The Arab Spring
The Role of ICTs

Social Media in the Egyptian Revolution:
Reconsidering Resource Mobilization Theory

NAHED ELTANTAWY
JULIE B. WIEST
High Point University

This article seeks to open dialogue about the utility of resource mobilization theory in explaining social movements and their impact by exploring the use of social media in the 2011 Egyptian revolution through a limited case study analysis. It argues that social media played an instrumental role in the success of the anti-government protests that led to the resignation of the country's dictatorial leader, and calls for further examination of the proposed incorporation of social media as an important resource for collective action and the organization of contemporary social movements.

New communication technologies—especially social media via the Internet— have become important resources for the mobilization of collective action and the subsequent creation, organization, and implementation of social movements around the world. The development of social media created opportunities for Web-fueled social movements, or cyberactivism, to change the landscape of collective action. Cyberactivism is a growing field of scholarly inquiry, though it is not yet well understood, and it is largely lacking a clear, cohesive direction.

Langman (2005) argues that computer-savvy activists use the Internet to initiate and organize a broad spectrum of dissention activities, including consumer boycotts and public protests and demonstrations. Numerous scholars, in fact, have pointed to new communication technologies— particularly social media like short messaging services (SMS), social-networking sites, and blogs—as being, collectively, an important new resource for the successful organization and implementation of social movements (e.g., Della Porta & Mosca, 2005; Langman, 2005; O'Lear, 1999; Wasserman, 2007). Social media technologies have been used especially in organizing and implementing collective activities, promoting a sense of community and collective identity among marginalized group members, creating less-confined political spaces, establishing connections with other social movements, and publicizing causes to gain support from the global community.

Prominent cyberactivism movements include antiwar, anti-globalization, and global justice movements. In the Iraqi antiwar movement, activists' use of the Internet to communicate, coordinate,

and create awareness among decentralized networks resulted in global protests that brought together about 10 million activists who demonstrated in hundreds of cities worldwide on February 15, 2003 (Cortright, 2007). The 1999 World Trade Organization (WTO) protest in Seattle marked the beginning of the global justice cyber movement (Juris, 2008; Kahn & Kellner, 2005; Lievrouw, 2011), and new communication technologies became the vehicle that brought together the tens of thousands of protesters who confronted WTO delegates (Lievrouw, 2011). The Internet also has enabled the creation of diverse democratic groups and movements, such as the World Social Forum, which mobilized global justice movements of more than 100,000 diverse activists in Brazil in 2003, and in Mumbai in 2004 (Langman, 2005).

In addition to supporting political and social movements in more conventional ways—by providing opportunities for political expression, symbolic identification for collective actors, and information exchange—new communication technologies may serve a novel instrumental function. In their examination of the anti-G8 protest in Genoa in 2001 and the European Social Forum in Florence in 2002, Della Porta and Mosca (2005) found that Internet-based communication technologies provide an important additional resource for social movements implemented by "resource poor" actors, offering a means for mass communication that may have previously been restricted by financial, temporal, or spatial constraints.

Other examples of social media use among "resource poor" actors include HIV/AIDS activism and the activities of some Muslim feminists. HIV/AIDS media activism, which grew significantly between the late 1980s and early 1990s, was initiated mostly by collectives of people with HIV/AIDS who aimed to publicize AIDS health and treatment options, as well as cultural and political activities of people with HIV/AIDS (Gillet, 2005). While these groups lacked the power and resources to efficiently spread their messages to a mass audience through traditional means, the Internet has now enabled mobilization of people with HIV/AIDS in developing countries as well as AIDS dissidents (ibid.). Finally, Muslim feminist activists in the Middle East have used the Internet to foster communication between women in diaspora and their sisters in Muslim countries, promote women's initiatives, and support each others' struggles (Moghadam, 2000).

Scholars from disciplines including communication, sociology, and political science have studied uses of social media in a range of social and political movements, but what seems to be missing is a theoretical framework that could integrate and contrast findings and conclusions from different studies, as well as advance a shared pursuit toward understanding the role of these technologies for collective action. While there appears to be general agreement among scholars that social media may be used as an effective and enduring resource for political and social change, its distinctive and sustaining features are not well understood.

Using the 2011 Egyptian revolution as a case for analysis, this article explores the possible utility of resource mobilization theory to enhance this understanding and take a step toward generating a theoretical framework capable of guiding related studies. Resource mobilization theory seems to be a reasonable starting point for explaining the usefulness and impact of social media technologies in social movements because of its emphasis on the social, historical, and political contexts of collective action, as

well as on the utility and interplay of available resources. In general, this article explores the potential usefulness of resource mobilization theory in understanding contemporary social movements. In pursuit of this goal, our analysis specifically seeks answers to the following research questions:

1. What conditions and resources sustained the anti-government protests that led to the Egyptian revolution in early 2011?
2. In what ways were social media technologies employed as a resource to support the Egyptian revolution?

Theoretical Framework

Resource mobilization theory largely developed from studies of collective action during the 1960s, gaining increasing prominence throughout the 1970s and 1980s, though its popularity has waned. The theory has been criticized for its assumption of the constancy of discontent and collective interests over time, its overemphasis of the significance of outside resources, and its inability to adequately address social movements that begin with fairly substantial resources or those instigated by some minority groups (see Jenkins, 1983; Shin, 1994; Walsh, 1981). Despite these claims and the changing landscape of social movements since the theory's heyday, resource mobilization should not be discounted, as it still has much to offer. Some scholars have suggested modifications of the theory (e.g., Buechler, 1993; Khawaja, 1994; Opp, 2000), and the increasing use of social media technologies in social movements presents an opportunity to re-examine the utility of resource mobilization in a contemporary context.

The theory is based on the notion that resources—such as time, money, organizational skills, and certain social or political opportunities—are critical to the success of social movements. At its inception, resource mobilization theory was unlike earlier theories of collective action in its treatment of social movements as normal, rational, institutionally rooted activities that are structured and patterned, thus allowing for analysis in terms of organizational dynamics (Buechler, 1993; Jenkins, 1983). Although types of resources vary among social movements, the availability of applicable resources, and of actors' abilities to use them effectively, are critical. In contrast to psychological variables considered by other social movement theories, resource mobilization theory was the first to recognize the importance of influences *outside* the social movement under study (Johnson, 2000). A thorough explanation of the history and development of resource mobilization theory is beyond the scope of this paper, but it can be found in Jenkins (1983) and McCarthy and Zald (1977).

Methodology

The qualitative case study method is a useful tool for developing a deep understanding about a particular case, its features, and its impact. The richness of data gathered through this method complements the article's theoretical framework and is needed to answer the research questions. Although myriad types of cases may be analyzed with this method, the case under study must represent a bounded integrated system (Glesne, 2006; Stake, 2005). In keeping with this requirement, we categorize the "Egyptian revolution" in this study as the activities and conditions that led to and defined the anti-

government protests that occurred between January 25 and February 11, 2011, ultimately leading to the resignation of Egyptian President Hosni Mubarak.

Case researchers examine both common and unique features of a case, with an emphasis on its defining features (Stake, 2005). In addition, researchers must acknowledge and be knowledgeable of comparable cases, insofar as learning about a particular case is related to how the case is similar to, and different from, other cases (ibid.). Keeping these imperatives in mind, we established general areas of inquiry organized around our research questions and shaped by resource mobilization theory to guide our case study of the Egyptian revolution. Based on a modified version of Stake's suggested research foci, we sought information about 1) the nature of the case, particularly its development and activities; 2) the sociohistorical context; 3) the physical setting and material resources available; 4) the current sociopolitical context, including the use of social media technologies; 5) other cases through which the Egyptian case is recognized; and 6) informants through which the case can be understood. Because of limited space, and in order to most adequately address our research questions, the following section focuses on major findings, especially as they emphasize historical, social, and political contexts and the uses of social media technologies in the anti-government protests in Egypt.

Data collection began shortly after the Tunisian revolution (apparently a significant influence on the Egyptian revolution), when we first became aware that large-scale protests were being organized in Egypt. Data collection continued throughout the protests and ended on the day after Mubarak's resignation. A variety of sources originating from inside and outside of Egypt—including published news reports and messages posted via social media such as Facebook, Twitter, and blogs—were analyzed. Such secondary data were appropriate for this study because of both the nature of our inquiry and the wealth of information available.

Given the enormous volume of data available, we could not access every news report and social media message produced. The qualitative researcher often must use her or his judgment, based on a set of criteria, to decide how much and how long a case should be studied to aid in understanding (Creswell, 1998; Denzin & Lincoln, 2005; Stake, 2005). Based on our prior knowledge and research, therefore, we collected a convenience sample from as large a variety of sources as possible until we had reached a point of saturation and had a good sense of the case.

Analysis

Contexts of a Revolution

Mass protests filled the streets of Egypt in an 18-day revolution against then President Hosni Mubarak, who kept the country under tight dictatorial rule for 30 years. While social media played a major role in the revolution, there are a number of other factors and activities that contributed to the development of events that triggered the protests that commenced January 25. Under Mubarak's regime, the sociopolitical and economic climate was both stifling and depressing. Presidential and parliamentary elections lacked transparency; corruption permeated all government bodies; and political conditions for Egyptian citizens were oppressive, preventing free expression, protest opportunities, and general political

participation. The country had been under a nearly constant state of emergency since 1967, allowing the government to squash protests, censor the media, and detain citizens for long periods of time without formal charge (Egypt extending state of emergency violates rights, 2008). In a further show of power, Mubarak drafted 34 constitutional amendments in 2007 that increased his control and further stifled the masses. These included powers to try civilians in military courts, revoke judicial supervision of parliamentary elections, and impose restrictions to prevent unaffiliated independents from running for office (Essam El-Din, 2011). According to the United Nations Development Programme's 2008 annual report, about 20% of the Egyptian population then lived below the poverty line (UNDP, 2008), and it was becoming increasingly challenging for Egypt's poor to satisfy basic needs (Hassan, 2011). These conditions gradually intensified public frustration and impatience with the regime, which appeared to be enduring, as Hosni Mubarak was grooming his son Gamal to succeed him.

It was in this environment that Mohamed ElBaradei, winner of the 2005 Nobel Peace Prize and former chief of the United Nations' International Atomic Energy Agency (IAEA), gained strong support and later became one of several leaders in the development of the revolution. ElBaradei was among the first to oppose the government and call for democratic reform and social justice (Gubash, 2009). In 2009, as ElBaradei was preparing to retire his post at the IAEA, he began reaching out to Egypt's youth to instill hope that political change was possible. Gradually, ElBaradei became a major enemy of the Egyptian government because of his willingness to criticize and shame the regime's dictatorship. In February 2010, ElBaradei and a group of approximately 30 politicians, intellectuals, and activists formed the National Association for Change, an opposition coalition that supported the democratic call that ElBaradei had initiated.

In addition to the intense political climate, geographic features, such as close proximity to Tunisia, as well as the location of Tahrir Square in the heart of Cairo, contributed to the development and success of the January 25 protests. Egypt and Tunisia are North African neighbors, separated by Libya and overlooking the Mediterranean Sea. Both are majority Muslim countries and share the Arabic language, and both had been ruled by dictators for decades. These commonalities help to explain the Egyptian interest in the events in Tunisia, and the successes there apparently encouraged the Egyptian citizenry.

The prime location of Tahrir Square at the epicenter of Cairo was another factor that contributed to the success of the revolution. Tahrir (or Liberation) Square is situated in a large, open space in downtown Cairo, close to a metro station that connects Tahrir with multiple other districts. The open space enabled millions of people to gather in the square, while also providing a window for the outside world to view the events taking place there. Even when reporters were violently driven out of the square by Mubarak thugs, many managed to continue reporting by setting up cameras in the various buildings that surround the square (Joyella, 2011). The location also provided a convenient gathering place for protesters from all across Cairo to unite.

Several politically motivated events also contributed to the Egyptian revolution. One of the most significant was the brutal death of Khaled Said in June 2010. Said, a young man from Alexandria, was patronizing an Internet café when he was approached by two police officers. Media reports and bloggers claim that the officers demanded money from Said and, when he told them he did not have it, began

beating him inside the café. The brutal beating continued outside until Said died on the street. A police vehicle later collected Said's body, and his family was reportedly told that Said died after choking on a packet of drugs (El Amrani, 2010). Said's supporters, however, believed he was killed because of a video he posted online showing the two officers exchanging money after a drug deal. Immediately following the death of Said, Internet websites were flooded with images of Said's disfigured face, and many people, including human-rights activists and ElBaradei, took to the streets in an expression of their outrage. For many Egyptians, Said's death became a symbol for the routine police brutality against civilians (Egyptian policemen charged over Khaled Said death, 2010). The killing of Khaled Said also inspired an influential Facebook group in his name, which is discussed in the following section.

The final significant event ahead of the Egyptian protests was the Tunisian revolution, which began on December 17, 2010, and ended with the fall of President Zine El Abidine Ben Ali on January 15, 2011. Although their Egyptian counterparts were already committed to mass protests on January 25 (the official holiday known as Egypt's Army Day), the success in Tunisia appears to have influenced Egyptians and strengthened a sense of collective identity and purpose, primarily because of similarities in the oppressive conditions under which both groups lived and the goals of citizen-activists.

The Role of Social Media

Resource mobilization theory makes clear that both the availability of resources and actors' efficacy in using them effectively are essential. In addition to resources like a motivated citizenry and the availability of transportation to gather in mass, a significant resource for the Egyptian revolution that was utilized effectively was social media. While one cannot argue that this was an Internet revolution, social media technologies represent an important instrumental resource that contributed to the birth and sustainability of the January 25 protests. Substantial access to social media among Egyptians was available largely because of government efforts to expand the nation's information technology capabilities as a tool for socioeconomic development (Hamdy, 2009). Beginning in 1999, government initiatives included free Internet access, low-cost computers, and the expansion of Internet access centers (ibid.). According to Internet marketing research firm Internet World Stats, in February 2010, more than 21% of Egypt's population of 80 million had access to the Internet, and more than 4.5 million used Facebook (Internet World Stats, 2011). Additionally, more than 70% of the population had a mobile phone subscription (Arab Republic of Egypt Ministry of Communications and Information Technology, 2010).

In the early 2000s, several Egyptian bloggers became prominent for tackling thorny issues. The initial blogs were only published in English, but the development of Arabic software encouraged the creation of more blogs in Arabic, thus attracting a wider domestic audience (Hamdy, 2009). As the Egyptian blogosphere grew, activists began utilizing other communication technologies, including social media like Facebook, Flickr, Twitter, and cellular phones (ibid.). April 2008 marked the first Egyptian-instigated cyberactivism attempt, in which activists created a Facebook page to join textile workers in Mahalla on a general strike. Although the Facebook page attracted 70,000 supporters, the strike was harshly defeated by state security forces (ibid.). The experience and knowledge gained in these early social media trials, however, proved useful in the 2011 protests and subsequent revolution.

What is perhaps most significant about the use of social media in the Egyptian revolution is how it changed the dynamics of social mobilization. Social media introduced speed and interactivity that were lacking in the traditional mobilization techniques, which generally include the use of leaflets, posters, and faxes. For instance, social media enabled domestic and international Egyptian activists to follow events in Egypt, join social-networking groups, and engage in discussions.

There were a number of individual activists with sufficient knowledge of social media resources who helped bring the revolution to life. These activists created Facebook groups, personal blogs, and Twitter accounts to engage supporters and followers in discussions on current conditions in Egypt. In the summer of 2010, the Facebook group "We are all Khalid Said" was created following the young man's death. Although the group initially was used to disseminate information about Said's death, it gradually expanded to include political discussions and began attracting more young political activists. Members of the group used this cyberspace to disseminate information on the latest misdeeds of the Mubarak regime, a discussion that appears to have reverberated among frustrated Egyptians and others, as indicated by the site's popularity.

ElBaradei was one of the primary figures who took advantage of the Internet to communicate with his followers and disseminate information. As complements to ElBaradei's personal Facebook page and Twitter account, the National Association for Change and other likeminded groups formed pro-ElBaradei Facebook pages. In October 2010, ElBaradei was quoted in an Australian daily newspaper as saying that change would be inevitable in Egypt: "The timing only depends on when people will be able to throw off this culture of fear that the regime has created" (Political change will come in Egypt, 2010).

Another individual who contributed to the revolution via social media technologies was Omar Afifi, a former Egyptian police officer-turned-activist. In 2008, Afifi wrote a book advising Egyptians on how to avoid police brutality. The book was banned and Afifi's life was threatened, which forced him to seek asylum in the United States. Afifi then took advantage of social media technologies in his continued effort to advise Egyptians, this time through YouTube videos, Facebook, and Twitter. When the Tunisian revolts took place, Afifi released a series of detailed YouTube videos instructing Egyptians on techniques for conducting their own revolution. Afifi provided numerous details and specified the exact day to revolt, where protesters should gather, and what they should wear. Most importantly, Afifi's instructional videos emphasized the idea of peaceful protest (Afifi, 2011a, 2011b, 2011c). The Associated Press quoted a Middle East analyst as saying that Afifi "basically fired the first shot" when he released the first video following the Tunisian revolts on January 14 (Ex-Egyptian cop living in Northern Virginia works for revolution, 2011).

A number of young social media activists who, for almost two years, exchanged information via Facebook and Twitter also helped to initiate the revolution. Egypt's youth, like their Tunisian counterparts, offered guidance on everything from using technology to escape government surveillance to facing rubber bullets and setting up barricades (Kirkpatrick & Sanger, 2011). In Egypt, the April 6 Movement, a group that largely depended on Facebook and social media to gain support, was one of the primary organizational resources of the January 25 protests. Two years prior, leaders of the April 6 Movement had begun researching nonviolent struggles, and even designing the movement's logo to resemble that of the

Serbian youth movement Otpor, which helped topple Slobodan Milosevic's dictatorship. Members of the group also traveled to Serbia to meet with Otpor activists (ibid.). The Internet was clearly a chief tool for these activists to gain and exchange knowledge to better prepare for the launch of the January 25 protests.

A major advantage of social media in the Egyptian revolution was its capacity for swiftly exchanging and disseminating information to millions of people inside and outside of Egypt. For instance, as Egyptians were carefully watching events unfold in Tunisia while also planning their own movement, activists from both countries were exchanging information, ideas, and words of encouragement online. During the Tunisian revolution, Egyptian bloggers were on Twitter, Facebook, and personal blogs posting updates and uploading images and videos of the Tunisian protests. On January 17, 2011, Egyptian female activist and blogger Nawara Negm posted a video message from an Egyptian actress with words of encouragement for Tunisians. Negm also posted information and cell phone numbers, urging Egyptians to send text messages to encourage Tunisians during the protests (Negm, 2011).

On January 21, Negm posted an entry titled "Be noble and demonstrate on January 25," calling on her followers to join activists in the street. She posted a YouTube video of a young Egyptian activist who was joining the movement, saying, "Do you see this girl? She is going to demonstrate." Negm encouraged people to invite friends or other Egyptians they would meet in the street to join as well. At one point, she wrote: "walk . . . walk in the street. Walk walk walk . . . and talk talk talk . . . and sing sing national songs, sing Beladi Beladi [my country my country]" (ibid.). In concluding her entry, Negm wrote:

> If you can take pictures, take pictures . . . if you can use Twitter, send tweets . . . if you can blog, blog from the street. There are people demonstrating for our cause in Tunisia and Jordan, and I just found out that there are people demonstrating in Paris too. All of these people have faith in us.

Other social media initiatives that illustrate the newfound interactivity and speed in mobilization include multiple Facebook pages, such as the previously mentioned "ElBaradei for Presidency" and "We are all Khaled Said" pages, which provided outlets for interaction, information exchange, and encouragement among users. Another Facebook page, created by three Egyptian teenagers on January 16, was known as "January 25: The day of revolution over torture, poverty, corruption & unemployment" (translated by co-author from Arabic). The "January 25" page administrators posted a video introducing themselves to the public and explaining their feelings of encouragement after the achievements in Tunisia, so as to implement a successful revolution in Egypt. Thus, these Facebook pages allowed activists to immediately address millions of users from diverse walks of life, as well as from different areas across Egypt, all at one time.

The speed and interactivity of social media use not only united protesters, but it also provided the means for disseminating important safety information during the revolution and an outlet for seeking help when in danger. When the Egyptian revolution began on January 25, activists posted messages on their blogs and Facebook pages from Tunisian protesters that contained words of encouragement, along with

detailed instructions and suggestions based on lessons learned. Among the messages, Tunisian protesters advised their Egyptian counterparts to protest at nighttime for safety, to avoid suicide operations, to use media to convey their message for outside pressure, to spray-paint security forces' armored vehicles black to cover the windshield, and to wash their faces with Coca-Cola to reduce the impact of tear gas (Facebook page: Mohamed ElBaradei; Negm, 2011).

Egyptian protesters also used social media to draw attention when in danger, as well as to provide activists and the outside world with minute-by-minute updates. *The Guardian* cites tweets by Mohamed Abdelfattah, an Egyptian video journalist, who on the evening of January 25, 2011, released a series of disturbing tweets in short succession during ongoing protests (Siddique, Haroon, & Gabbatt, 2011):

> @mfatta7 Tear gas
> @mfatta7 I'm suffocating
> @mfatta7 We r trapped inside a building
> @mfatta7 Armored vehicles outside
> @mfatta7 Help we r suffocating
> @mfatta7 I will be arrested
> @mfatta7 Help !!!
> @mfatta7 Arrested
> @mfatta7 Ikve [I've] been beaten a lot

Whereas traditionally, one would have to send a fax, make a phone call, or relay information through a messenger for help, many Egyptian activists were able to reduce response times and increase personal safety by using cell phones to send immediate SOS tweets.

Other activists used Twitter and Facebook to generate international attention and interest in the revolution. They posted pictures and videos depicting revolution events and updates, as well as information about police torture of protesters—and the world paid attention. UN Dispatch News published an online article entitled "10 must-follow Twitter feeds for Egyptian protests" (Albon, 2011). Because of activists' minute-by-minute updates via social media outlets, many Egyptians and foreigners abroad stayed informed of the developments in Egypt. For example, one activist, who tweets and blogs under the name 3Arabawy, tweeted: "first video up, http://www.youtube.com/watch?v=U3IEhQMPywE Crowds avoiding oncoming tear gas and police in Tahrir #jan25 #egypt" (Baraniuk, 2011). Another Twitter user, @weddady, tweeted a plea to foreign media to bring international attention to the protests: "URGENT: REQUEST to ALL EUROPE & US tweeps on #Jan25 PLEASE ASK YOUR MEDIA TO COVER #EGYPT NOW" (Baraniuk, 2011). 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. When the government banned reporters from Tahrir Square in an effort to prevent news from spreading to the world (Fisher, 2011), social media technologies enabled protesters to become citizen journalists.

When the Mubarak regime realized the power and speed of social media technologies and their extraordinary capacity for organization among activists, it cut off Internet and cellular phone communication across Egypt on January 28. As soon as activists recognized the government's plan, they turned to Facebook, Twitter, and blogs to alert the outside world. One Facebook user posted this message on ElBaradei's page on the evening of January 27:

> Starting tomorrow morning, all the foreigners in Egypt won't be able to communicate with their countries back home (facing issues or having troubles), because the Egyptian president gave his orders to cut and stop all kind of communications (Mobile + Internet), he doesn't want the whole world to see what he will be doing to his own nation, what kind of president is this? Please spread the word. (Facebook page: Mohamed ElBaradei)

Additionally, The Arabist, a website on Arab politics and culture, posted warnings on the communication blackout:

> I just received a call from a friend in Cairo (I won't say who it is now because he's a prominent activist) telling me neither his DSL nor his USB internet service is working. I've just checked with two other friends in different parts of Cairo and their internet is not working either. This just happened 10 minutes ago — and perhaps not uncoincidentally just after AP TV posted a video of a man being shot. Will update with more info. The ISPs being used by my friends are TEDATA, Vodafone, and Egynet. (El Amrani, 2011)

Although the Internet was disabled for almost five days, some activists still managed to get their message out, again with the aid of social media. Within Egypt, efforts included the following post by a blogger who published instructions for using a dial-up connection for Internet access:

> OK, it may sound crazy but I think I found a possible solution to connect to the Internet even through the cut off. The solution is by going back to the basics. So instead of connecting to the local Egyptian ISPs . . . we will try to by pass it and connect to REMOTE free ones via the phone network. (Manal, 2011)

According to Zirulnick (2011), other Egyptians managed to access Twitter by using proxies, or by calling friends abroad from landlines and asking them to tweet messages. The #Jan25 hash tag—the designated symbol for the day's protests—was being used in more than 25 unique tweets per minute that day (ibid.). According to Zirulnick, "Many of those still seemed to be coming from Cairo and other parts of Egypt. Tweets are filled with everything from warnings of tear gas to notifications of free food being handed out to protesters" (ibid.). Other efforts to maintain communication via social media during the Internet disruption included the "speak to tweet" initiative, created by a team of engineers from Twitter, Google, and SayNow (a Google-acquired company), which enabled activists to call with voice messages that were instantly turned into Twitter messages (Speak to tweet for Egypt: How it works, 2011).

These combined efforts and creative trials enabled a continued flow of communication, while maintaining speed and interactivity. One blog that included frequent Twitter updates from local protesters proclaimed: "great news, blackout not affecting morale in Cairo, veteran activists from 60s and 70s giving advice on how to do things predigital #Jan25" (Manal, 2011). The Huffington Post also posted tweets sent from Egypt and reported: "Despite the crackdowns, there are still some who have found a way to Twitter in Egypt, and they're describing the violence and events that have occurred" (Praetorius, 2011a). Twitter user @OcuupiedCairo wrote, "URGENT CALL Wounded desperately need medical supplies in Bab El Loq and transport to hospital DM me for details." Minutes later, another tweet by @DannyRamadan reported: "Tahrir is chaotic now. Fire everywhere. People are gathered there and extreme noise that I can't tell what [it] is at the moment #Jan25" (ibid.).

Although significant, social media clearly were not the only force driving the revolution. This became especially evident when government efforts to weaken the protesters' efforts through a mass communication blackout appeared to only strengthen the protesters' determination and increase the numbers of Egyptians joining the struggle. By that point, social media were not as critical to the protests, given that the majority of protesters were already out on the streets and able to utilize other, more proximate resources. Beaumont (2011) reported that "what social media was replaced by then—oddly enough—was the analogue equivalent of Twitter: handheld signs held aloft at demonstrations saying where and when people should gather the next day." In other words, this revolution might have been nurtured online, but it was never reserved to a single communication medium. Social media played a major role throughout the planning and organization phases, and also throughout the revolution, but other means of communication contributed as well. A BBC report explained:

> I was in Tahrir Square on Sunday: everywhere you look there are mobile phones, handwritten placards, messages picked out in stones and plastic tea cups, graffiti, newspapers and leaflets, not to mention al-Jazeera's TV cameras which broadcast hours of live footage from the square every day. When one channel of communication is blocked, people try another. (Alexander, 2011)

Yet, one negative impact of the communication blackout was the inability to call for urgent care for those injured during the protests. Negm (2011) expressed feelings of anger and helplessness on her blog: "I will never forget that we couldn't call an ambulance when we were on Kasr-el-Nil bridge. Why? Why? Why did these faces have to die so early?"

Written messages and images circulating on Facebook, Twitter, and blogs appeared to strengthen the collective identity of Egyptians worldwide, who may have already supported the fight against a dictatorial regime. Once the revolution began, multiple Facebook pages were created to include Egyptians abroad, including "Voice of Egypt Abroad," "Egyptians Abroad in Support of Egypt," and "New United Arab States." Other social media initiatives included a series of virtual protests in support of the Egyptian protests, like the Facebook-organized February 1 event inviting users to a virtual "March of Millions" in solidarity with Egyptian protesters. Administrators of the event explained on the page: "As one million march on the streets of Egypt, our goal is to reach one million voices in support of their march" (Saad &

Mohamed, 2011). Such initiatives brought both Egyptians and non-Egyptians together to support and experience the protests in cyberspace.

Collective identity in cyberspace seemed to reach an apex for Egyptians worldwide immediately after the announcement of Mubarak's resignation. Within seconds, tweets streamed in that expressed jubilation, pride, and emotion. ElBaradei tweeted: "Today Egypt is free. God bless the people of Egypt." Other messages were exchanged on Twitter and Facebook, with comments including variations of "Congratulations Egypt, you are free"; "Feb. 11 is Historic day in Egypt. We will celebrate it forever :) Jan25"; and "'lift your head up high you're an Egyptian' pride in Tahrir. Jan25" (Praetorius, 2011b). Social media technologies enabled the rapid spread of the news of Mubarak's fall and were major factors in the palpable unity expressed by Egyptians, both on the streets of Egypt and in cyberspace.

Conclusions

There is little doubt that social media played a significant role in the revolutions that have struck the Arab world since late December 2010. In the case of Egypt, activists had been engaged since 2009 in online discussions and debates on sociopolitical conditions, which eventually developed into a full-force revolution. What these activists were doing—in terms of debating, organizing, and planning—is not new in itself, but the means employed to communicate with each other and execute the revolution represents an important new resource for collective action. Social media introduced a novel resource that provided swiftness in receiving and disseminating information; helped to build and strengthen ties among activists; and increased interaction among protesters and between protesters and the rest of the world. Information about the events that led to the protests was spread largely through social media technologies, and the encouragement and sympathy offered via social media channels inspired and boosted Egyptian protesters, who were linked not only to each other, but also to Tunisian protesters, Egyptians abroad, and the outside world.

The Egyptian revolution, therefore, demonstrates the opportunities offered by social media for large-scale mobilization and the organization and implementation of social movements. Additionally, the use of social media helped to draw local and international attention to important activities that otherwise may have been shielded from public view, thereby isolating the participants. Social media introduced speed and interactivity that were not possible through the reliance on traditional mobilization resources such as brochures, faxes, and telephones. As one Tunisian protester advised, the use of media to extend a movement's reach can be a powerful way to gain outside validation and countermovement pressure. Following efforts and heeding the advice of activists who had come before them, Egyptian protesters were able to disseminate a continuous stream of text, videos, and images from the streets of the revolution directly to millions via social media technologies, and indirectly through the republication of these messages on news networks such as Al Jazeera and CNN.

Resource mobilization theory can aid in understanding the Egyptian revolution—as well as other political and social movements—in terms of the influential contexts and resources. Primarily because of their ubiquity and potential for communicating messages to massive, global audiences, social media technologies may be seen as an important, instrumental resource for collective action and social change.

We must, however, consider the powerful influence of outside conditions, particularly the social, political, and historical contexts of the movement, as well as the availability and interplay of resources (social media and others), and the actors' efficacy in utilizing available resources to meet their goals. Although some scholars believe that resource mobilization theory is past its prime, and although research on social media's utility in social movements is still in its infancy, their combination would draw on the endurance and strength of the theory while updating it for contemporary times. We urge scholars to consider and test this potentially useful theoretical framework in future studies, so that we may advance a social movement theory appropriate and useful for understanding social movements in our increasingly media-saturated world. Although the sample in this study was not randomly selected, and although our findings are not generalizable, this analysis contributes to knowledge of the Egyptian revolution and begins to assess the utility of incorporating social media as an important resource in the success of contemporary social movements.

References

Afifi, O. (2011a). January 14 Tunisian Freedom Day & our date is January 25. [YouTube video]. Retrieved from http://www.youtube.com/watch?v=gdJQRz0BtU8&feature=related

Afifi, O. (2011b). General instructions on peaceful protests: Part I. [YouTube video]. Retrieved from http://www.youtube.com/watch?v=ujtIdyfjgWU

Afifi, O. (2011c). General instructions on continued peaceful protests: Part II. [YouTube video]. Retrieved from http://www.youtube.com/watch?v=YYheiPStXtY&feature=related

Alexander, A. (2011, February 9). Internet role in Egypt's protests. *BBC News*. Retrieved from http://www.bbc.co.uk/news/world-middle-east-12400319

Albon, C. R. (2011, January 31). 10 must-follow Twitter feeds for Egyptian protests. *UN Dispatch*. Retrieved from http://www.undispatch.com/10-must-follow-twitter-feeds-for-egyptian-protests#

Associated Press. (2011, February 2). Ex-Egyptian cop living in Northern Virginia works for revolution. Retrieved from http://www.myfoxdc.com/dpp/news/local/ex-egyptian-cop-living-in-northern-virginia-works-for-revolution-020211

BBC News. (2010, July 1). Egyptian policemen charged over Khaled Said death. Retrieved from http://www.bbc.co.uk/news/10476720

Baraniuk, C. (2011, January 25). Watching the revolution on Twitter: Egypt #Jan25. *The Machine Starts Blog*. Retrieved from http://www.themachinestarts.com/read/20

Beaumont, P. (2011, February 25). The truth about Twitter, Facebook and the uprisings in the Arab world. *The Guardian*. Retrieved from http://www.guardian.co.uk/world/2011/feb/25/twitter-facebook-uprisings-arab-libya?INTCMP=ILCNETTXT3487

Buechler, S. M. (1993). Beyond resource mobilization? Emerging trends in social movement theory. *The Sociological Quarterly, 34(2)*, 217–235.

United Nations Development Programme (UNDP). (2008). Capacity development: Empowering people and institutions. Retrieved from http://www.undp.org/ publications/annualreport2008/pdf/IAR2008_ENG_low.pdf

Cortright, D. (2007). The movement against war in Iraq. *Nonviolent Social Change: The Bulletin of the Manchester College Peace Studies Institute*. Retrieved from http://www.manchester.edu/academics/departments/peace_studies/bulletin/2007/documents/The%20Movement%20against%20War%20in%20Iraq.pdf

Creswell, J. W. (1998). *Qualitative inquiry and research design: Choosing among five traditions.* Thousand Oaks, CA: SAGE.

Della Porta, D., & Mosca, L. (2005). Global-net for global movements? A network of networks for a movement of movements. *Journal of Public Policy, 25(1)*, 165–190.

Denzin, N. K., & Lincoln, Y. S. (2005). Introduction: The discipline and practice of qualitative research. In N. K. Denzin & Y. S. Lincoln (Eds.), *The Sage handbook of qualitative research* (pp. 1–32). Thousand Oaks, CA: SAGE.

El Amrani, I. (2010, June 14). The murder of Khaled Said. *Arabist.* Retrieved from http://www.arabist.net/blog/2010/6/14/the-murder-of-khaled-said.html

El Amrani, I. (2011, January 28). Urgent: Egypt has shut off the Internet. *Arabist.* Retrieved from http://www.arabist.net/blog/2010/6/14/the-murder-of-khaled-said.html

Essam El-Din, G. (2011, April 17). The coincidental rise and momentous fall of Hosni Mubarak. *Ahram online.* Retrieved from http://english.ahram.org.eg/NewsContent/ 1/64/10190/Egypt/Politics-/The-coincidental-rise-and-momentous-fall-of-Hosni-.aspx

Facebook page: ElBaradei for Presidency. Retrieved from http://www.facebook.com/m.elbaradei2011

Facebook page: January 25: the day of revolution over torture, poverty, corruption & unemployment [translated from Arabic]. Retrieved from http://www.facebook.com/#!/Yom.Elsawra.25.January?sk=app_4949752878

Facebook page: Mohamed ElBaradei. Retrieved from http://www.facebook.com/ #!/group.php?gid=184655341853

Facebook page: We are all Khaled Said. Retrieved from http://www.facebook. com/home.php#!/elshaheeed.co.uk

Fisher, M. (2011, February 2). Live blogging Egypt: Day 6. *The Atlantic.* Retrieved from http://www.theatlantic.com/international/archive/2011/02/liveblogging-egypt-day-6/70635

France24. (2010, October 30). Political change will come in Egypt: ElBaradei. Retrieved from http://www.france24.com/en/20101030-political-change-will-come-egypt-elbaradei

Gillett, J. (2003). Media activism and Internet use by people with HIV/AIDS. *Sociology of Health & Illness, 25(6)*, 608–624.

Glesne, C. (2006) *Becoming Qualitative Researchers* (3rd ed.). Boston: Allyn and Bacon.

Gubash, C. (2009). ElBaradei rattles official Egypt by mulling presidential run. World Blog from NBC News. Retrieved from http://worldblog.msnbc.msn.com/_news/2009/12/19/4376276-elbaradei-rattles-official-egypt-by-mulling-presidential-run

Hamdy, N. (2009). Arab citizen journalism in action: Challenging mainstream media, authorities and media laws. *Westminster Papers in Communication and Culture, 6(1)*, 92–112.

Hassan, H. A. (2011). Civil society in Egypt under the Mubarak regime. *Afro Asian Journal of Social Sciences, 2*(2), 1–18.

Human Rights Watch. (2008, May 27). Egypt extending state of emergency violates rights. Retrieved from http://www.hrw.org/en/news/2008/05/27/egypt-extending-state-emergency-violates-rights

Internet World Stats. (2011). Miniwatts Marketing Group. Retrieved from http://www.internetworldstats.com/africa.htm

Jenkins, J. C. (1983). Resource mobilization theory and the study of social movements. *Annual Review of Sociology, 9*, 527–553.

Johnson, A. G. (2000). *The Blackwell dictionary of sociology* (2nd ed.). Malden, MA: Blackwell Publishing.

Joyella, M. (2011, February 3).Undisclosed locations and low-light liveshots: Reporters adapt to risks in Egypt. *Media ITE*. Retrieved from http://www.mediaite.com/tv/security-teams-undisclosed-locations-and-low-light-liveshots-reporters-adust-to-risks-in-egypt

Juris, J. (2008). *Networking futures: The movements against corporate globalization*. Durham, NC: Duke University Press.

Kahn, R., & Kellner, D. (2005). Oppositional politics and the Internet: A critical/reconstructive approach. *Cultural Politics, 1*(1), 75–100.

Khawaja, M. (1994). Resource mobilization, hardship, and popular collective action in the West Bank. *Social Forces, 73*(1), 191–220.

Kirkpatrick, D. D., & Sanger, D. E. (2011, February 13). A Tunisian-Egyptian link that shook Arab history. *The New York Times.* Retrieved from http://www.nytimes.com/2011/02/14/world/middleeast/14egypt-tunisia-protests.html?_r=1

Langman, L. (2005). From virtual public spheres to global justice: A critical theory of interworked social movements. *Sociological Theory, 23*(1), 42–74.

Lievrouw, L. A. (2011). *Alternative and activist new media.* Cambridge, MA: Polity Press.

Manal. (2011, January 28). Back to basics: Using dial up Internet. Manal & Alaa's Bit Bucket Free Speech from the Bletches. Retrieved from http://www.manalaa.net

McCarthy, J. D., & Zald, M. N. (1977). Resource mobilization and social movements: A partial theory. *The American Journal of Sociology, 82*(6), 1,212–1,241.

Moghadam, V. (2000). Transnational feminist networks: A collective action in an era of globalization. *International Sociology, 15*(1), 57–85.

Negm, N. (2011). Tahyees front blog. Retrieved from http://tahyyes.blogspot.com/2011_01_01_archive.html

O'Lear, S. (1999). Networks of engagement: Electronic communication and grassroots environmental activism in Kaliningrad. *Human Geography, 81*(3), 165–178.

Opp, K. (2000). Adverse living conditions, grievances, and political protest after Communism: The example of East Germany. *Social Forces, 73*(1), 29–65.

Praetorius, D. (2011a, January 29). Tweets from the ground in Egypt. *The Huffington Post.* Retrieved from http://www.huffingtonpost.com/2011/01/28/tweets-egypt-twitter_n_815631.html#s232218&title=Danny_Ahmed_Ramadan

Praetorius, D. (2011b, February 11). Hosni Mubarak's resignation: Twitter reacts (tweets). *The Huffington Post.* Retrieved from http://www.huffingtonpost.com/2011/02/11/hosni-mubarak-twitter_n_821979.html#s238687&title=Sarah_El_Sirgany

Saad, A., & Mohamed, O. (2011, February 2). A virtual "march of millions" in solidarity with Egyptian protesters. [Facebook]. Retrieved from http://www.facebook.com/event.php?eid=126197157451259

Shin, G. (1994). The historical making of collective action: The Korean peasant uprisings of 1946. *The American Journal of Sociology, 99*(6), 1,596–1,624.

Siddique, H., Owen, P., & Gabbatt, A. (2011, January 25). Protests in Egypt and unrest in the Middle East—As it happened. *The Guardian.* Retrieved from http://www.guardian.co.uk/global/blog/2011/jan/25/middleeast-tunisia

Speak to tweet for Egypt: How it works. (2011, February 2). Manipurhub.com. Retrieved from http://manipurhub.com/tech/speak-to-tweet-for-egypthow-it-works

Stake, R. E. (2005). Qualitative case studies. In N. K. Denzin & Y. S. Lincoln (Eds.), *The Sage handbook of qualitative research* (pp. 443–466). Thousand Oaks, CA: SAGE.

Walsh, E. J. (1981). Resource mobilization and citizen protest in communities around Three Mile Island. *Social Problems, 29*(1), 1–21.

Wasserman, H. (2007). Is a new worldwide Web possible? An explorative comparison of the use of ICTs by two South African social movements. *African Studies Review, 50*(1), 109–131.

Zirulnick, A. (2011, January 25). Egypt's protests told by #Jan25. *The Christian Science Monitor*. Retrieved from http://www.csmonitor.com/World/Global-News/2011/0125/Egypt-s-protests-told-by-Jan25