on the spot, but developed in the years before the uprising in transnational activist networks, facilitated by international NGOs (Aneja, 2011; Kirkpatrick et al., 2011; Tufekci & Wilson, 2012).

These examples suggest that, even though formal social movement organizations were mostly absent in the mobilization of the Arab Spring uprisings, strategizing and leadership were still essential to protest organization and communication. Small groups of activists, centrally positioned in social media-facilitated networks, fulfilled many of the functions traditionally associated with social movement leaders, that is: strategically framing protest activity and connecting previously separate individuals and groups in common action. Furthermore, these actors were essential in so-called information politics: translating, diffusing, and curating protest information (Della Ratta & Valeriani, 2014; Poell et al., 2016; Tremayne, 2014; Tufekci, 2013). Reflecting on these practices, Della Ratta and Valeriani (2014) have labeled these top social media users as ‘connective leaders’: leaders who are focused on connecting people and information.

Although such connective leaders fulfill many functions traditionally associated with social movement leaders, theirs is a fundamentally different type of leadership. Some of the

key characteristics of connective leadership in a social media environment can be identified by examining the interactions between administrators and users of the Egyptian ‘Kullena Khaled Said’ (We are all Khaled Said) Facebook page. This page was created in June 2010 by Wael Ghonim, the Dubai-based head of marketing for Google Middle East and North Africa. He developed the page, in close collaboration with journalist and activist AbdelRahman Mansour, to protest the murder of Khaled Said, a young middle-class Egyptian man from Alexandria who was beaten to death by Egyptian security forces (Ghonim, 2012). The page received 250,000 likes during its first three months and rapidly developed into a stage where users shared grievances about the Mubarak regime (Lesch, 2011; Lim, 2012). Having initiated and guided this process of online contention, Ghonim and Mansour can be considered prominent examples of connective leaders (for the full discussion, see Poell et al., 2016).

Examining the activities of the two administrators in detail, it is striking how hard they tried to remain anonymous and not be labeled as activist leaders. This corresponds with a more general trend in contemporary activism. In contrast to social movement leaders of previous decades, some of which figured prominently in the mass media, most leading actors in social media protest communication do not want to be publicly recognized as leaders (Coleman, 2014). With varying measures of success, such actors have tried to remain out of the limelight. They do so partly for security reasons – certainly a major concern of Ghonim and Mansour – but also to maintain the image of a spontaneous people’s movement. By presenting their movements as bottom-up, contemporary protestors seek to transcend traditional political alignments. Making protest leaders publicly visible would undermine this narrative. This even applies to leading social media users in transnational protest communication, some of whom have developed into so-called microcelebrities. As Tufekci (2013: 868) points out, ‘the networked microcelebrity activist’ remains an integral part of protest movements. As she writes, ‘Without necessarily an institutional role or a claim to legitimacy through established, institutionalized means, the activist’s position within the movement remains that of a peer whose political acts are visible and can be challenged from within the movement’ (ibid.). This is in clear contrast to social movement leaders of the past who became mass media celebrities, such as the leaders of the Civil Rights Movement or the anti-war movement in the US (Gitlin, 1980).

Furthermore, the analysis of Kullena Khaled Said suggests that connective leadership revolves around inviting, connecting, steering, and stimulating, rather than directing, commanding, and proclaiming. Instead of recruiting members willing to ‘follow’, as social movements have historically sought to do, Ghonim and Mansour explicitly cultivated the page to be ‘participatory’. The admins actively invited user contributions, which informed further initiatives and activities developed through the page. A prime example of this was a call to users to photograph themselves holding up the ‘Kullena Khaled Said’ sign, a tactic which was, a year later, replicated on a much larger scale during the Occupy protests with the ‘We are the 99%’ slogan (Gerbaudo, 2015; Milan, 2015a). Moreover, Ghonim and Mansour regularly held polls to determine what further activities the users were interested in developing through the page. More generally, the admins systematically read user comments to be able to adequately respond to user feedback. Thus, active user engagement, as enabled by social media, does not contradict the exercise of leadership, or make leadership obsolete. Instead, triggering, shaping, and incorporating user contributions are part and parcel of how this type of leadership is exercised.

Although connective leaders facilitate and steer the participation of social media users in protest communication and mobilization, this type of leadership is certainly not without its problems. First, connective leaders command little, if any, loyalty because they do not and cannot publicly identify themselves as leaders. And given the completely open character of social media communication, their activities can also be easily monitored and undermined by authorities. This became very clear on the Khaled Said page when supporters of the Mubarak regime effectively hijacked the communication on the page from the moment the mass protests started on January 25, 2011. With newly created Facebook accounts, these supporters began spreading false rumors and accusing the administrators of being foreign agents, secretly working for Israel. Second, as Gerbaudo (2017) has demonstrated, the contradiction between

leadership in social media protest communication and the ideology of horizontality and leaderlessness that characterizes new protest movements often leads to conflicts among connective leaders. Examining the small teams that managed the Twitter, Facebook, Tumblr, and Livestream accounts of Occupy Wall Street in the US, the Spanish Indignados, and the UK Uncut movements, he observes that ‘disputes about the management of activist power accounts have seen competing factions fighting to secure control over these assets, with activists engaging in the banning of rivals, and in mutual accusations of “hi-jacking” collective resources’ (Gerbaudo, 2017: 11). He maintains that such conflicts, which occur in virtually every major contemporary protest movement, significantly undermine these movements and hasten their decline.

These tensions point towards a fundamental dilemma facing the leadership of today’s social movements. As Melucci (1996) already pointed out 20 years ago, to ensure the survival of social movements particular tasks, which require some form of leadership, have to be fulfilled. At the same time, in the current cultural setting of individualization and rejection of hierarchy, it is impossible to make leadership explicit, as this would lead to the breakdown of the ‘interpersonal relations’ and ‘solidarity’ on which movements are built (1996: 345). According to Melucci, movements try to resolve this dilemma by minimizing and concealing decision-making and representative functions (ibid.). This strategy can clearly be observed in the attempts by connective leaders in social media protest communication to remain anonymous, or at least refrain from identifying themselves as leaders. Accordingly, today’s movements present themselves as the ‘people’, as ‘we’ the ‘99%’. Evidently, these strategies don’t permanently revolve the dilemma, as leadership functions continue to be exercised, even in highly distributed forms of social media protest communication. Any time these functions become explicit, conflicts are likely to occur.

While this analysis of the articulation of leadership doesn’t invalidate arguments about connective action, micro-donations, and a culture of sharing, it does complicate these ideas. The challenge for researchers studying contemporary protest communication, mobilization, and coordination is not just to explore how these processes take shape through distributed user practices, but also to trace how these practices are steered through new forms of leadership. Examining these relationships, it is important to see that activist leadership and social media protest activity are not necessarily contradictory, but can be mutually reinforcing.

Collectivity

The second major question is whether collectivity still plays a key role in today’s protest movements. Castells (2012) suggests that most people join social movements with their own motivations and goals. And Bennett and Segerberg (2012) argue that connective action does not revolve around ‘collective action frames’, which require negotiating common interpretations of collective identities. Instead, connective action is driven by the rapid sharing of personal action frames through social media platforms. Various other researchers have, however, begun to question this interpretation, arguing that a ‘collective sense of self’ does emerge in the mass sharing of protest slogans and materials on social media platforms. This collective sense of self can be understood as a manifestation of collective identity (Bakardjieva, 2015; Coretti & Pica, 2015; Gerbaudo, 2015; Kavada, 2015, 2016; Monterde et al., 2015).

Recognizing that social media protest communication has a vital ‘affective’ or ‘emotional’ dimension is an important step towards identifying collectivity. Mass protest, as

Juris (2008: 63) emphasizes, produces through its ‘highly unpredictable and confrontational nature ... powerful affective ties’. Such ties are especially crucial ‘within fluid, network-based movements that rely on non-traditional modes of identification and commitment’ (ibid.). In the absence of social movement organizations to provide stability, it becomes difficult, as Juris (2008) makes clear, to sustain a mobilization process without strong affective ties. This suggests that the ‘personal action frames’ highlighted by Bennett and Segerberg (2012) are not sufficient to bring together large protesting masses.

Studying protest mobilization on social media platforms, various scholars have indeed observed instances in which powerful affective appeals were made to larger collectives. For example, in their exploration of Twitter communication during the 2011 Egyptian uprising, Papacharissi and de Fatima Oliveira (2012: 275) detected ‘overwhelming expressions of solidarity’ in the stream of news reports. In fact, it ‘became difficult to separate factual reports from expressions of camaraderie’ (ibid.). Gerbaudo (2016: 256), in turn, makes similar observations in his analysis of the interaction on large Facebook pages central to the 2011 Egyptian and Spanish protest movements. In the mass interaction on these pages, he noticed ‘moments of digital enthusiasm’, ‘in which the emotions of thousands of Web users fuse into a collective sense of possibility’. Acting as connective leaders, the administrators of these pages played a key role in boosting enthusiasm by producing ‘hopeful narratives’, which set in motion processes of ‘emotional contagion’ as users reinforced these narratives (Gerbaudo, 2016: 254).

Having established the presence and importance of emotions and affective relations in contemporary protest communication, the question, subsequently, becomes whether moments of emotional connectivity can be understood in terms of ‘collective identity’. In their introduction to a special issue on social media and protest identities, Gerbaudo and Treré (2015: 867) strongly argue in favor of such an assessment. They maintain that the mass adoption of hashtag #wearethe99percent in the Occupy protest, the transformation of the ‘lady in red dress’ picture into a protest symbol during the Gezi Park protests, and other similar protest sharing practices are effectively ‘manifestations of collective identity’. Correspondingly, Milan (2015a: 894) argues that as such practices take shape on social media, they produce ‘collective narratives’ that score high in terms of ‘bridging’ personal viewpoints and experiences and ‘building’ and ‘reproducing’ ‘communication-based social capital’.

However, scholars observing such instances of collectivity emphasize that these relations are by no means stable. A collective ‘we’ can suddenly emerge, but just as quickly disappear. Juris (2012: 266) calls this the ‘logic of aggregation’, in which a mass of individuals quickly comes together, but can fall apart at any moment. When today’s protestors interact with each other through social media platforms, they often forge ‘a collective subjectivity’. Yet, as Juris points out, this ‘is a subjectivity that is under the constant pressure of disaggregation into its individual components’ (ibid.). Consequently, he emphasizes the importance of offline interaction and community building on the ground for those interested in building more sustainable collectives.

This brings us to the second angle from which we need to complicate the idea that contemporary protest movements are propelled and shaped by self-motivated social media sharing practices. We will show that the techno-commercial architecture of platforms fundamentally steers how users connect and interact with each other, and, consequently, how social media protest organization and communication unfolds. While many scholars working on contemporary protest movements devote some attention to the particular technological features of platforms, such as hashtags, like buttons, and algorithms, this area of research remains underexplored. There is little research that systematically examines how social media user practices, technologies, and business models mutually articulate each other, or that explores the consequences for the character and dynamic of today’s protest movements.

Techno-commercial strategies

Reflecting on how social media steer popular contention, it is vital to observe that these platforms are not primarily developed and managed to facilitate protest. Reading the celebratory accounts in the press and some of the academic literature on the vital role of social media platforms in protest mobilization and communication, it is easy to forget that platforms are, above all, developed to facilitate the systemic collection and analysis of user data to enable various forms of targeted advertising and services (Couldry, 2015; Fuchs, 2011; van Dijck, 2013). There is a constant tension between these techno-commercial platform strategies and activist tactics and values.

To explore this tension, we need to turn to what Gillespie calls ‘governance by platforms’ (see Chapter 14, this volume), which refers to the ways platforms curate the content and police the activity of their users. One crucial method through which social media corporations ‘govern’ is through their Terms of Service (ToS). Youmans and York (2012) provide one of the few studies that examines how such a form of governance can obstruct activist communication. Drawing from several case studies, the authors demonstrate that the policies and user agreements of social media platforms, including those of Facebook, YouTube, and Twitter, have resulted in the banning of activist users, the removal of activist content and accounts, and the handing over of sensitive activist user information to governments.

One crucial example of this are the attempts by leading social media corporations to prohibit the use of pseudonyms, also known as real-names policies, requiring users to identify themselves through their legal name. In the case of the above-discussed ‘Kullena Khaled Said’ Facebook page, this policy caused substantial problems. When Wael Ghonim created the page, he used the pseudonym ‘ElShaheed’ (‘the martyr’). As we have discussed, Ghonim and his collaborators tried hard to remain anonymous. They did so both for security and to maintain the image of a spontaneous people’s movement. However, as Facebook does not allow the use of pseudonyms, Ghonim’s account and, more importantly, the page, which had become a highly popular oppositional platform, were suddenly deactivated in November 2010 (Youmans & York, 2012: 318–319). Although the page was relatively quickly restored, this incident reveals a fundamental tension. For many activists it is important to remain anonymous, whereas social media platform owners – generally American corporations – have a strong interest in knowing users’ real identities, which can be monetized more easily.

Friction is also generated by attempts to police the content and activity on social media platforms in accordance with particular ‘community standards’. Virtually all platforms impose rules to regulate offending content and behavior, most prominently pornography, graphic violence, hate speech, and trolling. Again there is an obvious economic interest to do so, as such content and behavior might discourage some groups of users and, more problematically, deter advertisers, who do not want their products associated with potentially offensive content. Platforms rely on a combination of automated detection of problematic content and on users flagging and blocking such content (Crawford & Gillespie, 2016). These policing efforts, while necessary to protect users and the economic viability of a platform, can undermine activist communication. Youmans and York (2012: 320–321) give the example of various popular activist YouTube videos from Syria and Egypt, which showed graphic violence by authorities and were removed from the platform for this reason. As in the case of the Khaled Said page, these videos were eventually restored after complaints by journalists and activists. These examples illustrate, on the one hand, how social media corporations put up serious efforts to accommodate activist interests. On the other hand, they also show that

these corporations have a structural economic interest to systematically police the activity and content on their platforms in ways that do not always correspond with activists' politics of visibility (ibid.; Milan, 2015b).

Whereas various studies illustrate the tension between activism and content policing by platforms, more systematic research is needed to understand how frequent such cases are and how they affect protest mobilization and communication. Even more complex is the question how the particular technological architectures of platforms – their user and programming interfaces, as well as their algorithmic selection mechanisms – shape the character and dynamics of protest. In other words, how to 'weigh' the power of algorithms versus the power of users to steer online attention and relations? This is a complex question as it is impossible to precisely determine how algorithms enhance or decrease the visibility of specific protest issues and actors, nor is it possible to exactly pin down how different technologically enabled practices, such as hashtagging, retweeting, liking, following, and friending, promote particular types of connection and exchange between activists. At the same time, as work in platform and software studies shows, it is clear that the technological architectures of social media do fundamentally shape how users connect and interact with each other (Berry, 2011; Gillespie, 2014; Langlois et al., 2009). Consequently, there is a strong need to critically explore social media protest activity as a particular set of socio-technical practices, even though such an exploration will to some extent remain speculative.

Acceleration

The first development we would like to highlight concerns the acceleration of activist communication propelled by social media. In combination with the ubiquitous availability of advanced mobile communication devices, social media platforms allow users on the move to exchange information in real time. As various researchers have observed, the Web is transforming from a relatively static environment primarily focused on information retrieval to a highly dynamic ecology of data streams, which constantly feed users with new information (Berry, 2011; Hermida, 2010; Weltevrede et al., 2014).

This transformation greatly speeds up the exchange of information between activists. On the one hand, acceleration can be interpreted as a form of empowerment. Social media platforms allow activists to document (almost in real time) unfolding protest events, and massively share their feelings about these events (Papacharissi & de Fatima Oliveira, 2012; Poell & Borra, 2012). Papacharissi and de Fatima Oliveira use the term 'instantaneity' to describe the instant online recording and communication of unfolding events, as well as the tone and urgency of the language individuals employ on social media platforms. Such real-time and ubiquitous forms of protest communication are of great strategic importance to activists. Social media protest communication not only shows the larger world the violence committed by authorities, but they also allow protestors to coordinate their activities. As Earl et al. (2013: 472) have pointed out in their research on the protests against the 2009 G20 summit in Pittsburgh, such use of social media has the potential 'to reduce information asymmetries between protesters and police'.

On the other hand, though, protesters' social media practices tend to focus attention on the violence and spectacle that accompanies many protests. Historically, alternative activist media have been considered especially important because these allowed activists to highlight the larger issues at stake in political contestation. In the early 2000s, NGO sites and alternative online news outlets, such as Indymedia, were celebrated precisely because they facilitated the long-term articulation and polarization of protest issues. By discussing such issues and linking alternative sites to each other as well as to corporate and governmental

sites, activists constituted ‘issue networks’ (Bennett, 2004; Dean, 2002; Marres and Rogers, 2005). As Jodi Dean wrote in 2002, such networks make it possible to move away from the ‘drive for spectacle and immediacy that plagues an audience oriented news cycle’ as they ‘work to maintain links among those specifically engaged with a matter of concern’ (2002: 172–173). Evidently, the event-oriented focus and ‘real-time’ nature of social media protest communication runs the risk of shifting the perspective of online activist communication from the actual protest issues to the protest spectacle.

It is crucial to note that the event-oriented focus of social media communication is not merely the result of specific user practices, but is also prompted by the technological architectures underpinning social media platforms. Various social media sharing mechanisms, such as ‘liking’ and ‘retweeting’, are promoted by the platforms themselves, as well as by many mainstream and alternative news sites in the form of social buttons (Gerlitz & Helmond, 2013). Omnipresent sharing features encourage users to spread and repeat breaking news. Further adding to the newsy character of social media platforms are the ‘hashtag’ and ‘trending topic’ features, which are particularly prominent in the Twitter architecture, but have more recently also been taken up by Facebook. Hashtags instigate users to share and search for news on specific subjects, whereas trending topics further highlight breaking news. Most notably, Twitter has developed their trending feature into a sophisticated popular news barometer by identifying the ‘most breaking news’, and by allowing users to break down trending topics by region, country, and city.

Given how this event-oriented focus is fundamentally built into social media platforms’ architectures, it will be very difficult to reverse or adjust the perspective of social media communication. This becomes especially difficult as activists increasingly build their communication and organization strategies around social platforms’ sharing mechanisms and orient these strategies towards the platforms’ specific mechanisms of algorithmic selection. Activists’ practice of promoting particular hashtags, such as #g20report in the case of the G20 protests, #sidibouزيد during the Tunisian revolution, and #25jan in the early stages of the Egyptian revolution, exemplifies this tendency. More generally, such strategies can be understood as symptomatic of a more general tendency among ‘producers of information to make their content, and themselves’, in the words of Gillespie (2014: 184), ‘recognizable to an algorithm’.

Personalization and virality

The second development we would like to reflect on is the ‘personalization’ of public communication, which many scholars have associated with the rise of social media (Bennett & Segerberg, 2011; Couldry & Turow, 2014; Kennedy & Moss, 2015; Lovink & Rasch, 2013; Pariser, 2011). As discussed, the question of how this development affects protest has triggered a lot of debate, with some researchers seeing contemporary protest as revolving around personal action frames, whereas others observe powerful moments of collectivity in social media protest communication. Yet, these observations are primarily based on research that focuses on social media user practices. To advance this debate, it is important to also examine how personalization is shaped by the *techno-commercial architecture* of platforms.

From such a perspective, personalization involves social media platforms prompting users to explicitly make ‘personal’ connections and stimulating them to create their persona by constantly posting and sharing new content. Moreover, personalization uniquely depends on these platforms’ propensity to algorithmically connect users to content, advertisers, and each other (van Dijck & Poell, 2013: 9). The development of the Facebook News Feed, YouTube’s recommended videos, and Twitter’s Top search results show how social media

corporations are constantly trying to more precisely tailor content to users' specific interests. Algorithmic curation is, however, not only about serving each user with a personal diet of content, ads, and friend suggestions, but also about connecting users with content that is generating engagement in the larger networks in which they are situated. Research on the algorithmic selection mechanisms used by the main US-based social media platforms suggests that these mechanisms take both individual and collective user signals into account. As such, social media platforms *steer* users towards personalized connections, while at the same time introducing viral dynamics in public communication that *produce* moments of collectivity. Let's briefly look at each side of the equation in a bit more detail.

Major social media platforms such as Facebook, Twitter, and YouTube personalize the user experience on a number of levels. First, they push users to create and extend their personal networks by 'following' or 'friending' other users or accounts. They also enable users to create their own communication spaces, for example, through hashtags such as #egypt, #sidibouزيد, or #OccupyWallStreet, or in the form of Facebook groups and pages, like 'Kullena Khaled Said'. Finally, social media platforms algorithmically select for each user the content that is most likely to meet their interests, hence serving customized media diets. Thus, the techno-commercial flipside of personalization is customized services that steer users towards particular types of connections, content, and ads.

At the same time, social platforms are found to promote virality (Goel et al., 2015; Papacharissi, 2015; Sampson, 2012). They do so by providing users with omnipresent like, share, and retweet buttons to quickly and easily share content with other users. These user signals are subsequently processed through platform algorithms, which tend to privilege items that rapidly generate a lot of user engagement, in the form of trending topics and most relevant content. While processes of algorithmic selection do frequently highlight protest-related communication during large demonstrations, occupations, and uprisings (because of their newsworthiness), there is certainly no guarantee that they will do so. As the Occupy protestors found out, social media algorithms can conflict with what users themselves consider relevant. In the fall of 2011, at the height of the occupations, protestors noticed that despite their intense use of #OccupyWallStreet and #OccupyBoston, these hashtags trended almost anywhere in the US except for New York and Boston, whereas less popular Occupy-related terms and hashtags made it into the trending topic lists of the two cities. Suspicious Occupiers subsequently accused Twitter of manipulating its trending topics. However, as Gilad Lotan (2011) has demonstrated, no censoring appears to have taken place; it was the 'outcome of a purely algorithmic mechanism', pointing out that the consistent attention given to #OccupyWallStreet and #OccupyBoston in NYC and Boston did not result in attention spikes. As Lotan explains, trending topics are not simply determined on the basis of the volume of tweets containing a particular hashtag or term. Instead, 'the algorithm adapts over time, based on the changing velocity of the usage of the given term in tweets. If we see a systematic rise in volume, but no clear spike, it is possible that the topic will never trend' (ibid.) Similar observations can be made concerning Facebook's News Feed algorithms (McGee, 2013).

In other words, social media promote viral communication over sustained long-term public attention for specific topics. Not coincidentally, this predilection towards virality corresponds with the business strategies of the major social platforms, which try to derive income from (third party) data services that detect, in real time, emerging topics of popular interest as well as shifts in public sentiment. Building on such real-time analytics, Twitter and especially Facebook are developing personalized systems of targeted advertising, which pick up on the specific interests of particular user aggregates (Cheney-Lippold, 2011; Turrow, 2012; Wilken, 2014).

In light of these techno-commercial mechanisms, which underpin the socio-cultural forms of personalization, it should come as no surprise that activist communication and mobilization processes based on social media have generated loosely connected protest networks, which just as quickly fall apart as they are stitched together. Personalization, real-time, and virality are part of social media's DNA. The technological architectures and business models of these media are geared towards the viral dissemination of affective

messages through personal networks. For activists this is both a blessing and a curse. As social media penetrate deeply into everyday personal communication in ways alternative media have never been able to do, activists can reach people who would otherwise not be reached by activist communication. At the same time, the interactions and interests that tie dispersed social media users together to form protest movements, generating instant moments of togetherness, tend to dissolve when social platforms algorithmically connect users to the next wave of trending topics.

Alternative media are technologically and intellectually designed to sustain interest in particular social and political issues and to build communities and publics around such issues. By contrast, on social media there is a constant tension between community building and commercial interests and strategies. Many of the major social media platforms, on the one hand, invest in the development of community features, Facebook groups and pages are a prime example of this. On the other hand, to sustain their structural commercial appetite for online engagement, these platforms also continuously introduce the next set of topics that satisfy user interests, whatever these interests might be. From this perspective, we suggest that while social media enable powerful moments of collectivity, communities and publics are destined to remain ephemeral in social media environment, always already on the point of giving way to the next set of trending topics and related sentiments.

Challenges for future research

The key challenge for future research on the evolving relationship between social media and the organization and communication of protest is to develop a comprehensive approach that is sensitive to the innovative ways in which users self-organize, create, and share new protest-related material, and how collectivity and leadership are articulated in such practices. At the same time, it is crucial to critically interrogate how these practices are steered by the techno-commercial strategies of corporations. So far, researchers have tended to either focus on specific sets of socio-cultural or techno-commercial practices and strategies. This has produced a lot of valuable insights, but has also limited our ability to understand the overall dynamic of contemporary protest. Without a thorough examination of creative activist social media practices it is hard to understand the vitality and impact of platform-mediated protest. And vice versa: without a critical examination of the techno-commercial strategies of platforms we cannot fully understand why protest messages and activity can spread very quickly, but also suddenly disappear from the public limelight (for examples of research that tries to do both, see Galis & Neumayer, 2016; Milan, 2015b; Poell, 2014; Shea et al., 2015).

In a further complication for studying these interrelated practices, both platform and protest strategies are continuously evolving. As has been extensively documented, social media corporations constantly tinker with the algorithms they use to determine 'relevant' content. Substantial changes in, for example, Facebook's News Feed algorithm or Twitter's trending topics algorithm are usually publicly announced, but social platforms also make small changes on a daily basis. Furthermore, from time to time these platforms introduce new features, which transform how users can express themselves and connect with each other. Prominent examples of this were the launch of Facebook's News Feed, and the integration of retweeting and @mentioning in Twitter's architecture. And finally, new popular platforms regularly emerge, such as Snapchat and WeChat a few years ago, while other platforms, like Flickr or Friendster, become less popular or disappear altogether. All of these changes bring about shifts in how protests are mobilized and communicated. Exploring such evolving socio-technical relations, it is important to realize that platform affordances do not determine how users employ social technologies, but that they rather guide this use. How particular social

media protest activities unfold is also very much shaped by the creativity and reflexivity of users. Connective activist leaders, as discussed in this chapter, have over the years developed a range of communication and mobilization strategies in using social platforms. These strategies – ranging from promoting particular hashtags to selecting particular platforms to pursue core objectives – are changing over time as well.

Thus, for researchers, the challenge is to trace how changing activist practices and evolving techno-commercial platform strategies mutually articulate each other. Such inquiry should allow for a more precise understanding of the current dynamic of protest organization and communication, but also how this dynamic has changed over time. Doing this type of inquiry is by no means easy, as researchers need to take the specific political-cultural settings of the protests they are studying into account as well. Evidently, it matters for activist social media use whether a protest is directed at an authoritarian state, as in the case of the Egyptian protests discussed in this chapter, or at a liberal democratic state. From the mid-2000s onwards, as the Berkman Center has documented in detail, states have made extensive efforts to control online communication (Deibert et al., 2010, 2012). These efforts deeply affect how activists connect with each other on social platforms. While the relations between states and new protest movements are beyond the scope of this chapter, case studies on particular protests will need to take these relations into account.

This brings us back to the call for interdisciplinarity with which we started this chapter. To understand how the character and dynamic of social media activity enables and shapes new protest movements, we need to combine insights from different fields of research. While social movement studies remains an important starting point for investigating protest, it is also crucial to draw from work in political communication, software and platform studies, as well as from political economy, surveillance, and censorship research. It is only through interdisciplinary research that we can comprehensively explore the complex political-cultural and socio-technical relations in which new protest movements take shape.

References

Anduiza, E., Cristancho, C., & Sabucedo, J. M. (2014). Mobilization through online social networks: The political protest of the indignados in Spain. *Information, Communication & Society*, 17(6), 750–764.

Aneja, A. (2011). Protest movements in West Asia: Some impressions. *Strategic Analysis*, 35(4), 547–551.

Bakardjieva, M. (2015). Do clouds have politics? Collective actors in social media land. *Information, Communication & Society*, 18(8), 983–990.

Bennett, L. (2004). Communicating global activism: Strengths and vulnerabilities of networked politics. In W. van de Donk, B. Loader, P. Nixon, & D. Rucht (Eds.), *Cyberprotest: New media, citizens and social movements* (pp. 123–146). London: Routledge.

Bennett, W. L., & Segerberg, A. (2011). Digital media and the personalization of collective action: Social technology and the organization of protests against the global economic crisis. *Information, Communication & Society*, 14(6), 770–799.

Bennett, W. L., & Segerberg, A. (2012). The logic of connective action: Digital media and the personalization of contentious politics. *Information, Communication & Society*, 15(5), 739–768.

- Bennett, W. L., & Segerberg, A. (2013). *The logic of connective action: Digital media and the personalization of contentious politics*. Cambridge: Cambridge University Press.
- Berry, D. (2011). *The philosophy of software: Code and mediation in the digital age*. New York: Springer.
- Bruns, A., Highfield, T., & Burgess, J. (2013). The Arab Spring and social media audiences: English and Arabic Twitter users and their networks. *American Behavioral Scientist*, 57(7), 871–898.
- Caraway, B. (2016). OUR Walmart: A case study of connective action. *Information, Communication & Society*, 19(7), 907–920.
- Castells, M. (2012). *Networks of outrage and hope: Social movements in the Internet age*. Hoboken, NJ: John Wiley & Sons.
- Cheney-Lippold, J. (2011). A new algorithmic identity soft biopolitics and the modulation of control. *Theory, Culture & Society*, 28(6), 164–181.
- Coleman, G. (2014). *Hacker, hoaxer, whistleblower, spy: The many faces of anonymous*. London: Verso.
- Coretti, L., & Pica, D. (2015). The rise and fall of collective identity in networked movements: Communication protocols, Facebook, and the anti-Berlusconi protest. *Information, Communication & Society*, 18(8), 951–967.
- Couldry, N. (2015). The myth of ‘us’: Digital networks, political change and the production of collectivity. *Information, Communication & Society*, 18(6), 608–626.
- Couldry, N., & Turow, J. (2014). Advertising, Big Data and the clearance of the public realm: Marketers’ new approaches to the content subsidy. *International Journal of Communication*, 8, 1710–1726.
- Crawford, K., & Gillespie, T. (2016). What is a flag for? Social media reporting tools and the vocabulary of complaint. *New Media & Society*, 18(3), 410–428.
- Dean, J. (2002). *Publicity’s secret*. Ithaca, NY: Cornell University Press.
- Deibert, R. J., Palfrey, J. G., Rohozinski, V., & Zittrain, J. (Eds.) (2010). *Access controlled: The shaping of power, rights, and rule in cyberspace*. Cambridge, MA: MIT Press.
- Deibert, R. J., Palfrey, J. G., Rohozinski, V., & Zittrain, J. (Eds.) (2012). *Access contested: Security, identity and resistance in Asian cyberspace*. Cambridge, MA: MIT Press.
- Della Ratta, D., & Valeriani, A. (2014). Remixing the Spring! Connective leadership and read-write practices in the 2011 Arab uprisings. In C. Padovani & A. Calabrese (Eds.), *Communication rights and social justice* (pp. 288–304). Basingstoke, UK: Palgrave Macmillan.
- Dessewffy, T., & Nagy, Z. (2016). Born in Facebook: The refugee crisis and grassroots connective action in Hungary. *International Journal of Communication*, 10, 23.
- Earl, J., McKee Hurwitz, H., Mejia Mesinas, A., Tolan, M., & Arlotti, A. (2013). This protest will be tweeted: Twitter and protest policing during the Pittsburgh G20. *Information, Communication & Society*, 16(4), 459–478.

- Fuchs, C. (2011). *Foundations of critical media and information studies*. New York: Routledge.
- Galis, V., & Neumayer, C. (2016). Laying claim to social media by activists: A cyber-material détournement. *Social Media + Society*, 2(3), e2056305116664360-e2056305116664360.
- Gerbaudo, P. (2012). *Tweets and the streets: Social media and contemporary activism*. London: Pluto Press.
- Gerbaudo, P. (2015). Protest avatars as memetic signifiers: Political profile pictures and the construction of collective identity on social media in the 2011 protest wave. *Information, Communication & Society*, 18(8), 916–929.
- Gerbaudo, P. (2017). Social media teams as digital vanguards: the question of leadership in the management of key Facebook and Twitter accounts of Occupy Wall Street, Indignados and UK Uncut. *Information, Communication & Society*, 20(2), 185-202.
- Gerbaudo, P., & Treré, E. (2015). In search of the ‘we’ of social media activism: Introduction to the special issue on social media and protest identities. *Information, Communication & Society*, 18(8), 865–871.
- Gerlitz, C., & Helmond, A. (2013). The like economy: Social buttons and the data-intensive web. *New Media & Society*, 15(8), 1348–1365.
- Ghoni, W. (2012). *Revolution 2.0: The power of the people is greater than the people in power: A memoir*. Boston, MA: Houghton Mifflin Harcourt.
- Gillespie, T. (2014). The relevance of algorithms. In T. Gillespie, P. J. Boczkowski & K. A. Foot. *Media technologies: Essays on communication, materiality, and society* (pp. 167-194). Cambridge, MA: MIT Press, 2014.
- Gitlin, T. (1980). *The whole world is watching: Mass media in the making & unmaking of the new left*. Los Angeles, CA: University of California Press.
- Goel, S., Anderson, A., Hofman, J., & Watts, D. J. (2015). The structural virality of online diffusion. *Management Science*, 62(1), 180–196.
- Göle, N. (2013). Gezi-anatomy of a public square movement. *Insight Turkey*, 15(3), 7.
- Hermida, A. (2010). Twittering the news: The emergence of ambient journalism. *Journalism Practice*, 4(3), 297–308.
- Juris, J. S. (2008). Performing politics: Image, embodiment, and affective solidarity during anti-corporate globalization protests. *Ethnography*, 9(1), 61–97.
- Juris, J. S. (2012). Reflections on# Occupy Everywhere: Social media, public space, and emerging logics of aggregation. *American Ethnologist*, 39(2), 259–279.
- Kavada, A. (2015). Creating the collective: Social media, the Occupy Movement and its constitution as a collective actor. *Information, Communication & Society*, 18(8), 872–886.
- Kavada, A. (2016). Social movements and political agency in the digital age: A communication approach. *Media and Communication*, 4(4), 8–12.

- Kennedy, H., & Moss, G. (2015). Known or knowing publics? Social media data mining and the question of public agency. *Big Data & Society*, 2(2).
- Kirkpatrick, D. D., Sanger, D. E., Fahim, K., El-Naggar, M., & Mazzetti, M. (2011). A Tunisian–Egyptian link that shook Arab history. *The New York Times*, February 14, p. A1.
- Kuymulu, M. B. (2013). Reclaiming the right to the city: Reflections on the urban uprisings in Turkey. *City*, 17(3), 274–278.
- Langlois, G., Elmer, G., McKelvey, F., & Devereaux, Z. (2009). Networked publics: The double articulation of code and politics on Facebook. *Canadian Journal of Communication*, 34(3), 415.
- Lee, F. L., & Chan, J. M. (2016). Digital media activities and mode of participation in a protest campaign: A study of the Umbrella Movement. *Information, Communication & Society*, 19(1), 4–22.
- Lesch, A. M. (2011). Egypt’s Spring: Causes of the revolution. *Middle East Policy*, 18(3), 35–48.
- Lim, M. (2012). Clicks, cabs, and coffee houses: Social media and oppositional movements in Egypt, 2004–2011. *Journal of Communication*, 62(2), 231–248.
- Lim, M. (2013). Framing Bouazizi: ‘White lies’, hybrid network, and collective/connective action in the 2010–11 Tunisian uprising. *Journalism*, 14(7), 921–941.
- Lotan, G. (2011) “Data Reveals That "Occupying" Twitter Trending Topics is Harder Than it Looks!” *SocialFlow*, 12 October 2011. Accessed on September 10, 2013. <http://blog.socialflow.com/post/7120244374/data-reveals-that-occupying-twitter-trending-topics-is-harder-than-it-looks>
- Lotan, G., Graeff, E., Ananny, M., Gaffney, D., & Pearce, I. (2011). The Arab Spring| the revolutions were tweeted: Information flows during the 2011 Tunisian and Egyptian revolutions. *International Journal of Communication*, 5, 31.
- Lovink, G., & Rasch, M. (2013). *Unlike us reader: Social media monopolies and their alternatives* (No. 8). Amsterdam: Institute of Network Cultures.
- Margetts, H., John, P., Hale, S., & Yasseri, T. (2016). *Political turbulence: How social media shape collective action*. Princeton, NJ: Princeton University Press.
- Marres, N., & Rogers, R. (2005). Recipe for tracing the fate of issues and their publics on the web. In B. Latour & P. Weibel (Eds.), *Making things public: Atmospheres of democracy* (pp. 922–935). Cambridge, MA: MIT Press.
- McGee, M. (2013). EdgeRank is dead: Facebook’s news feed algorithm now has close to 100K weight factors. *Marketing Land*, August 16. <http://marketingland.com/edgerank-is-dead-facebooks-news-feed-algorithm-now-has-close-to-100k-weight-factors-55908> (accessed on October 14, 2013).
- Melucci, A. (1996). *Challenging codes: Collective action in the information age*. Cambridge: Cambridge University Press.
- Milan, S. (2015a). From social movements to cloud protesting: The evolution of collective identity. *Information, Communication & Society*, 18(8), 887–900.

- Milan, S. (2015b). When algorithms shape collective action: Social media and the dynamics of cloud protesting. *Social Media + Society*, 1(2), 2056305115622481.
- Monterde, A., Calleja-López, A., Aguilera, M., Barandiaran, X. E., & Postill, J. (2015). Multitudinous identities: A qualitative and network analysis of the 15M collective identity. *Information, Communication & Society*, 18(8), 930–950.
- Papacharissi, Z. (2015). *Affective publics: Sentiment, technology, and politics*. Oxford: Oxford University Press.
- Papacharissi, Z., & de Fatima Oliveira, M. (2012). Affective news and networked publics: The rhythms of news storytelling on# Egypt. *Journal of Communication*, 62(2), 266–282.
- Pariser, E. (2011). *The filter bubble: What the Internet is hiding from you*. Harmondsworth, UK: Penguin.
- Poell, T. (2014). Social media and the transformation of activist communication: Exploring the social media ecology of the 2010 Toronto G20 protests. *Information, Communication & Society*, 17(6), 716–731.
- Poell, T., Abdulla, R., Rieder, B., Woltering, R., & Zack, L. (2016). Protest leadership in the age of social media. *Information, Communication & Society*, 19(7), 994–1014.
- Poell, T., & Borra, E. (2012). Twitter, YouTube, and Flickr as platforms of alternative journalism: The social media account of the 2010 Toronto G20 protests. *Journalism*, 13(6), 695–713.
- Poell, T., & Darmoni, K. (2012). Twitter as a multilingual space: The articulation of the Tunisian revolution through# sidibouزيد. *NECSUS. European Journal of Media Studies*, 1(1), 14–34.
- Poell, T., & van Dijck, J. (2015). Social media and activist communication. In C. Atton (Ed.), *The Routledge companion to alternative and community media* (pp. 527–537). London: Routledge.
- Saad-Filho, A. (2013). Mass protests under ‘left neoliberalism’: Brazil, June–July 2013. *Critical Sociology*, 39(5), 657–669.
- Sampson, T. D. (2012). *Virality: Contagion theory in the age of networks*. Minneapolis, MN: University of Minnesota Press.
- Shea, P., Notley, T., & Burgess, J. (2015). Entanglements—activism and technology: Editors’ introduction. *Fibreculture Journal*, 26, 1–6.
- Tremayne, M. (2014). Anatomy of protest in the digital era: A network analysis of Twitter and Occupy Wall Street. *Social Movement Studies*, 13(1), 110–126.
- Tufekci, Z. (2013). ‘Not this one’: Social movements, the attention economy, and microcelebrity networked activism. *American Behavioral Scientist*, 57(7), 848–870.
- Tufekci, Z., & Wilson, C. (2012). Social media and the decision to participate in political protest: Observations from Tahrir Square. *Journal of Communication*, 62(2), 363–379.
- Turow, J. (2012). *The daily you: How the new advertising industry is defining your identity and your worth*. New Haven, CT: Yale University Press.

van Dijck, J. (2013). *The culture of connectivity: A critical history of social media*. New York and Oxford: Oxford University Press.

van Dijck, J., & Poell, T. (2013). Understanding social media logic. *Media and Communication*, 1(1), 2–14.

Weltevrede, E., Helmond, A., & Gerlitz, C. (2014). The politics of real-time: A device perspective on social media platforms and search engines. *Theory, Culture & Society*, 31(6), 125–150.

Wilken, R. (2014). Places nearby: Facebook as a location-based social media platform. *New Media & Society*, 16(7), 1087–1103.

Wright, S. (2015). Populism and Downing Street E-petitions: Connective action, hybridity, and the changing nature of organizing. *Political Communication*, 32(3), 414–433.

Youmans, W. L., & York, J. C. (2012). Social media and the activist toolkit: User agreements, corporate interests, and the information infrastructure of modern social movements. *Journal of Communication*, 62(2), 315–329.