

Collective Action in the Information Age: How Social Media Shapes the Character and Success of Protests

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As protests unfolded worldwide in the early twenty-first century, mainstream media were abuzz with praise for the apparently crucial role of on-line social media. Protests in Iran were dubbed the “Twitter Revolution” (Hounshell 2011). Protests in Egypt were dubbed the “Facebook Revolution” (Talbot 2011). The Occupy Wall Street movement was dubbed the “Tumblr Revolution” (Graham-Felsen 2011). Headlines declared: “Tunians Abroad: Facebook, Regular Citizens Key to Revolution” (Yan 2011); “Social Media Sparked, Accelerated Egypt’s Revolutionary Fire” (Gustin 2011); “Turkey’s Social Media and Smartphones Key to ‘Occupy Gezi’ Protests” (Dorsey 2013); “Social Media Spreads and Splinters Brazil Protests” (Stauffer 2013).

These optimistic accounts raise an important question for the study of social movements: Does access to social media cause protests to be different than they would have been without such access? And ultimately: Are they more likely to be successful?

Determining if and how modern protests would have differed in a world without social media is difficult. However, careful study of the way social media are being used by twenty-first-century protesters, combined

with theory to help generalize from empirical examples, illuminate plausible effects.

Social media platforms like Twitter and Facebook are now standard protest tools, used to plan and spread the word about protests before they occur, and to report on them from the ground (Tufekci and Freelon 2013). In locations across the globe, activity on social media spikes in the area near a protest immediately prior to and during the protest (Steinert-Threlkeld et al. 2015). However, despite the widespread use of social media by protesters, and traditional media's excitement about these platforms, their precise effect on the ultimate success of protests remains an open question.

This chapter examines the use of social media in modern protests. It begins by describing these tools and reviewing their potential to change the character of protests. As I argue, the presence of social media *can* increase the size, frequency, and international visibility of protests. I then consider the set of conditions under which the presence of social media would affect the outcomes of protests, focusing on when and how they may do so. While it is too early to say whether the presence of social media has had a definitive causal effect on protest outcomes, this chapter suggests that the effect of social media should vary with context and circumstance. Understanding the potential, contingent mechanisms by which social media could affect outcomes is important not only for a theory of social movements, but also for designing empirical studies that can meaningfully detect the connection between social media and protest success.

The Nature of Social Media

The term “social media” refers to a large set of platforms that allow communication and information sharing within virtual communities. Users access these online platforms via any device with Internet capability, including mobile smartphones, and then use them to share and retrieve content, including messages, photos, and videos. These media platforms are “social” in that users can identify a set of other users as their contacts and then share content with some or all of them. Twitter, Facebook, Instagram, and Tumblr are some of the most popular platforms, though updates to these and the emergence of new platforms are common. Each

offers a slightly different set of features to accomplish the sharing of various forms of content between contacts.

Three common features are relevant to understanding the role social media plays in protests. First, conditional on having access, the cost of sharing content is very low. Composing a message on Twitter (a “tweet”) takes seconds. Uploading video becomes easier with every update. Snapping photos with a phone is quick and sharing them is one or two clicks away. Even easier than *creating* content is *forwarding* content that others have already created. With the click of a button, content received from a social contact can be shared with all other social contacts. One implication of this is that the bar for “newsworthiness” can be substantially lower for users of social media than for users of more traditional forms of communication or dissemination. Lots of information about any event can be easily passed along, and in real time.

Second, content can reach many people simultaneously. If users want to they can broadcast their content to their whole set of social ties. Facebook users can post content that reaches all of their contacts; Twitter users can post tweets that all of their followers can read. Since the effort required to do so is low, lots of content can reach a large number of people simultaneously.

Third, because content is shared within virtual communities, the sender and receiver often have a real interpersonal connection of some sort. Alerts about something going on or invitations to some activity are not coming from just anybody; they are often coming from personally known sources, and recipients often know many of the other recipients too. Users passing content along to their social ties are effectively vetting and personally endorsing it.

Exactly which social media applications are selected and how they are used in protests can vary (see Tufekci and Freelon 2013 for an overview), but activity throughout Turkey’s 2013 protests provides a textbook example. As the BBC reported, “[participants] have used Twitter to share information about how to survive the protests; Facebook sites provide news updates on the situation in occupied Gezi Park; while photographs of the protests have been shared on Flickr and Tumblr and video on sites such as YouTube” (Hutchinson 2013).

Social media can be used at any stage of a protest. Long prior to a planned protest, they can be used to spread information about grievances or claims. This information may become the unifying motivation and goal, or “cause,” of the protest. Immediately prior to a planned protest, social media can help coordinate logistics—when and where the protest will be held. During a protest, news about conditions and events can be broadcast live from the scene. As a protest is breaking up, social media can spread word of the next steps, document its success, and lament its setbacks.

Under the right conditions, these three common features—low costs, large audiences, and personal sources—could make protests larger and more frequent than they would have been without social media. The next sections of this chapter consider the conditions under which social media would and would not have this consequence in theory.

The Case for Optimism: How Social Media Can Positively Impact the Character of Protests

To identify the effect of social media on protest outcomes, we need to understand their impact on the character of protests. Social media can affect protests by changing the behavior of individuals who may turn out to the protest—“prospective participants”—as well as by changing the behavior of others who were never going to turn out (perhaps because they live too far away) but whose support could matter for the protest. Both can impact how large, frequent, or visible protests will be in theory, given certain assumptions about how people decide whether to participate in a protest or not.

How Social Media Can Increase Turnout at Protests

Suppose there is a group of people who are dissatisfied with current conditions—perhaps their country’s unequal income distribution or an unpopular political leader. These people have grievances; they prefer some change to the status quo. Holding a protest is one option to try to change the status quo. We would call such a protest “successful” if it results in a change to the status quo in the direction of the preferences of those with grievances (perhaps a policy concession or a change in leadership).

The process by which a group of people with grievances coalesces into an organized protest is complicated, and the motivation underlying any person's decision to join in can vary widely. Suppose three things are true about this process: 1) the effort that any person would need to expend to join a protest decreases with the transparency of the logistical details; the easier it is to learn about a protest, and the more carefully the event is planned, the less effort it takes to join in; 2) the effort that any person would need to expend to join a protest decreases with the number of others planning to attend; if many show up, costs are expected to be more widely distributed, individuals may face fewer consequences, and there may be strong peer pressure to attend; and 3) a person's willingness to expend a certain amount of effort increases with the emotional intensity of his or her desire for change; that is, the more a person believes in the cause and finds change necessary or perhaps even a duty, the more willing he or she is to participate. If a person's likelihood of doing something is decreasing in the effort required, then these three assumptions imply that social media may make protests larger and more frequent via three mechanisms.

Mechanism 1: Social Media Allow Users to Spread News of Grievances in Rapid, Convincing, Emotionally Provocative Ways

Users of social media are not bound by professional standards of even-handedness and objectivity. Quite the contrary, these media are understood to disseminate personal viewpoints. Occupy Wall Street offers a case in point of this use of social media. The Occupy movement coalesced around the cause of equality (see chapter 8). Responding to heightened income inequality in the United States, members of the movement referred to themselves as “the 99 percent” (those in the ninety-ninth percentile of the income distribution), in contrast to “the 1 percent” (those in the right tail of the income distribution). In the early days of the movement, some users of the photo-sharing social media platform Tumblr created a blog devoted to the cause. The page was titled “We Are the 99 Percent,” and on it users posted photos of themselves holding signs describing their plight (Rosen 2011). Not only were these stories personal, they included real faces with which to relate. Posts to the blog flooded in, and by the time of the

Zuccotti Park protests, nearly a hundred new posts a day were being added (Graham-Felsen 2011).

This kind of shared personal experience of hardship can influence a protest movement in two ways. First, if people are compelled by these personal accounts, more people may come to share the grievance, and people may feel more strongly aggrieved. Given the assumptions described above, this would increase the number of people willing to join a protest organized around this cause. Second, the knowledge that such convincing personal accounts are shared widely on the social media platform may generate the belief that others are also being convinced to turn out. If a belief that more people will join in the protest makes participation easier, then social media may increase participation in protests in this way as well.

Convincing accounts of hardships (perhaps even substantiated with photos and video) can be broadcast easily in real time from the ground on social media, which could boost the number of participants at moments crucial to a protest movement.¹ This reasoning led many to speculate that the Arab Spring protests were products of social media:

No revolution in history has been recorded so comprehensively, and in such minute detail. . . . Future social historians will gorge themselves on evidence like this, the micro-detail of social responses to unrest: but for now, its importance lies in the way it enables participants to judge what kind of history is being made in real time. Banned from reporting in Iran, the mainstream media quickly began to realize the value of this user-generated content, and to run it. The momentum of the protests fed off this cycle of guerilla news-gathering, media amplification, censorship and renewed protest. (Mason 2012, 35)

Because online social media can transmit personalized messages, even from the protest itself, these tools have the potential to motivate others to support the cause and attend the protest. A person hearing these accounts over social media knows that her social contacts, whose judgment or esteem she may value, endorse the cause. Given the three assumptions described above, the result can be an increase in protest participation. Not

only can this boost the size of a protest already planned, it also can make future protests more likely to occur.

Mechanism 2: Social Media Help Users Coordinate the Protest

That social media can be used to plan events has been well documented. Castells explains the various ways that Facebook was used to organize Occupy events: “[Facebook groups] served as directories to help members stay in touch with each other, send private messages, or post on each other’s walls. The groups were also used for organizing: to make announcements, post calendar items and send messages to all members of the group” (2012, 175). The Arab Spring uprisings also began with organizational details broadcast over social media (Castells 2012, 103). Examples abound of tweets communicating times and places of events. Since messages can rapidly reach a wide audience at a low cost, social media serves as a useful, flexible tool for making protest information known, thereby reducing the effort required of potential protesters.

Users are organized into virtual communities within social media applications. This not only means that a person can share news with many others; it also means that others can share that news as well. News spreads along a virtual social network, which has two implications. First, a very large number of people can be reached. Second, those who are reached know they are part of a community in which everyone was reached. When logistical details of a protest are shared in this way, lots of people know that many others have heard the details as well. In fact, many of those who heard are personal contacts, which creates pockets of common knowledge: users can infer that their social contacts know, and that their contacts know that their contacts know. Common knowledge among social cliques can substantially reduce the expected costs of protesting (Chwe 2000). Given the three assumptions described above, both implications may cause turnout in protests to be higher than it would have been without the presence of social media, and may increase the frequency of protests as well.

Mechanism 3: Social Media Can Broadcast Specific Pleas to Turn Out to a Protest

While there are examples of social media indirectly encouraging turnout by drawing more people in to the protesters' cause, there are also examples of social media being used to explicitly encourage turnout. Some users post general or targeted invitations to a protest. When protests in Egypt were brewing, Asmaa Mafhouz created videos and posted them. In her "vlog" (close-up video message), she announced that she and others were going to Tahrir Square. In a particularly charged plea, she declared: "People, have some shame! I, a girl, posted that I will go down to Tahrir Square, to stand alone, and I'll hold a banner. All that came were three guys. . . . I'm making this video to give you a simple message: we're going to Tahrir on 25 January" (quoted in Mason 2012, 11). Emotional appeals from trusted sources that can reach many people can both increase emotional attachment to the cause and convince potential participants that turnout will be high, which may in turn boost participation in protests. Moreover, given that these invitations reach social cliques, pockets of common knowledge can boost their efficacy in the way described in mechanism 2.

How Social Media May Increase Protest Visibility

The previous section established that, given the three assumptions about how a person decides whether to join a protest, the presence of social media can increase both the size and frequency of protests. Social media can also shape the character of protests by influencing the behavior of people beyond those who may show up at the protest.

The wide reach of content can help news of hardships reach audiences beyond the potential participants of a protest. One consequence is that news of protests can reach international audiences. For example, Wall and Zahed (2011) traced the trajectory of YouTube videos produced in Egypt before the 2011 protests in Tahrir Square as they were shared through social media first in Egypt, and then in Saudi Arabia. They eventually made their way to the United States and even into major US news outlets like the *New York Times* and the *Washington Post*. Accounts shared on social media are easy for major international news outlets to find and report on: the content can be made publicly available, and is centralized, searchable, and often

organized (for instance by the inclusion of a hashtag). Protesters, aware of this possibility, will often tweet in English rather than the local language (Tucker et al. 2014). News reaching the outside world through social media is qualitatively different from other forms of information that reaches the outside since it can be from participants themselves and is disseminated in real time. Eltantawy and Wiest argue that this was the case in Egypt: “Once again, social media introduced a powerful mobilization resource that protesters utilized to address the world while events were unfolding. This is a significant development in social mobilization, as it was the protesters themselves who disseminated information, pictures, and videos—not just reporters and group leaders” (2011, 1215). International attention may fuel the motivation of those at the protest,² but may also generate extra pressure on the regime or target of the protest. The presence of social media may allow groups to forge transnational ties or compensate for the lack of existing ones (see chapter 3).

The Case for Pessimism: How Social Media Can Depress Protest Attendance

It is important to note that the boost in size and frequency discussed above is conditional on the assumptions underlying the decision to participate. If the three assumptions stipulated above do *not* reflect the way that people are motivated to protest, then the presence of social media may actually *reduce* turnout from the level it would have been had social media not been used.

While the three assumptions are plausible in general, there are also scenarios in which they are unlikely to hold. Take assumption 2, that knowledge that more people will turn out makes a person more likely to turn out to protest. This assumption is plausible in contexts in which people expect blowback to be less severe in large crowds, or expect the protest to be met with mild opposition. In other contexts, though, especially those in which the grievances are felt with less conviction, or the opposition to protesters is expected to be particularly brutal, a competing incentive to shirk may be present. In such a case, the larger the number of people willing to put themselves on the line for the cause, the *less* a person would feel compelled to join (perhaps because his marginal impact on the

success of the protest is smaller, or his presence or absence is less likely to be noticed). If this were the case, the more social media helps to create the impression that many will turn out, the *less* likely a user of social media would be to turn out. Relatedly, in these contexts, assumption 1 may not hold either: if logistical details are presented so clearly that prospective protesters know that all other prospective protesters know that attending would be easy, they may guess that many will show up, obviating the need for them to show up themselves. In these contexts, the ease with which information about the cause and about logistics flows through social media compounds the incentive to shirk. Social media would then function to depress turnout.

The above describes a problem of collective action—people are not so dedicated to the protest cause that they personally desire to participate, and they are willing to free ride on the participation of others. A separate problem could depress participation as well. Even if a person is not inclined to free ride, she may be dissuaded from participating if the messages reaching her on social media make participation appear too costly. Vivid, personal accounts may credibly reveal that participation would be dangerous, unpleasant, or difficult. Consider again the YouTube video posted by Asmaa Hafhouz in Egypt, which declared: “I, a girl, posted that I will go down to Tahrir Square, to stand alone, and I’ll hold a banner. All that came were three guys” (quoted in Mason 2012, 11). This is an invitation to another attempted protest. While some may find this motivating, others may learn from it that the next protest is likely to be perilous. Similarly, a blog on the *Guardian* website posted a series of distressing tweets sent by video journalist Mohamed Abdelfattah in Cairo (with lags in between): “Tear gas,” “I’m suffocating,” “We r trapped inside a building,” “Armored vehicles outside,” “Help we r suffocating,” “I will be arrested,” “Help !!!,” “Arrested” (quoted in Siddique, Owen, and Gabbatt 2011). On the one hand, this post served as a real-time news source and could help rally others to join in. On the other hand, this line of tweets may have made joining in sound less appealing and more dangerous. Those who conclude that attending the protest would actually be harder than they thought may be dissuaded from participating.

While these forces acting to depress turnout are present in theory, whether and when the collective-action problem or the revelation-of-cost

problem render the presence of social media a net negative for protests is an important open question.

An additional possibility is that the opportunity to share content on social media may force out real participation. The idea that some may retweet a tweet, comment on a blog, or join a Facebook page and then do nothing further has been dubbed “slacktivism.” Morozov sums up the problem as follows: “But harmless activism wasn’t very productive either: what do 100 million people invited to join the Facebook group ‘100 Million Facebook members for Democracy in Iran’ expect to get out of their membership? Is it just a gigantic exercise in collective transcontinental wishful thinking? Do they really expect that their ‘slacktivism’—a catchy new word that describes such feel-good but useless Internet activism—would have some impact?” (2009, 13).

On the one hand, “slacktivists” who share content online but are unwilling to take to the streets can help so long as their sharing encourages others to act. On the other hand, if these slacktivists *would* have participated in the physical protest but now, thanks to social media, they pass information along *instead*, then even granting the mechanisms above, the net impact on protest size and, ultimately, success, is ambiguous. The issue is that, for some, social media may serve as a substitute for real action. If they would have protested but instead opt out when presented with the easier option of sharing on social media, then the presence of social media and its accommodation of “slacktivists” has the potential to depress protest attendance. Recent research uses survey evidence to show that, among a sample of Italians who discussed the 2013 election on Twitter, participating in low-cost activities like tweeting about the election was positively associated with participating in higher-cost activities like contacting politicians and attending events (Vaccari et al. 2015). This supports the conclusion that on net, even if some tweet instead of participating in more high-cost activities, more tweet *in addition* to participating in these activities. To rule out the problem of slacktivism wholesale, future research will need to confirm that the number who tweet *instead of* participating in higher-cost activities is low in general.

Domestic Political Institutions and Social Media

The cases for optimism and pessimism outlined above explore how social media impact the character of protests. In certain circumstances, access to social media would increase the size, frequency, and visibility of protests; in others, access would decrease the size and frequency. These changes in the character of protests should affect groups' ability to change the status quo, since larger, more frequent, or more visible protests should be more likely to achieve their ends. To understand how social media impact protest success, an additional factor must be accounted for.

Protesters do not organize in a vacuum. Rather, they coordinate in a strategic environment containing those who prefer the status quo. In the recent global waves of protest, the actors most interested in thwarting change have been existing governments.

Social media are relatively new technologies, and the relationship between governments and social media is constantly evolving. Governments behave as though social media can help protesters, and some have taken steps to block its use in one way or another. When dissidents in Iran were using Twitter to voice protest, the government and the dissidents were regularly changing tactics in response to each other's actions. Dissidents would use social media, especially Twitter, while governments would block access; dissidents would find new means of access, the government would target those, and so on. As the *Washington Times* reported in the midst of this back-and-forth, "Hackers in particular were active in helping keep channels open as the regime blocked them, and they spread the word about functioning proxy portals. . . . Eventually the regime started taking down these sources, and the e-dissidents shifted to email. The only way to completely block the flow of Internet information would have been to take the entire country offline, a move the regime apparently has resisted thus far" (Washington Times 2009). Clever, technology-savvy protesters helped protect access to social media, and the government actively tried to thwart their efforts.

Egypt's government took the more drastic approach that the Iranian government was avoiding: they shut down the Internet. According to Castells, Egypt's Internet was uniquely suited for full-scale shutdown:

Egypt's great disconnection was an entirely different situation from the limited Internet manipulation that took place in Tunisia, where only specific routes were blocked, or Iran, where the Internet stayed up in a rate-limited form designed to make Internet connectivity extremely slow. Disconnecting the Internet in Egypt was relatively easy, compared with what would be necessary in democratic countries. In Egypt there were only four major ISPs, each of which had relatively few routers connecting them to the outside world. (2012, 85)

Blocking access to certain websites, slowing access to certain websites, and shutting the Internet down altogether are some strategies that have been employed by governments facing serious protests. These strategies may be easier in less democratic regimes, in which access is more centralized.

Of course, whether blocking access actually thwarts protests is also an open question. One clever study made use of the Internet shutdown during the Tahrir Square protests in Egypt to measure the impact of social media access for the Egyptian protests. Because people lost access to social media during the shutdown, the study was able to compare the same protest with and without access to social media. Hassanpour found that protest activity not only did not decrease during the shutdown, it actually increased: “[the Internet shutdown] implicated many apolitical citizens unaware of or uninterested in the unrest; it forced more face-to-face communication, i.e., more physical presence in streets; and finally it effectively decentralized the rebellion on the 28th through new hybrid communication tactics, producing a quagmire much harder to control and repress than one massive gathering in Tahrir” (2014, 10). Of course, this at best tells us what happens when social media are present and then restricted, not what would have happened had social media never been present. However, this does suggest that shutting down the Internet or blocking access to specific social media websites is not necessarily the government's optimal strategy.

Making online social media difficult or illegal to use is not the only strategy available to a government. It can also allow full access, but use social media to its own ends. For another recent example in Turkey, the government has used social media to identify dissidents and gather

evidence serving as grounds for their arrest: “Turkish police on Wednesday arrested 25 people they accused of using Twitter and social media to stoke anti-government sentiment during protests that have engulfed the country. . . . The authorities appear to have taken their cue from Turkey’s prime minister, Recep Tayyip Erdogan, who denounced Twitter as a ‘menace to society,’ adding: ‘The best examples of lies can be found there’ ” (Harding and Letsch 2013). There are reports that Israel uses social media like Facebook to identify potential pro-Palestinian protesters in order to blacklist them (Protalinski 2011). Moreover, combing social media for information about who will be gathering where can give anti-protest forces an advantage in breaking up a protest once it starts to form.

In addition to using the content of social media to its advantage, governments also have the option of generating social media content of their own. Posting from ostensibly private accounts to muddle the information environment, confuse logistical details, and argue against the cause are all options that social media make possible.

The set of strategies that governments will use in response to protests organized over social media is still in flux. Using information to target protesters, curtailing access, and adding information to manipulate a protest movement are just a few options.

These tactics suggest an interesting relationship between domestic regime type and social media function. Conditional on having access to social media, these platforms in principle narrow the gap between democratic and autocratic states—users in either can broadcast information widely, and associate online. Of course, access may not be equal; autocratic states may be more willing to intervene to prevent access or to co-opt social media use for their own ends. Generating fake news and spreading propaganda may be more feasible for or attractive to nondemocratic leaders. Governments’ responses to social media use is evolving; if these platforms give nondemocratic governments greater access to the plans of prospective protesters, or richer tools to thwart or mislead protest efforts, the ultimate impact could differ by domestic institutional environment. Although apparently a useful tool for the pursuit of democracy in nondemocratic settings, social media may be less effective in exactly these settings.

Moving Forward

Though the era of social media has only recently begun, the study of the use of these tools in protest is an active research area that has already revealed a number of important insights about modern social movements. Some of these pertain to who uses social media and how when organizing protests. One recent study focuses on participants in the 2015 Charlie Hebdo demonstration in Paris. A comparison of people who sent tweets from the protest site in Paris with others who sent tweets from Paris but away from the protest site reveals that protest participants occupy different network positions within Twitter—in general they have more followers and their followers have more followers (Larson et al. forthcoming). Moreover, protesters are highly interconnected on Twitter, suggesting that pockets of shared knowledge and influence, which social media facilitate, play a role in motivating protest participation.

Relatedly, a study of Twitter activity during the Arab Spring reveals that those who occupy relatively peripheral network positions play an especially important role in turning others out to the protest (Steinert-Threlkeld 2017). Studies of messages sent on Twitter during Istanbul’s Taksim Gezi Park protest in 2013 and the United for Global Change demonstration in 2012 show that those with fewer connections on Twitter have a large impact in the aggregate by passing along messages from others, resulting in a wide reach of protest-relevant messages (Barberá et al. 2015). Certain Twitter users, by nature of their ability to bridge distinct communities on the platform, are responsible for messages jumping from social group to social group, which may help to organize and influence turnout in protests (González-Bailón and Wang 2016). It is increasingly clear that social media plays an important role in spreading information about all aspects of protests widely, and our understanding of exactly how this happens improves with each new study.

Whether or not this information-sending function translates into greater protest success is a much more difficult question to answer. In a widely circulated *New Yorker* piece, Malcom Gladwell praised social media’s ability to make use of weak connections between people, but doubted its use in scenarios like protests: “The Internet lets us exploit the power of these kinds of distant connections with marvelous efficiency.

It's terrific at the diffusion of innovation, interdisciplinary collaboration, seamlessly matching up buyers and sellers, and the logistical functions of the dating world. But weak ties seldom lead to high-risk activism" (2010). Whether a high-risk action like participating in a protest can be encouraged or even *caused* by social media, and whether this translates into greater protest success, are important but elusive questions.

One hurdle is the difficulty of testing the causal mechanism. In order to conclude that the use of social media *causes* protests to be more impactful, the ideal experiment would take a set of nascent protests that are as similar as possible in all aspects that could affect their level of success and randomly assign the use of social media to some but not others. Obviously, this experiment is unlikely to be conducted.³

Correlations have been observed between social media activity and protests (Steinert-Threlkeld et al. 2015). For instance, "In Tunisia, for example, 20 percent of blogs were evaluating Ben Ali's leadership on the day he resigned from office (January 14), up from just 5 percent the month before. Subsequently, the primary topic for Tunisian blogs was 'revolution' until a public rally of at least 100,000 people took place and eventually forced the old regime's remaining leaders to relinquish power" (Howard et al. 2011, 3). Without knowing what the protests would have looked like without the use of social media, it is difficult to conclude that social media activity caused the protests or boosted participation from what it would have been in a world without social media.

Social media's causal effect on protest success depends on how social media change the character of protest. In addition to the ways social media are connected to protest character discussed above, there are other possible channels through which these tools may alter protest outcomes from what they would have been had social media not been available. One is through altering the composition of protesters. Do the demographics of those who protest look different in a world with social media, and do these demographic differences impact protest success?

We might imagine that the composition of protesters does bear on protest success, perhaps by affecting which types of causes are found to be worthy of protest or how much pressure the group can place on the government.

Much of the real-time information about protests is shared and received on smartphones. This means that the primary demographic that may be affected by content shared over social media is a narrow one composed of technologically savvy young people. This may be a different demographic than was active in previous waves of protest (Howard et al. 2011). For instance, Castells writes that

at the end of 2010, an estimated 80 percent of Egyptians had a cell phone, according to research from Ovum. About a quarter of households had access to the Internet as of 2009, according to the International Telecommunications Union. But the proportion was much higher among the 20- to 35-year-old demographic group of Cairo, Alexandria and other major urban centers, who, in their majority, be it from home, school or cybercafes, are able to access the Internet. (2012, 57)

Whether this demographic is particularly well suited to motivate others to join them, and whether their goals are aligned with those of other prospective protesters, remains to be seen.

Conclusion

In short, while a number of questions cannot yet be definitively answered, we know that social media are a set of tools that allow users to share content with many other users very rapidly, and that in the information age, people with Internet access do use social media throughout all stages of protest. The information that people share using social media is often personal and emotional. Before protest events, such media are used to spread word of the cause, plan the logistics of upcoming events, and recruit participants. During protests, people post and pass along news from the ground. Afterwards, people report details, assess progress, and start planning anew.

We know that social media activity spikes before protest events, and when access is abruptly cut off, people turn to the streets. Whether access to social media on net makes protests more likely, widely attended, or

effective at inducing change is still ambiguous. Whatever the causal mechanism or net causal impact, governments are taking notice. Responses like shutting down the Internet, tracking down key social media features, and attempting to legislate use of the media suggest that governments are betting in favor of a net increase in protest success due to social media unless they take action.

In theory, social media can cause protests to be better attended and more likely to be successful than they would have been in a world without social media. These tools make coordinating and popularizing claims and grievances particularly easy. With them, protesters have unprecedented access to international audiences, offering a channel for global linkages. So long as authoritarian regimes are unsuccessful at blocking or co-opting social media activity, these tools can be useful in any institutional environment. Of course, under the right circumstances, these tools have the power to work against protest success as well. It is important to carefully consider the ways that social media may or may not be helpful for protest outcomes in order to design studies that answer lingering questions central to the study of social movements in the information age.

NOTES

- 1 This mechanism can be viewed as an extension of resource mobilization theory (see McCarthy and Zald 1977). Viewed through this lens, social media is a tool that allows quick and effective mobilization of human resources. It allows easy access to existing social networks, pools of human capital, and even offers the means to quickly forge new connections between people. Groups possessing grievances and behaving according to the assumptions described in this chapter are better able to mobilize human resources if they have access to social media than if they do not.
- 2 The ability to quickly transmit news internationally may also serve to aid protests via a frames mechanism (see Snow et al. 1986). If coordinating on a common understanding of the need for protest is helpful, social media can not only align potential participants' views within an area of interest, but also help to export already developed frames from more mature protests abroad. One unique opportunity the era of online social media presents to researchers of frames stems from the fact that online activity leaves a trace. To the extent that posts on social media accurately represent a person's understanding of a frame, then the consistency, spread, and evolution of frames can be studied on a scale never before possible.
- 3 Understanding the causal mechanism by which social media helps or hinders protests is especially crucial for evaluating potential interventions in terms of their usefulness

in bringing about democratic government. Obviously, it would be useful to know the answer to certain questions, such as: If we handed everyone living under an autocratic regime a reliable smartphone, could we expect democracy to follow? Many intermediate questions stand in the way, but any knowledge we could glean of the causal mechanism brings us closer to understanding and potentially even influencing the course of protests.

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